

senses & sensitivity

a human-centred branding strategy

senses & sensitivity

a human-centred branding strategy

Senses and Sensibility: a human-centred branding strategy.

Brenda Saris-Brandon.

A thesis submitted to Auckland University of Technology in fulfilment
of the requirements for the degree of Master of Philosophy (MPhil).

2014.

School of Art and Design.

Table of Contents

List of figures and tables	pg 5
Attestation of Authorship	pg 7
Acknowledgements	pg 8
Ethics	pg 8
Abstract	pg 9
Glossary and Acronym terms	pg 10
Chapter 1: Senses and Sensibility, the study	pg 19
1.1 Introduction	pg 20
1.2 Research design and aims	pg 26
1.3 Structure of the thesis	pg 28
Chapter 2: Connections and relationships	pg 29
2.1 Early branding theories and strategies	pg 30
2.2 Brand theory and strategy	pg 37
2.2.1 Sensation, subjectivity and emotion	pg 40
2.2.2 Semiotics and primal codes	pg 48
2.2.3 The role of design and semiotics within changing perspectives	pg 53
2.2.4 Customers	pg 56
2.2.5 Identity, consumption and desire	pg 60
2.2.6 Entrepreneurship, innovation, human-centred design and design thinking	pg 64
2.2.7 Connecting culture and technology with the 5 senses	pg 68
2.2.8 Making connections: a conclusion	pg 70

Chapter 3: Framing the research pg 72

3.1 Introduction	pg 73
3.2 Building the research	pg 75
3.3 Mixed methods	pg 78
3.3.1 Focus Groups	pg 79
3.3.2 Questionnaire design	pg 81
3.3.3 Gathering data	pg 85

Chapter 4: Information design and data visualisation pg 87

4.1 Information design or data visualisation?	pg 88
4.2 Ideation of interpretations and metaphor	pg 91
4.2.1 A product	pg 92
4.2.2 A service	pg 93
4.2.3 An identity	pg 95
4.2.4 Visualising brand experience through the AST continuum	pg 98
4.2.5 Indexing natural and abstract metaphor	pg 102
4.2.5.1 A tree	pg 103
4.2.5.2 A meal	pg 112
4.2.5.3 Abstraction	pg 117
4.3 A visual identity for Senses and Sensibility	pg 121
4.4 Conclusions	pg 123
4.5 Analysis and synthesis: the questionnaire	pg 124

4.5.1 Evaluating brand loyalty through sensewaves	pg 126
4.5.2 Overall results for sensewaves	pg 130
4.5.3 Overall results for the context questions	pg 143
4.5.4 Overall conclusion of the questionnaire data	pg 144
4.6 Open-ended questions and observations: the focus groups	pg 148

Chapter 5: Final connections pg 150

5.1 Conclusion	pg 151
5.2 Theoretical implications	pg 154
5.3 Limitations and future study	pg 155

Appendices and References pg 157

Appendices	pg 158
Appendix A: <i>Documentation for focus group participants</i>	pg 159
Appendix B: <i>Questionnaire design</i>	pg 160
Appendix C: <i>Completed questionnaires: process of analysis</i>	pg 168
Appendix D: <i>Further raw statistical analysis</i>	pg 169
Appendix E: <i>Supporting Excel spreadsheet data for Table 2</i>	pg 173
References	pg 174

List of Figures

Fig. 1: <i>Building brand loyalty through the AST continuum</i>	pg 23	Fig. 14: <i>Comparisons between Blur and Helvetica</i>	pg 55	Fig. 27: <i>Visualising brand experience through the AST continuum 1</i>	pg 99
Fig. 2: <i>Apple interface design</i>	pg 24	Fig. 15: <i>World population growth</i>	pg 58	Fig. 28: <i>Visualising brand experience through the AST continuum 2</i>	pg 100
Fig. 3: <i>Brand time has become a form of show and tell time</i>	pg 24	Fig. 16: <i>NZ population 1991-2013</i>	pg 58	Fig. 29: <i>Visualising brand experience through the AST continuum 3</i>	pg 101
Fig. 4: <i>Research process for Senses and Sensibility</i>	pg 27	Fig. 17: <i>Inter-generational customers</i>	pg 59	Fig. 30: <i>Brand DNA</i>	pg 102
Fig. 5: <i>Title page for John Gerard, the herball or generall historie of plants, 1633</i>	pg 31	Fig. 18: <i>Experience innovation to create customer loyalty</i>	pg 66	Fig. 31: <i>Referencing a natural metaphor to convey the AST continuum</i>	pg 102
Fig. 6: <i>Centralized/decentralized identity structures</i>	pg 33	Fig. 19: <i>Ideo definitions of design thinking</i>	pg 67	Fig. 32: <i>Concept explorations for tree metaphor 1</i>	pg 104
Fig. 7: <i>Dominion Post advertisement</i>	pg 37	Fig. 20: <i>Framing Senses and Sensibility</i>	pg 74	Fig. 33: <i>Concept explorations for tree metaphor 2</i>	pg 105
Fig. 8: <i>Nano with me and my friend</i>	pg 37	Fig. 21: <i>Questionnaire design: part 1</i>	pg 84	Fig. 34: <i>Concept explorations for tree metaphor 3</i>	pg 106
Fig. 9: <i>Anatomy of the brain</i>	pg 43	Fig. 22: <i>Context questions, questionnaire design: part 2</i>	pg 86	Fig. 35: <i>Parts of the visual identity for flyingpig.co.nz</i>	pg 107
Fig. 10: <i>Sense connections to the amygdala</i>	pg 44	Fig. 23: <i>Nightingale's "Coxcombs"</i>	pg 89	Fig. 36: <i>Concept explorations for tree metaphor 4</i>	pg 108
Fig. 11: <i>Deciphering theories of emotion</i>	pg 47	Fig. 24: <i>A product defined through an art, science and technology lens of examination</i>	pg 94	Fig. 37: <i>Resolving tree metaphor concept</i>	pg 109
Fig. 12: <i>Semiotics of three car brands</i>	pg 50	Fig. 25: <i>A service defined through an art, science and technology lens of examination</i>	pg 96	Fig. 38: <i>Final tree metaphor concept. The AST continuum: A tool for NZ SME's to use as a model for their own application</i>	pg 111
Fig. 13: <i>Symbolism, meanings and representations</i>	pg 52	Fig. 26: <i>An identity defined through an art, science and technology lens of examination</i>	pg 97		

Fig. 39: <i>Experimenting with the Adobe illustrator blend tool</i>	pg 113
Fig. 40: <i>Experimenting with the Adobe illustrator blend tool and earlier conceptual directions to represent the AST continuum</i>	pg 114
Fig. 41: <i>Meal metaphor 1</i>	pg 115
Fig. 42: <i>Meal metaphor 2</i>	pg 116
Fig. 43: <i>Concept explorations with Flowpaper App.</i>	pg 118
Fig. 44: <i>Spirals 1</i>	pg 119
Fig. 45: <i>Spirals 2</i>	pg 120
Fig. 46: <i>Concept explorations for the AST continuum logo</i>	pg 122
Fig. 47: <i>A visual identity for Senses and Sensibility</i>	pg 123
Fig. 48: <i>Graphic interpretation of concentric ripple pattern</i>	pg 124
Fig. 49: <i>Concept drawing for sensewave concept</i>	pg 125
Fig. 50: <i>Sensewave No. 1</i>	pg 127
Fig. 51: <i>Sensewave No. 2</i>	pg 128
Fig. 52: <i>Analysis model for the results</i>	pg 131

Fig. 53: <i>Sensewave for a potato</i>	pg 135
Fig. 54: <i>Sensewave for a lemon</i>	pg 136
Fig. 55: <i>Sensewave for a Nike shoe</i>	pg 137
Fig. 56: <i>Sensewave for the headphones</i>	pg 138
Fig. 57: <i>Sensewave for the fragrance</i>	pg 139
Fig. 58: <i>Sensewave for the flyspray</i>	pg 140
Fig. 59: <i>Sensewave for a stapler</i>	pg 141
Fig. 60: <i>Sensewave for an eraser</i>	pg 142
Fig. 61: <i>Graphic interpretations for context questions</i>	pg 145
Fig. 62: <i>Senseswaves</i>	pg 147
Fig. 63: <i>Two key models for Senses and sensibility the study</i>	pg 155

List of Tables

Table 1: <i>Overall findings of majority of responses from all participants</i>	pg 129
Table 2: <i>Set of ordinal numbers for sight, sound, touch, taste and smell – all objects</i>	pg 143
Table 3: <i>Similarities and differences between the objects</i>	pg 146

Attestation of Authorship

I hereby acknowledge that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by any other person (except where explicitly defined in the acknowledgements), nor any material which to a substantial extent has been submitted for award of any other degree or diploma of a university or other institution of higher learning.



Brenda Saris-Brandon

In 1985 I completed a Diploma in Visual Communication Design (Dip VCD) at the Wellington Polytechnic School of Design in New Zealand. The following year I began working as a junior art director for Ted Bates Advertising. 2015 marks 30 years since my career began in the design and advertising industry. I have witnessed considerable change in that time. Two years ago in 2012, I began working at WhitireiaNZ as a design lecturer, which in many ways has been the catalyst for this MPhil. This research is as much a consolidation of working almost continuously in the design and advertising industry for 30 years as it is a desire to unpack what happened for my students. Many of my peer group that graduated with a Dip VCD have enjoyed careers similar to mine which is a reflection of the education we received. However, the landscape is entirely different for students (including one of my own daughters) who graduate with qualifications in the design field today. I hope this study might offer some insight on how they might equip themselves for what the future may hold.

"If I'd asked people what they wanted,
they would have said a faster horse." - Henry Ford

Acknowledgements

I would like to acknowledge the generous support and contribution of all the people who were involved in this study, including:

Dr. Leong Yap and Dr. Peter Gilderdale, for their academic guidance and support,

Kaye Jujnovich, Dean, Faculty of Arts at WhitireiaNZ, and colleagues, Chris White and Deb Donnelly for discussions and positive encouragement,

Participants from the focus groups for generously donating their time,

Industry experts, Mark DiSomma, Sven Baker and Brian Slade for offering constructive and thoughtful perspectives on brands and branding,

My two daughters who have yet again endured an absent mother, with an empathy that is astonishing, and Paul Saris for both his professional support and patience in discussing this thesis, and personal support through what has been an emotional journey.

Ethics Approval

Ethics application was approved by the Auckland University of Technology Ethics Committee on 18th February 2014. AUTEK Reference number 13/322. Documentation for focus group participants, see Appendix A, pg.149.

Abstract

Senses and Sensibility: a human-centred branding strategy.

A brand is the soul of a business. Whether we are marketing a product or a service, brand value is significantly grounded on emotions that are activated through the five human senses. Studies have indicated that successful brand strategies convey meaningful experience to the five senses to elicit and trigger buying behaviours. Customers do not buy products and services per se, but they seek stories, engagement and meaningful experience that the product or service conveys. Brands that harness art, science and technology (AST) to delight the human emotions engender higher brand equity. This thesis studies the social and cultural meanings consumers attach to brands and branding within the art, science and technology continuum. The AST continuum combines and synergises the three disciplines to engender pleasurable feelings to stimulate brand connections for a product, service or brand. This *Senses and Sensibility* connection – enshrined in human feelings and responsiveness – is discussed, along with human behaviour, persuasive and emotional branding, globalisation and socialisation within social media. From here emerge key elements for a successful brand strategy to enable NZ SMEs to stay competitive in the shifting landscape of humanistic branding.

The importance of the five human senses in human-centric branding is described in some detail. They are said to be our windows on the world, mediating it at both a physiological and cognitive level. Brand strategists are harnessing the

web to engage customers' emotions with their brands. However, although the internet has become an omnipresent channel for branding and customers seek high quality multi-sensory and multi-experiential brand interactions, designing for the five senses is largely forgotten when brand strategies are devised for this technological environment. In the globalised world where the five human senses and socialisation interact with social media, the challenges ahead are complex. To understand the problems and opportunities currently facing brand strategist, the thesis draws upon discourse to understand past and present approaches to branding. It contextualises relationships and connections between conscious and unconscious behaviour, emotion, sensation, motivation, desire, perception, identity and consumption. Some business models are reviewed to help frame these emotional experience touch-points that build customer loyalty for brands, and ultimately brand equity for business. For *Senses and Sensibility* to be of value, the study sought interpretations from a series of focus groups and subjective assessments. Through this process, the research moved towards hermeneutic phenomenology in seeking meaning through linguistic descriptions of participants' emotional experience in relationship to their five senses and the social media context. A large amount of information from the research process was generated, analysed and synthesised through data visualisation, graphic representation and information design. This creative work constitutes an important and original practice-based aspect of the thesis. Conclusions suggest that this strategic approach is valuable to business, since it considers the emotional and subjective capabilities of the customer. As a business approach, it is characterised by a personal relationship between all stakeholders in keeping with contemporary values.

Glossary and Acronym terms

Aesthetics. The philosophy of art. The study or contemplation or appreciation of the (nature of) artistic value or beauty. * *

Alchemy. A type of chemistry, especially in the Middle Ages, that dealt with trying to find a way to change ordinary metals into gold and with trying to find a medicine that would cure any disease. Retrieved from <http://dictionary.cambridge.org/dictionary/british/alchemy?q=Alchemy>

Analogue. Non digital. Data represented in a continuous form, as contrasted with digital data having discrete values. Regular telephone service comes over analogue lines. * *

Analogy. A comparison between two different situations that have something in common. Usually an everyday situation is used to illustrate something in the new situation. * *

Art. The process and products of applying skills to any activity that transforms matter, sound, or motion into forms considered aesthetically pleasing to people in a society. In graphic arts usage, all matter other than text material e.g. illustrations and photographs. * *

AST continuum. Acronym used for this research to describe the devised art-science-technology continuum.

Behaviour. Actions by people as against a mental inclination towards taking such action (behavioural intent) that may or may not be preceded by a change in attitude. * *

Behavioristic Approaches to Motivation. The behavioristic approach examines how motives are learned and how internal drives and external goals interact with learning to produce behaviour. Retrieved from <http://www.britannica.com/EBchecked/topic/394212/motivation/12696/Biological-monitoring-systems>. Relates to behaviouristic learning theory of motivation (BLTM).

Blog. A blog (a contraction of the term “Web log”) is a Web site, usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. * *

Brainstorming. (Creative tools) Organised group exercise, sole purpose is to produce a lot of ideas A creativity technique generally attributed to Alex Osborn, an advertising executive in the 1950s. The goal of brainstorming is to create a pool of ideas prior to evaluating each idea. Thus the brainstorming process is a synergistic event that avoids the negative impact of critical evaluation until a number of potential solutions have been created by the group. The result is more ideas to choose from and better quality ideas. * *

Brand. A brand is a mixture of attributes, tangible and intangible, symbolised in a trademark, which, if managed properly, creates value and influence. *

Brand Architecture. How an organization structures and names the brands within its portfolio. There are three main types of brand architecture system: monolithic, where the corporate name is used on all products and services offered by the company; endorsed, where all sub-brands are linked to the corporate brand by means of either a verbal or visual endorsement; and branded, where the corporate brand operates merely as a holding company, and each product or service is individually branded for its target market. *

Brand Equity. The sum of all distinguishing qualities of a brand, drawn from all relevant stakeholders, that results in personal commitment to and demand for the brand; these differentiating thoughts and feelings make the brand valued and valuable. *

Brand Identity. The outward expression of the brand, including its name and visual appearance. The brand's identity is its fundamental means of consumer recognition and symbolizes the brand's differentiation from competitors. *

Branding. Selecting and blending tangible and intangible attributes to differentiate the product, service or corporation in an attractive, meaningful and compelling way. *

Brand Loyalty. A measure of the degree to which a buyer recognises, prefers and insists upon a particular brand; brand loyalty results from continued satisfaction with a product considered important and gives rise to repeat purchases of products with little thought but with high-involvement. A situation when a consumer is reluctant to switch from consumption of a favoured good. Active support by consumers in continuing consumption of a particular brand in the face of competition by other branded substitutes. Such loyalty is often subjective or subconscious. The biased behavioural response, expressed to a degree to which a customer holds a positive attitude toward a brand, has a commitment to it and intends to continue purchasing it in the future. * *

Brand Strategy. A plan for the systematic development of a brand to enable it to meet its agreed objectives. The strategy should be rooted in the brand's vision and driven by the principles of differentiation and sustained consumer appeal. The brand strategy should influence the total operation of a business to ensure consistent brand behaviors and experiences. *

Business-to-Business (B2B). Commercial transactions between an organisation and other organisations (inter-organisational marketing). * * *

Brand Values. The code by which the brand lives. The brand values act as a benchmark to measure behaviors and performance. *

Cartesian. Of or connected with the ideas and theories of the mathematician René Descartes: Cartesian doubt/dualism. Retrieved from <http://dictionary.cambridge.org/dictionary/british/cartesian>

Cognitive. A process of information storage and retrieval, which can be utilised flexibly in behaviour. In humans, cognitive relates to mental operations sometimes termed thought processes, eg reasoning, calculation and planning. * *

Competitive advantage. The significant advantages that an organisation has over competitors. Such advantages allow the organisation to add more value than its competitors

in the same market.

An advantage over competitors gained by offering consumers greater value, either through lower prices or by providing more benefits that justify higher prices. Value created by a company for its customers that clearly distinguishes it from the competition and provides its customers a reason to remain loyal. * *

Complexity. (1) The degree to which a system or component has a design or implementation that is difficult to understand and verify. (2) Pertaining to any of a set of structure based metrics that measure the attribute in (1). The degree of difficulty which a purchaser of a new product has in understanding it; a major determinant of the rate of new product adoption. * *

Context. The background factors within which behaviour occurs. The setting in which the information is received; this includes social, cultural and organisational contexts. * *

Continuum. Something that changes in character gradually or in very slight stages without any clear dividing points. Retrieved from <http://dictionary.cambridge.org/dictionary/british/continuum?q=Continuum>

Corporate communications. Public relations for a corporation, integrated as part of the company's overall strategic objectives, rather than activities designed for its individual segments. This activity covers internal and external communications to give attention and understanding to the institution. * *

Culture. The total lifestyle of a people from a particular social grouping, including all the ideas, symbols, preferences and material objects that they share. 1. The set of learned values, norms and behaviours that are shared by a society and are designed to increase the probability of the society's survival. 2. The institutionalised ways or modes of appropriate behaviour. It is the modal or distinctive patterns of behaviour of a people including implicit cultural beliefs, norms, values and premises that govern conduct. It includes the shared superstitions, myths, folkways, mores and behaviour patterns that are rewarded or punished. * *

Data. A collection of observations. Statistical term describing classified factual information. Singular is datum. Facts or information gathered in a research study. * *

Design Thinking (DT). Consists of four key elements: Define the problem, create and consider many options, Refine selected options, pick the winner and execute. Retrieved from <http://www.fastcompany.com/919258/design-thinking-what>

Differentiation. Creation or demonstration of unique characteristics in a company's products or brands compared to those of its competitors. *

Digital. Data expressed as a series of bits that are interpreted by a computer and software. Information that is digital is information represented by numbers (digits) or more broadly, information that can be measured in discrete, exact values. The opposite term is analogue, which describes information represented along a continuous range, where there are an infinite number of possible values. The best way to understand the difference between digital and analogue is to compare a digital clock to a traditional round clock with hands. The display on a digital clock always shows one particular time, in numbers. A clock with hands, in contrast, is an analogue device because the hands move along the entire circle of the clock face; at any one instant the hands can be anywhere on the clock, displaying an infinite number of moments in time. Water is analogue; ice cubes are digital. All common computers work only with numbers and are digital devices. * *

Early adopters. The group in a market second only to innovators in the speed with which they adopt a new product. For new products, these are customers who, relying on their own intuition and vision, buy into new product concepts very early in the life cycle. For new processes, these are organisational entities that were willing to try out new processes rather than just maintaining the old. * *

Empirical. Data based upon observation or experiment as opposed to theory. Pertaining

to a statement or formula based upon experience or observation rather than on deduction or theory. Received through the senses (sight, touch, smell, hearing, taste), either directly or through extensions. Based on experience, or observation -- describing knowledge derived from or warranted by sense perception. * *

Emotion. A pattern of intense changes in physiological arousal, behaviour, cognitive processes and environmental influences that are described in subjective terms such as happiness, fear or anger. * *

Emotions. Arguably defined as bodily changes, together with mental change, influencing one's decisions, sometimes out of the normal pattern for the individual, used particularly in reference to buying behaviour. Emotions are psychological feelings that people have that usually result from--and contribute to--a conflict. Examples are anger, shame, fear, distrust and a sense of powerlessness. If emotions are effectively managed, they can become a resource for effective conflict resolution. If they are not effectively managed, however, they can intensify a conflict, heightening tensions and making the situation more difficult to resolve. * *

Empathic Design. A 5-step method for uncovering customer needs and sparking ideas for new concepts. The method involves going to a customer's work site, watching as he or she performs functions associated with the customer needs your firm wants to solve and then debriefing the customer about what they did, why they did those things, the problems they encountered as they were trying to perform the function and what worked well. By spending time with customers, the team develops empathy for the problems customers encounter trying to perform their daily tasks. * *

Endorsed brand (See Brand Architecture.) Generally a product or service brand name that is supported by a masterbrand - either dominantly e.g. Tesco Metro or lightly e.g. Nestle Kit-Kat. *

Entrepreneurship. The act of being an entrepreneur, which is a French word meaning “one who undertakes an endeavour”. Entrepreneurs assemble resources including innovations, finance and business acumen in an effort to transform innovations into economic goods. This may result in new organisations or may be part of revitalising mature organisations in response to a perceived opportunity or necessity. The most obvious form of entrepreneurship is that of starting new businesses; however, in recent years, the term has been extended to include social and political forms of entrepreneurial activity. When entrepreneurship is describing activities within a firm or large organisation it is referred to as intrapreneurship and may include corporate venturing, when large entities start spin-off organisations. * *

Epistemology. The theory of knowledge or branch of philosophy that studies how knowledge is gained, how much we can know and what justification there is for what is known. * *

Ethics. A major branch of philosophy. The study of principles relating to right and wrong conduct; morality; the standards that govern the conduct of a person, especially a member of a profession. (Greek, “customs”; see Latin mores [morals]) The principles that encompass the standards and conduct that an organisation sets itself in its dealings within the organisation and with its external environment. The study of normative judgments concerned with what is morally right and wrong, good and bad. Moral codes of conduct; rules for how someone should operate that can be utilised as situations demand A general designation for value systems governing human activities considered to be “right” or “wrong,” usually with reference to some “higher” authority (as in “you have no ethics” or “what are the ethics of this situation?”); also refers to the study of such systems. The practices and principles constituting morally right conduct, and the philosophical study of these. The principles that encompass the standards and conduct that an organisation sets itself in its dealings within the organisation and with its external environment. The study of normative judgments concerned with what is morally right and wrong, good and bad. Moral codes of conduct; rules for how someone should

operate that can be utilised as situations demand. * *

Ethnographic. Present a description of a culture as it was prior to contact. * *

Focus group. A qualitative research technique in which a group of about eight people is invited to a neutral venue to discuss a given subject, for example hand-held power tools. The principle is the same as an in-depth interview, except that group dynamics help to make the discussion livelier and more wide-ranging. Qualitative groups enable the researcher to probe deeper into specific areas of interest (for example, the nature of commitment to a brand). The result adds richer texture to the understanding of broader data (for example, quantitative), which may paint general trends or observations. Also known as a group discussion. *

Globalisation. The increase of international trading and sharing of information, social and cultural values. * * *

Glocalisation. A combination of the words “globalisation” and “localisation” used to describe a product that is developed and distributed globally, and fashioned to accommodate the user or consumer in a local market. This means that the product may be tailored to conform with local laws, customs or consumer preferences. Products that are effectively “glocalised” are, by definition, going to be of much greater interest to the end user. * *

Graphics. (1) Illustration or diagram in pictorial statistics. (2) Visual elements of communications usually associated with artwork, dummies and photographs in media. * *

Haptic. (1) Relating to or based on the sense of touch. (2) Characterized by a predilection for the sense of touch <a haptic person>. Retrieved from <http://www.merriam-webster.com/dictionary/haptic>

Hermeneutics. Formal study of methods of interpretation. Following Gadamer, the hermeneutical process is often regarded as involving complex interaction between the interpreting subject and the interpreted object. * *

Hierarchy. A system in which people or things are arranged according to their importance. Retrieved from <http://dictionary.cambridge.org/dictionary/british/hierarchy?q=Hierarchy>

Human-Centered Design (HCD). Marked by humanistic values and devotion to human welfare. Retrieved from <http://www.thefreedictionary.com/human-centered>

Hypothesis. Specific proposition or expectation about the nature of things derived from a theory. A statement that stipulates a relationship between a phenomenon for which the researcher seeks to account and one or more other phenomena. An “educated guess” about the outcome of an empirical test designed to answer a research question. An unproven statement or proposition about a factor or phenomenon that is of interest to the researcher. * *

Ideation. (Idea generation). All of those activities and processes that lead to creating broad sets of solutions to consumer problems. These techniques may be used in the early stages of product development to generate initial product concepts, in the intermediate stages for overcoming implementation issues, in the later stages for planning launch and in the post-mortem stage to better understand success and failure in the marketplace. * *

Indexing. Something that serves to guide, point out, or otherwise facilitate reference. Retrieved from <http://www.thefreedictionary.com/index>

Information design. In a very broad sense of the term, information design is the bridge that links information technologies and knowledge creation. It helps enhance interaction with all our senses in order to create knowledge. Retrieved from <http://www.gdrc.org/info-design/definitions.html>

Innovation. The generation and exploitation of new ideas. The process moves products (goods and services), human and capital resources, markets and production processes

beyond their current boundaries and capabilities. The introduction of a product which is new to both the company and its customers a new-to-the-world product. The process of adopting a new thing, idea, or behaviour pattern into a culture. Introduction of new thoughts, policies, products, markets, distribution, merchandising or other deliberate change. Given that, all things being equal, all products have a life cycle that dictates that, at some point, their usefulness will decline, innovation is an essential ingredient to long-term development of commercial enterprise and its absence must lead to the decline of the enterprise itself. * *

Interaction. Occurs when two or more factors combine to cause a consumer to behave in a different manner than if the two factors were not combined. * *

Internet. The physical network that links computers across the globe. It consists of the infrastructure of network servers and communication links between them, which are used to hold and transport the vast amount of information on the internet. The internet enables the transfer of messages and transactions between connected computers worldwide. * * *

Iteration. A series of steps in an algorithm whereby the processing of data is performed repetitively until the result exceeds a particular threshold. Iteration is often used in multiple sequence alignments whereby each set of pair-wise alignments are compared with every other, starting with the most similar pairs and progressing to the least similar, until there are no longer any sequence-pairs remaining to be aligned. * *

Kinaesthetic. A term used to describe the response and feedback from movement sensations in the muscles or joints. * *

Metaphor. Semiotics term. Metaphor expresses the unfamiliar (known in literary jargon as the ‘tenor’) in terms of the familiar (the ‘vehicle’). The tenor and the vehicle are normally unrelated. Application of a word or phrase to an object or concept in order to suggest a comparison. * *

Methodology. Broadly speaking, the study of research methods extending from broad issues relating to epistemology, through the theoretical principles underpinning particular methods, to specific procedures for conducting research. Retrieved from http://srmo.sagepub.com/searchresults?f_0=QSEARCH_MT&q_0=methodology

Mixed methods. The combined use of both quantitative and qualitative methodologies within the same study in order to address a single research question. Mixed-methods research draws upon both quantitative and qualitative methodological approaches to answer a particular research question. Retrieved from <http://srmo.sagepub.com/view/the-sage-dictionary-of-social-research-methods/n120.xml>

Modernism. Many of the early 20th century art and design movements connected to modernism, such as De Stijl, constructivism and the Bauhaus, endeavoured to celebrate functionalism and rationality under the maxim that 'form follows function'. The modernist approach to layout and design in general focused upon the use of white space and sans serif typography that utilised asymmetry. This was driven by an adherence to the grid, based on geometry and the proportion of the page, as a controlling device. (Noble & Bestley, 2005, p.188).

Monolithic Brand A single brand name that is used to "masterbrand" all products or services in a range. Individual products are nearly always identified by alpha or numeric signifiers. Companies like Mercedes and BMW favor such systems.*

Narrative. Semiotics term. A narrative is a representation of a 'chain' of events. In the orderly Aristotelian narrative form, causation and goals turn story (chronological events) into a plot.* *

Neuroscience. A branch of psychology, also called physiological psychology. Neuroscience is the study of the functioning of the nervous system which includes the structures and functioning of the brain and its relationship to behaviour.* *

New Zealand Small and Medium Enterprises (NZ SME's.) Defined as enterprises in NZ have fewer than 20 employees (97.2%). (Ministry of Business, Innovation and Employment, 2013).

Obituary. An article in a newspaper about the life of someone who has died recently. Retrieved from <http://www.merriam-webster.com/dictionary/obituary>. Neumeier advocates an obituary exercise for branding and asks, what would you like posterity to say about your company? (Neumeier, 2007, p.50)

Objectivity. Objectivity means striving as far as possible to reduce or eliminate bias in the conduct of research. Conducting an investigation and collecting data without the process being influenced by personal interpretation or bias.* *

Observation. Method of data collection in which the situation of interest is watched and the relevant facts, actions, or behaviours are recorded. Systematically planned and recorded observation that serves a specifically formulated research purpose, is related to more general propositions and is subjected to checks and controls on its total accuracy. Research technique, in which data is collected by researchers witnessing or recording the actual events which take place.* *

Ontology. A theory about the nature of being and existence. In computing, the formal representation of knowledge as a set of concepts within a particular domain. Retrieved from http://srmo.sagepub.com/searchresults?f_0=QSEARCH_MT&q_0=Ontology

Phenomenological. Pertaining to the way things appear or are experienced; in the humanistic approach, a reference to the emphasis on an individual's perceptions and feelings as defining the meaning of their behaviour.* *

Philosophy of mind. Is the branch of philosophy that studies the nature of the mind, mental events, mental functions, mental properties, consciousness and their relationship to the physical body, particularly the brain.* *

Postmodernism. Semiotics term. This slippery term, which ostensibly refers to an era succeeding modernism, is philosophically allied with poststructuralism, deconstruction, radical scepticism and relativism - with which it shares an anti-foundationalist stance. Ironically postmodernism could almost be defined in terms of resisting definition. Postmodernism does not constitute a unified 'theory' (though many postmodernist theorists grant no access to any reality outside signification). Nor is there a 'postmodernist' aesthetic 'movement'; postmodernism is highly fragmented and eclectic. However, characteristic features of postmodern texts and practices are the use of irony and a highly reflexive intertextuality - blurring the boundaries of texts, genres and media and drawing attention to the text's constructedness and processes of construction. Postmodernism differs from modernism in embracing popular culture and 'bad taste'.* *

Post-structuralism. Semiotics term. Whilst poststructuralism is often interpreted simply as 'anti-structuralism', it is worth noting that the label refers to a school of thought which developed after, out of and in relation to structuralism. Poststructuralism built on and adapted structuralist notions in addition to problematising many of them. For instance, whilst Saussure argued for the arbitrariness of the relationship between the signifier and the signified and the primacy of the signifier, many poststructuralists have taken this notion further, asserting the total disconnection of the signifier and the signified. Both schools of thought are built on the assumption that we are the subjects of language rather than being simply instrumental 'users' of it and poststructuralist thinkers have developed further the notion of 'the constitution of the subject', challenging essentialist romantic individualism (the notion that we are autonomous and creative agents with stable, unified 'personalities' and 'original' ideas).* *

Primal codes. (Primal). Being first in time; original; primeval. Retrieved from <http://www.thefreedictionary.com/primal>. **(Primal codes)** are locked in humans. Based on creation, creed, icons, rituals, pagans and sacred words. Retrieved from <http://www.slideshare.net/paulsjr/primal-branding>

Product Brand A brand which is synonymous with a particular product offering, for example, Nike.*

Prosumer. A customer who wants to buy high quality technical products or equipment. This word is formed from the words 'professional' and 'consumer'. Retrieved from <http://dictionary.cambridge.org/dictionary/business-english/prosumer>

Qualitative. Research data concerned with understanding behavioural patterns. Relates to 'why?' rather than 'how many?'.* *

Quantitative. Research data based on volume. (e.g. Numbers or percentages of people, classified by viewing, reading or listening habits).* *

Questionnaire. A list of questions. Base document for survey research studies which provides the questions and the structure for an interview and has provision for respondents' answers. A questionnaire has four main purposes: to collect relevant data, to make data comparable, to minimise bias in the asking of questions and recording of responses and to frame questions in a varied and interesting way so that respondents will answer without resentment. Requires considerable skill in design, involving understanding of human nature and communication processes.* *

Scenario. Model: of a possible future environment for the organisation, whose strategic implications can then be investigated. A focused description of different futures presented in a coherent manner; a forecasting technique that requires managers to write explicit anticipated futures and articulate the chains of events that would need to occur to make the future happen; a method used for organisational learning.* *

Science. A method of learning about the world by applying the principles of the scientific method, which includes making empirical observations, proposing hypotheses to explain those observations and testing those hypotheses in valid and reliable ways; also refers to the organised body of knowledge that results from scientific study.* *

Self identity. (Self image). Is the mental picture, generally of a kind that is quite resistant to change, that depicts not only details that are potentially available to objective investigation by others (height, weight, hair colour, sex, IQ. Score, etc.), but also items that have been learned by that person about himself or herself, either from personal experiences or by internalising the judgments of others. * *

Semiotics. The study of signs and symbols, especially the relationship between written or spoken signs and their referents in the physical world or the world of ideas. A core strategic method by which graphic marks, texts and images can be deconstructed and interpreted to determine their underlying meanings. (Noble & Bestley, 2005, p.189)

Sensation. The immediate and direct response of the senses (taste, smell, sight, touch and hearing) to a stimulus such as an advertisement, package, brand name, or point-of-purchase display. * *

Senses. Are the physiological methods of perception. The senses and their operation, classification and theory are overlapping topics studied by a variety of fields, most notably neuroscience, cognitive psychology (or cognitive science) and philosophy of perception. * *

Sensibility. An understanding of or ability to decide about what is good or valuable, especially in connection with artistic or social activities: literary/musical/artistic/theatrical/aesthetic sensibility. Retrieved from <http://dictionary.cambridge.org/dictionary/british/sensibility?q=Sensibility>

Social Media. An umbrella term that defines the various activities that integrate technology, social interaction and the construction of words and pictures. A term used to describe tools and platforms people use to produce, publish and share online content and to interact with one another. This interaction and the manner in which information is presented, depends on the varied perspectives and “building” of shared meaning, as people share their stories and understandings. Social media tools include blogs, podcasts, videos, microblogs, wikis, etc. * *

Strategy. The principles that show how an organisation’s major objectives or goals are to be achieved over a defined time period. Usually confined only to the general logic for achieving the objectives. “Strategies are the key to winning wars and as all great strategists know, you need strategy to win wars” - Sun Tzu. The word strategy actually refers to the deployment of troops. Once the enemy has been engaged, attention shifts to tactics. Substitute “resources” for troops and the transfer of the concept to the business world begins to take form. Strategy is about means. It is about the attainment of ends. It is concerned with how to achieve goals and objectives. * *

Subjectivity. A subjective assessment is one that is based on criteria that exist only or principally in the assessor. Two subjective assessors assessing the same item might differ widely in their assessment. * *

Symbiotic. A relationship between people or organizations that depend on each other equally. Retrieved from <http://dictionary.cambridge.org/dictionary/british/symbiosis?q=symbiotic>

Synesthesia. A sensation produced in one modality when a stimulus is applied to another modality, as when the hearing of a certain sound induces the visualization of a certain color. Retrieved from <http://dictionary.reference.com/browse/synesthetic>

Synthesis. Commonly understood to be an integration of two or more pre-existing elements which results in a new creation. * *

Target Market. The market segment or group of customers that a company has decided to serve, and at which it consequently aims its marketing activities. *

Technology. The application of logic, reason and knowledge to the problems of exploiting raw materials from the environment. Social technologies employ the same thought processes in addressing problems of human organisation. Technology involves the creation of material instruments (such as machines) used in human interaction with nature as well as social instruments (such as bureaucracy) used in human organisation. * *

Trademark. “Any sign capable of being represented graphically which is capable of distinguishing goods or services of one undertaking from those of another undertaking” (UK Trade Marks Act 1994). *

Triangulation. In the social sciences, triangulation is often used to indicate that two (or more) methods are used in a study in order to check the results. The idea is that one can be more confident with a result if different methods lead to the same result. Retrieved from <http://encyclopedia.thefreedictionary.com/Triangulation+%28social+science%29>

Typography. The design of the writing in a piece of printing or on a computer screen. Retrieved from <http://dictionary.cambridge.org/dictionary/british/typography>

User-Generated Content (UGC). Any data or media that is contributed by individual users of a website; also called consumer-generated media, user-created content. Retrieved from <http://dictionary.reference.com/browse/user-generated+content>

Value. Personal appraisal of worth, magnitude, significance or importance towards a product. The capacity of a good or service to provide satisfaction to its purchaser; or, the resources employed in its production and hence its opportunity cost in terms of alternative outputs foregone. * *

Visual Communication Design. The expression of ideas and information using visual forms or aids. Body language including gestures are part of such communication. Presentations may also include photographs, charts, graphs, and diagrams to enforce or demonstrate ideas or data. Retrieved from <http://www.businessdictionary.com/definition/visual-communication.html>

Visual Identity. What a brand looks like - including, among other things, its logo, typography, packaging and literature systems. *

Website. A collection of web pages, on particular domain name or sub-domain on the world wide web on the internet. Usually it is made up of a set of web pages created using html and accessible via http. * *

Word-of-Mouth Communications. Face-to-face communications among people. Social channels of communication such as friends, neighbours, associates, co-workers, or family members. Exchange of comments, thoughts or ideas between two or more consumers, none of whom is a marketing source. * *

* Retrieved from http://www.brandchannel.com/education_glossary.asp

* * Retrieved from http://www.marketing.org.au/glossary_of_marketing_terms.aspx

* * * Retrieved from http://sensacom.com/web_glossary.html



1.1 Introduction

Traditional methods of branding based on pre-internet models provide only limited equity because they still rely on the conventional business models, which satisfied historic needs (Neumeier, 2007, p.21). At the same time, traditional educational theories continue to be taught. These theories are centered on modernist concepts, which are analytical rather than emotional (Jensen, 1999, p.17). The result is that there is a gap in developing meaningful brand communications that resonate with today's customers. For business the result is an increasingly limiting opportunity to achieve satisfactory brand loyalty, value and equity, if traditional methods continue to be pursued. This is due in part to businesses' inability to fully grasp current technological complexities and the way that customers have changed their ways of expressing their brand expectations in a growing social and interactive online environment. Customers seek emotional and multisensory socialisation through social media (Lindstrom, 2005, p.7). "Consumer power is [asking] brands to deliver higher quality multisensory, multi-experiential brand interactions" (Guzman & Iglesias, 2012, p.389). Yet it appears that designing for the five senses is largely forgotten when brand strategies are devised for this technological environment. According to Lindstrom (2005), the more sensory bonding components in a brand, the stronger the foundation (p.111); however, whilst it is possible to see and hear things online, there is limited opportunity for a customer to try something on,

feel its weight and texture, or smell and taste it. "People lose intangible aspects of customer experience, such as atmosphere or the subtleties of face-to-face interactions" (Murray, 2003, p.7).

The AST continuum is a construct designed to provide business with a strategic platform from which to do successful branding and it factors the five human senses in its conception. The following points have been observed which underpin the research.

- Traditional methods of branding are not as effective as they could be in today's highly competitive, technological environment. The majority of modern industries are being significantly affected by computerisation and the relentless speed of change (Brynjolfsson & Hitt, 2000, p.24 & Neumeier, 2009, p.19). "The increase in broadband availability puts more and more power into the hands of the customer" (Pringle & Field, 2008, p.256).
- "Sensory elements can be the key factors distinguishing one brand experience from another" (Gobé, 2009, p.71).
- Brands require branding to stay alive, calling for continuous review and adjusting of their experience design, which encompasses a wide range of interrelated disciplines, to support continuously evolving customers' needs and wants. For business, this is more important than ever. "A winning strategy today may not prevail tomorrow, it might not even be relevant tomorrow [and whilst it might be optimal to] stick to your knitting, keep your focus or avoid

diluting your energies, blindly following a strategy is more risky than ever” (Aaker, 2010, p.12).

- A further challenge and difficulty for branding is that the value of a brand is hard to define at the best of times, and whilst the icons of brands can be tangible, their value can fluctuate (Aaker & Joachimsthaler, 2000, p.20). This is influenced by the challenge of customer experience (trust, value and emotional elements) and retention of brand loyalty.
- To provide context, business looks to branding in order to help build loyalty, value and equity in business. This research is concerned with small business in New Zealand, where 97.2% of enterprises have fewer than 20 employees. “Small businesses dominate our industries” (Ministry of Business, Innovation and Employment, 2013).

Three parts constitute the AST continuum: art, science and technology.

According to Kagan (1994), the interrelationships between art, science and technology are rooted in history, yet the segregation of art within culture as an aesthetic phenomenon, in contrast to human activities, which are dictated by practical needs and objective reality (technology) is recent. However, a number of factors have led to a reversal, including the rapid development of design, which is playing an increasingly important role in culture and the appearance of art forms based on new technologies such as photography and computer graphics (p.409).

Art is one of the key creative processes, which may not only visualise design of a brand, but it can also contribute to the creative part of a brand campaign, through creative expression of a concept or strategy. Yet Malina (1990) argues that art has no role to play in design or sense experience; “in traditional plastic art forms, the artwork is embedded in the material itself and is directly accessible to the human senses. In computer arts the artwork itself, embedded in digital data and software, is not directly accessible to the human senses [and] the inflexibility of computer art systems, and their unsuitability as tools for artistic expression, is perhaps reinforced by the widespread use of prepackaged software” (p.33). I contend that this has become a benefit for co-creation and collaboration in a global environment because the software is a new set of tools, not dissimilar to a traditional paintbrush. It is how the tools are used that is important and there is an opportunity to evoke sensory experience and emotion through imagery and sound for the brand customer through technology. This can “be developed in specific ways – from concrete appeals to the senses to more abstract ideas and deeply embedded first impressions” (Clark, 2004, p.67). “Works of art have always existed within complex personal, social, cultural, economic, spiritual, and philosophical networks [however, by adding people] an age of global interconnectedness, the creation of works of art follow entirely new principles” (Alexenberg, 2008, p.89).

Connections between art and science are not well understood. “The exact relationship between an individual’s capacities for an abstract reflection of reality and a figurative reflection of reality, corresponding to scientific versus

artistic perception, is far from being understood or controlled” (Kagan, 1994, 4009). However neuroscience a scientific technology, may be used to observe human behaviour. “This behaviour research is providing “many insights into how customers make decisions” (Dooley, 2011, p.83). Therefore, in current branding, science may be employed to understand human behaviour. Today the theories about human perceptual systems are based in biology, neuroscience, and psychology, not mysticism (Norman, 2004, p.20) and the purpose of science is to “acquire knowledge of all things as governed by universal laws (to the extent that objective reality is accessible to our cognition)” (Kagan, 1994, p.409). Cognitive expression through observations in neuroscience is enabling understanding of unconscious emotions such as desire, motivation, the reward event (Morillo, 1990, p.173) and human sensation. “Through our senses we acquire information as well as sensations, which are related to the senses in more than an etymological way, the stimulus for sensations or feelings may come from the inside or outside” (Goody, 2002, p.17).

The five senses are the means by which material phenomena are perceived, assessed and privileged. This is important to human-centred branding because as Gobé (2009) asserts, “sensory elements can provide a fertile and imaginative shopping experience for consumers” (p.71). Smell is widely accepted as the sense most connected to memory and emotion because of the connections between the olfactory region of the brain to the amygdala-hippocampal complex. “Scent is not filtered out by the brain; it is instinctive and involuntary” (Gobé, 2009, p.99 & Lindstrom, 2005, p.69).

I perceive that the difficulty in designing brand communications for the senses, is that whilst smell, sight and possibly sound maybe considered in a pragmatic manner, touch and taste may be more difficult especially in the context of social media. Gobé (2009) contends that “successful sensory appeals only occur through intelligent strategy”(p.71). Therefore this research seeks to understand the importance of sensory appeals within the strategic AST continuum. This may potentially enable NZ SME’s to develop brand communications that are more meaningful, pleasurable and emotional for their customers.

Connections between behavioural sciences and technology appear to be understood better. However, “the unprecedented acceleration of technological innovation has created conditions in which consciousness is more than ever inadequate” (Hansen, 2004, p.394). Customers use technology in terms of social media. Norman (2004) suggests that happy people are more likely to seek alternative solutions and therefore forget associated issues, than people who are frustrated when it comes to emotionally satisfying design of products (p.20). Dooley (2011) questions this in regard to websites by saying failure to connect with customers may cause frustration and ultimate lack of success (p. 245). Therefore it is through art that these issues may be addressed for successful brand communications. The AST continuum in its conception is itself a continuum in this regard (the continuum aspect is further discussed in the literature review) and is human-centred in its approach. Human-centred in this context not only denotes the interfacing of “human thought processes and technology” (Stanton, 1997, p.2), to enhance experience but also references human values (Laurence, 2012, p.152). Human values, broadly speaking are

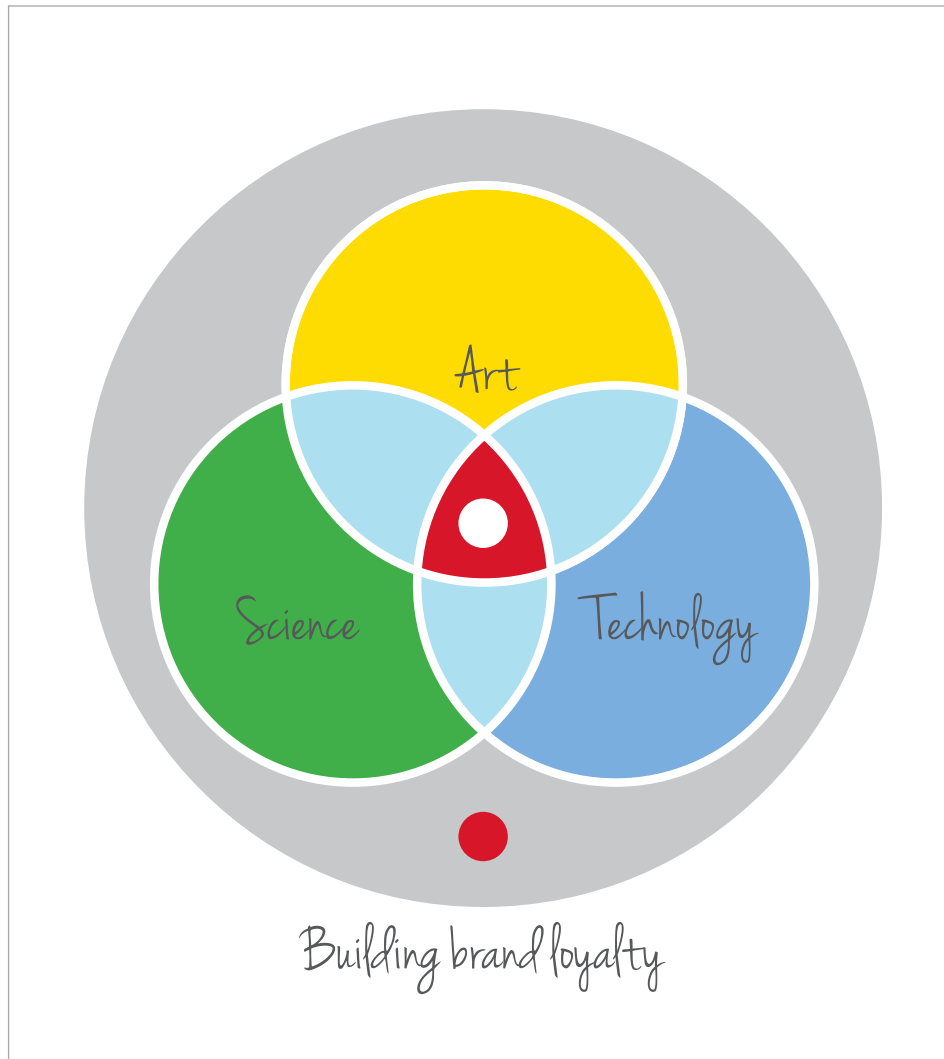


Fig. 1: *Building brand loyalty through the AST continuum.*

assigned via social, cultural, religious or political convention (key to the thesis).

When the three component parts combine (art, science and technology) in this interdisciplinary approach there is the potential for customer loyalty to be created. “Customer loyalty is an invaluable asset for firms as it [may] provide security and predictability of demand and create barriers against other firms trying to enter the market” (Hakala, Svensson & Vincze, 2012, p.439). See Fig. 1: *Building brand loyalty through the AST continuum.*

Customer loyalty is based on a collection of factors, which includes trust, value and emotional elements. “It is known that trust is a living element in a relationship and it can grow in strength by successful interactions or be diminished to the point of extinction by a failure to deliver. Different customers view value in different ways. Most consider costs and benefits and [finally] emotion is inherent in most customer decisions [with] higher level emotions [able to ignite] pride and passion for the brand” (Pitta, Franzak & Fowler, 2006, pp. 422-424). Customers can be deeply affected by exposure to a trusted brand in association with objectionable content, and with large segments of the population online, such impact on a company may be significant. “Unfortunately, defending a brand is made more complicated by the fact that not all people find the same material offensive” (Murray, 2003, p.18). Customers must also believe in the brand or company’s integrity (Pitta et al., 2006, p.424). “Corporate social responsibility (CSR) has been the business-led response to the NO Logo (Klein, 2010) critique” (Doane, 2003, p.187).

Branding is built on differentiation (Neumeier, 2007, p.65), and based on perception. Perception or perceptual experience is thought of as “involving sensations, or sense impressions [which] may be [understood through] conscious or unconscious states” (Maund, 2003, p.52). This takes place in a highly competitive environment, influenced by customer experience and *word of mouth* (WOM) (Guzman & Iglesias, 2012, p.388). Branding has become a more complex task in this environment as customer expectation has become virtually unrestricted in today’s consumer society. Expectations continue to shift and develop, fuelling competition. Brands are also contradictory. Brands require design for recognition and they also require design for surprise (Edwards & Day, 2005, p.33). This is the contradiction. Consistency fights with excitement on a continuous basis. People tend to look for a consistent anchor point to which they may respond with delight and surprise. For example, when Microsoft launched Windows 8, they delivered on surprise but failed on consistency. Apple is consistently, consistent. If all Apple computer models are lined up, it is apparent that the design of the interface has been consistent, yet the technology inside has changed and constantly surprises. See Fig. 2: *Apple interface design*.



Fig. 2: *Apple interface design*.
 2 images left retrieved May 8, 2013 from <http://www.atlargeinc.com/blog/2011/09/07/our-first-time-with-apple/>. 2 images right retrieved May 8, 2013 from <http://www.apple.com/>

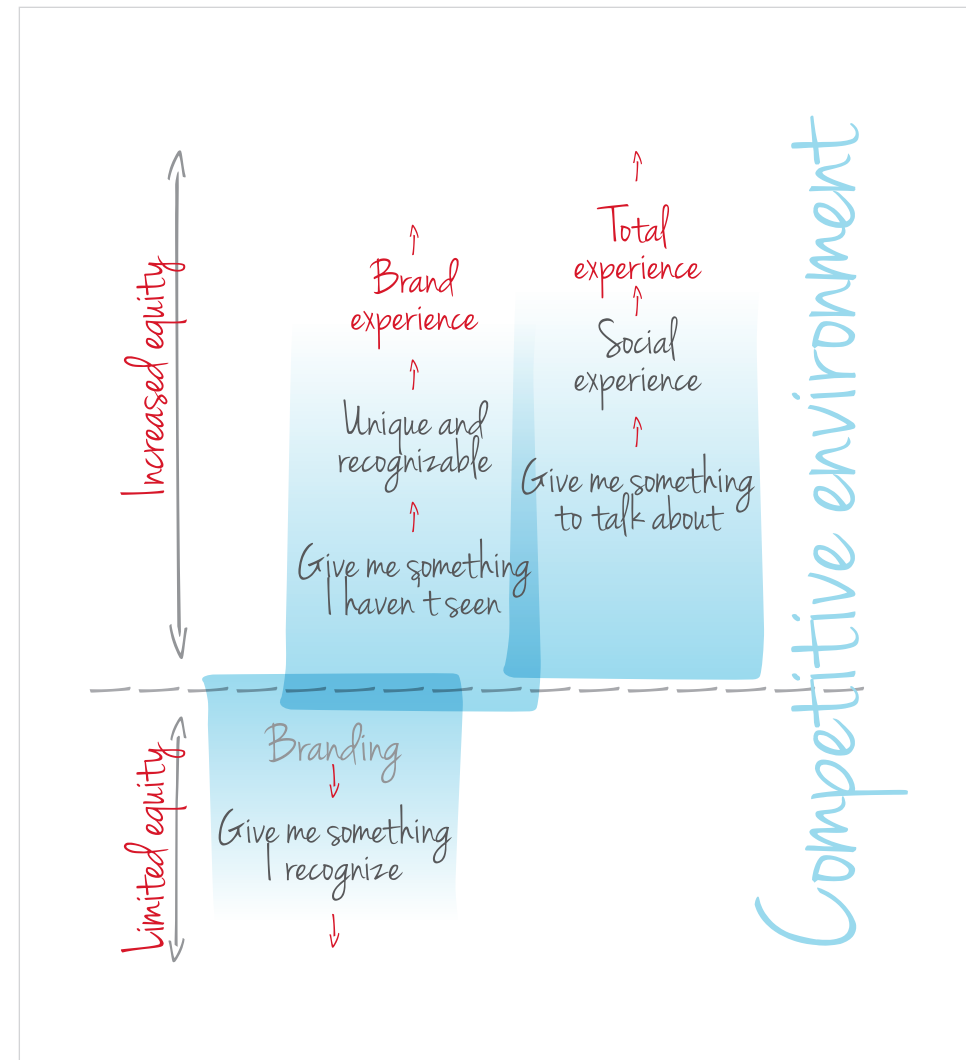


Fig. 3: *Brand time has become a form of show and tell time.* 24

Large impact innovations like the digital revolution cause disruption, producing behavioural traits that were previously untapped, yet create considerable opportunity (Godin, 2011, September 29). In order to be more successful, business may benefit from adopting different brand strategies, which cater for differences between customers from distinct cultural, social and generational groups. People are deciphering digital information and creating social experience for themselves even if separated by time zones or constrained by time. The potential for a business is to create a total brand experience, where branding can become pleasurable and meaningful for customers. Consider a branding process that is merging both customer experience and social experience within a multisensory context. When customers, in such a model, are given a unique brand experience that is more than something they already recognize, the brand provides both surprise and something exciting to talk about. See Fig. 3: *Brand time has become a form of show and tell time*. Many large-scale brands such as Apple and Burberry are doing just this.

Both the store experience and the online experience are giving people something to talk about in a social context either in person or online, building these brands. “Brands that succeed in delivering a consistent and outstanding brand experience achieve higher levels of brand loyalty and even evangelism; [however], delivering consistent brand experiences, given the plethora of available brand touchpoints, is becoming a challenge itself” (Guzman & Iglesias, 2012, p.388). Branding in this context becomes a dynamic and mobile aspect of postmodern society and culture. The findings of *Senses and Sensibility* have important implications for NZ

business and brand designers who are forming strategy to build loyalty.

The AST continuum works with the behavioural and psychological traits that make us human, and the potential is to harness the potential of a branding process (AST continuum), which depends on the communication of information in a way that delights the senses and sensibilities of the customer. Such approaches, which combine art with the persuasive and behavioral sciences, have the potential to help businesses communicate the values of a brand within a technological framework in order to build loyalty. The branding process is both logical, rational, magical and emotional (Neumeier, 2005, p.35). There are senses and sensibilities in brands and branding. People are at the heart of branding activities, and whilst their needs, wants and desires are difficult to capture, understanding customers and connecting to them is key to business success. “The best people to fund your [business] growth are your customers” (Godin, 2010, August 13).

1.2 Research design and aims

Creswell (1994) suggests, “in qualitative study, one does not begin with a theory to test or verify. Instead, consistent with the inductive model of thinking, a theory may emerge during the data collection and analysis phase of the research” (p. 94), and the theory may not emerge until quite late in the study. “View the theory or pattern as emerging in the design” (p. 95). It has been the literature (see the literature review, chapter 2), which has contributed mostly to an emerging theory for *Senses and Sensibility*. In the early stages of the study, the strategic AST continuum became evident as a possible way forward for business. However, understanding and connecting the five senses to this notion was more difficult. It became apparent that a successful synthesis of these elements would be possible only after the epistemology of philosophical thought about branding in the last 100 years was explored. As a result, the aim of *Senses and Sensibility* was to test connections between brand loyalty and the positive or negative effects of social media on the five human senses (sense experience). It is my assumption that there may be changes in customer loyalty influenced by responses people receive within social media, and these influences may compromise the notion of the AST continuum. For the strategy to be useful the requirement is for these dynamics to be understood.

Bearing this in mind, the question that this research poses is:

How does sense experience affect brand loyalty in social media?

Additionally, the research asks:

- How are the five senses relevant to a purpose or belief about a brand within the social media context?
- How could the practice of branding benefit from the proposed AST continuum?

Whilst Fig. 4: *Research process for Senses and Sensibility*, might suggest a linear design process for this research, it was in fact an iterative design process (Van Der Vorst, 2003, p.21). Critical thinking or reflection was required to enable the transformation of ideation into implementation through each stage of the process. At an even deeper and instinctive level, Crouch & Pearce (2012) discuss how deductive and abductive thinking comes from a base set of experiences. “Without an understanding of orange peel’s material qualities, there can be no realization that it can be cut into new shapes” (p. 23).

Therefore it was through the analysis of contexts; ontology, epistemology, methodology and design thinking that method and defining and framing the goal/opportunity were identified. This is very similar to developing a strategy for the brand design process. A certain amount of ‘pre’ designing sometimes takes place, to determine if the pathway the designer is following is appropriate for the

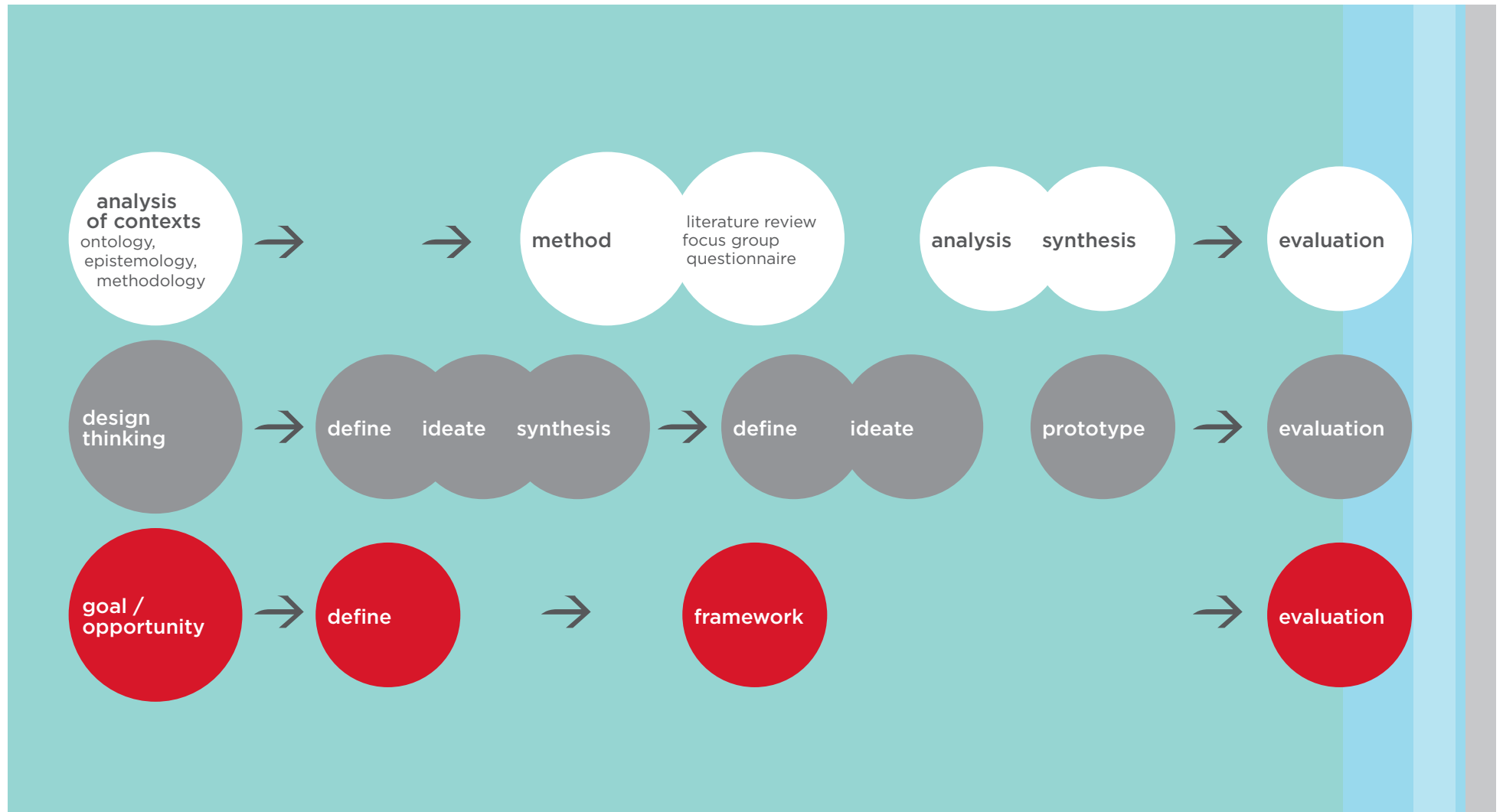


Fig. 4: Research process for Senses and Sensibility. 27

target audience and the client. For this research, early synthesis also took place prior to the method being resolved in order to help define an opportunity. This was necessary in understanding how information graphics might be used as an approach for conveying the AST strategy to business and how the findings from the research (data) may be useful for data visualisation in order to convey the findings for the thesis. A large amount of information from the research process was subsequently generated, analysed and synthesised through data visualisation, graphic representation and information design. This creative work constitutes an important and original practice-based aspect of the thesis. These first approaches are discussed in sections 4.1 and 4.2. In approaching the research phase, phenomenology was applied through three focus groups and a simple subjective assessment questionnaire (mixed methods). This approach studied the lived experience of participants and moved towards hermeneutic phenomenology when it sought meaning, through linguistic descriptions about emotional sense experience in relationship to a social media context (Smith, 2013). Building the research is further discussed in section 3.2.

1.3 Structure of the thesis

Chapter 1 has introduced *Senses and Sensibility*, the research design and aims. The introduction has included some of the strategic thinking behind the AST continuum.

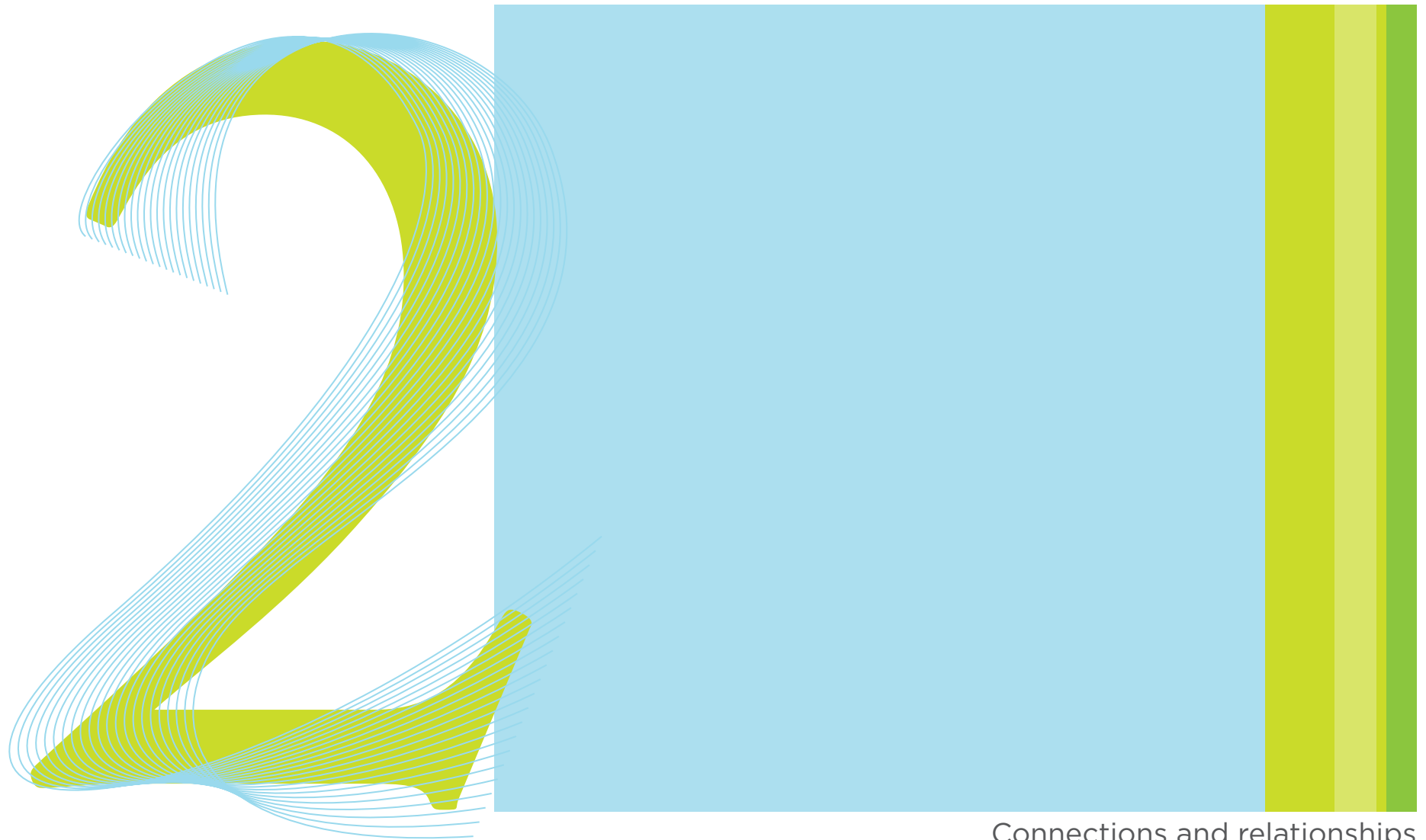
Chapter 2. The literature review delves into past and present approaches to branding within modern and post-structural contextual thinking. Relationships and connections between emotion, sensation, motivation, desire, cultural perception, identity, consumption and sense experience are explored. These customer emotional experience touch-points are key drivers in building customer loyalty for brands.

Chapter 3 outlines how *Senses and Sensibility* was framed and how the research was built.

Chapter 4. This chapter introduces early ideation and concept explorations to represent the AST continuum for business purposes and presents findings of the data from the subjective assessment questionnaire. The analysis of this data combines with data visualisation to present the overall findings for the research.

Chapter 5 concludes this study and discusses limitations and future study.

Chapter 6. Appendices and References.



2.1

Early branding theories and strategies

This chapter examines the context of this research, which investigates the effects of the internet on connections and relationships between brand loyalty and the senses. Insight is gained through a retrospective glance into branding theories and techniques in the period before the advent of the internet and what has happened since the internet became such an omnipresent channel for branding.

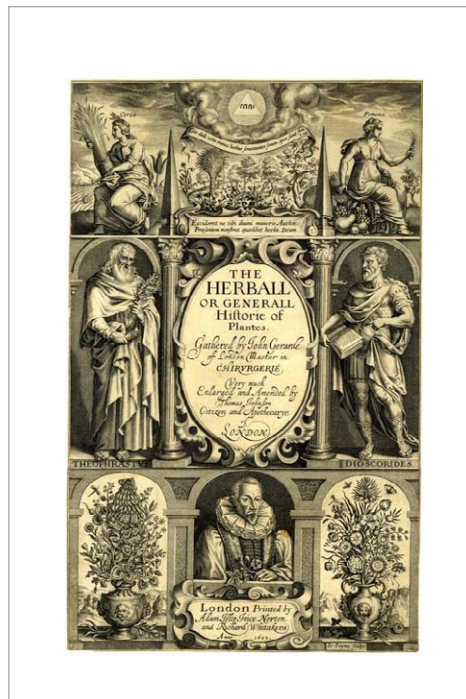
There are many definitions of a brand. Neumeier (2007) provides the most commonly quoted version. “A brand is a person’s gut feeling about a product, service or company” (p.19). He asserts that the only other word that comes close to capturing the richness and complexity of the concept is reputation. A common mis-conception is that a brand is a logo or a visual identity. The distinction between a logo and a brand is best described by Gobé. “Corporate identity programs in the new economy are far more vivid and effective if the identity has integrated elements such as social sensitivity, cultural relevance, and an attempt to find a real connection point with people” (Gobé, 2009, p.126). Finding emotional connection points for people is key to successful branding. Branding is when a company builds lasting value by delighting customers. “Companies serve at the pleasure of their customers” (Neumeier, 2007, p.19). These terms (brand and branding) are contemporary definitions. The very original definition of branding meant to mark livestock with burning irons, a practice that has lasted for at least 5000 years. (Mollerup, 1997, p.27).

Mollerup (1997), locates a beginning for the motivation of branding through heraldry (p.17), monograms (p.24) and branding with burning irons – earmarks, farm marks, ceramic marks, stonemason’s marks, hallmarks, printers’

marks, watermarks and furniture marks (p.27). He calls all of these marks the forerunners of trademarks, arising out of a desire for:

1. Social identity: who is this or who says that?
2. Ownership: who owns this?
3. Origins: who made this? (Mollerup, 1997, p.16).

This raises the question: why was social identity, ownership and the origin of a maker so important that it needed a mark?



Bicchieri and Muldoon (2011) attribute part of the answer to a requirement for social norms. This was in order to conform the behaviour of a society. “Norms of honesty, loyalty, reciprocity and promise keeping, to name but a few cooperative norms, are crucial to the smooth functioning of social groups.” But why a sign or a mark? A mark is an enabler, which can link (cognitive) perceptions such as honesty or loyalty to something tangible or actual. Associations and connections are formed between these two things. In the rich linguistic

system of semiotics, a mark (an actual tangible, visual thing) enables language (sign or signifier) and meaning (referent), to be viewed through a physical device that has been visualised in a conceptual sense. Pierce called the “physical” an indexical sign (Silverman, 1983, p.19), meaning a mark may act as a signpost, which becomes a locator for a brand. In considering the interpretation of a visual device, meaning (referent) is located. Meaning is interpreted by individual perception. These early marks or monograms helped identify in a physical way which side you were on (heraldic), denoted ownership of a particular farmer or craftsman (branding an animal or object with burning irons) and were single drawn lines or crosses. (Mollerup, 1997, p.24).

With the rise of the mark came other considerations including commercialism, the practice of trademarking and corporate identity structures. Linking a brand to a message can be found on the title page that was produced for Gerard’s *Herbal*, a book concerned with dispensing herbal cures to the English during the 16th century (see Fig. 5: Title page for *John Gerard, the herball or generall historie of plants, 1633.*) This is an example of early commercial branding and the associations that are made between a name and a message. Without going into a debate about the actual contents of the book which by some accounts could be quite inaccurate (Bowman, 2004), this title page points to a time when people were becoming linked to commercialism because of a very real need, if they had access to the means. Disease was ravaging Europe in the 16th century. The underlying hope and “promise” that Gerard offered suggested that these early customers may be cured, and his name became synonymous with healing. This

Fig. 5: Title page for *John Gerard, the herball or generall historie of plants, 1633.*
Retrieved 15 September 2012 from <http://crs.ca/featured-book/sept-2012/>

early form of advertising was a form of branding because Gerard's name was linked to a message. The page contains metaphor and classical references, the circle/sun device with a triangle top centre are a link to alchemy, and there are maker's marks in evidence (list of printers names the base).

Theorists offer different versions of why trademarking became important for brands. Micklethwait and Wooldridge (2003) suggest trademarking was required because "one of the fundamental ideas of medieval law was that bodies corporate - towns, universities, guilds - had lives beyond that of their members" (p.xvi). Meaning entities might outlive the wider group and were unable to be owned by an individual or group of individuals, which is remarkably similar to modern branding. Becker and Murphy's (2009) view is less about the good of protecting an entity and more about enabling private advantages such as rising prices without attracting attention, and controlling the identities of consumers (p.94). This notion links branding to consumption and may help explain why contemporary luxury brands are so profitable despite the availability of cheaper alternatives. Trademarking did not become law until 1905 in the United States (Blake, 2006, p.11) and marks were not able to be trademarked in the United Kingdom until a series of company acts were passed (Micklethwait & Wooldridge, 2003, pp.51-52). In 1883, the brief 1875 act was replaced by a patents and trademark act. This was noteworthy as the definition was "widened to include 'fancy words' in 1883, [with] many firms [securing] ownership of word-based marks by inventing brands that were distinct from their company name or existing product line" (Mercer, 2010, p.22). This evolution from a

description of origin to an object of artifice, marked a shift in branding with the purpose and choice of a brand name limited by trade mark registration conditions as it considered how words and images should combine to present an idea about a product or service and those ideas needed to somehow differentiate one company from another.

This meant that a name need not have to have any direct relationship to the product's use or the company itself. In fact, companies observed the opportunity to be inventive, in ways similar to what we see today. When Google was launched onto an unsuspecting public, who would have thought it would become such a powerful word. Facebook is more descriptive. Twitter, also, a more descriptive term.

According to Mohsin (2009) J. Walter Thompson (JWT) published a house advertisement around 1900, which explains the idea of trademark advertising (p.2). Mercer (2010) identifies that it was JWT who introduced the concept of brand architecture in the 1930's. Examples are supplied, including JWT encouraging the company Kraft to move its name "from denoting a type of cheese 'to making the name *Kraft* mean *a house*, to be used as an endorsement alongside product brand names" (p.33). This was pure modernist thinking (in that it was structural or based on a hierarchical and organisational structures). Brand hierarchies are a legacy that current branding still employs. This is due in part to recent theorists still espousing their usefulness (Mohsin, 2009, p.12). An example of a NZ house brand is the supermarket (Countdown) Signature range. This house brand offers

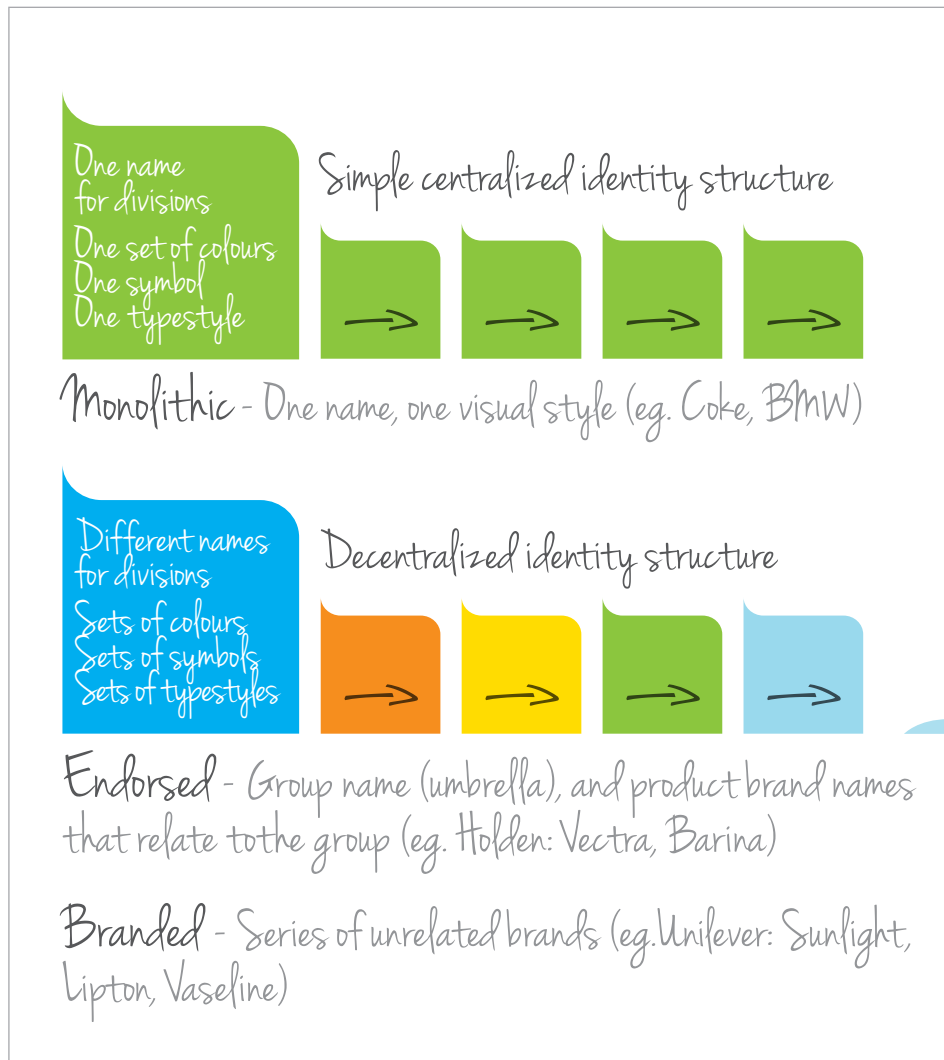


Fig. 6: Centralized/decentralized identity structures.

different product categories such as tinned fruit or pet food. Arching over this is the umbrella brand (Progressive Enterprises). Additional organisational structure legacies also include consistency of image; “advertising should project the same image, year after year” (Ogilvy, 1985, p.14) and the visual identity resource. We now call this the brand standards guideline. Designers still design and use guidelines to share information about how to work with the visual identity. Olins (1989) was firm about its usefulness: “the identity resource can clarify an organization’s structure – and enable its purpose and shape to emerge clearly” (p.78). The categories Olins outlines, namely, monolithic, endorsed and branded still largely exist today (see Fig. 6: *Centralized/decentralized identity structures*,) although the term *endorsed* is problematic. It could be argued that an endorsed brand, such as Holden (motor vehicles) requires the approach of branded branding. Another angle would be for Holden to develop its own unique identity to compete with other brands in the same category even if those other brands come from the same group, house brand or umbrella brand.



There are issues with this tight structural theory and the ensuing legacies. Edwards and Day (2005) suggest a malaise that has taken hold of house brands. They start to look the same and there is a tendency for this convergence to result in customer ambivalence (pp.25-26). Perhaps Olins predicted this? “Companies that move very fast without thinking things through sometimes look foolish” and he also advised that companies such as Procter & Gamble could adopt an endorsed identity policy for their individual “branded” products, thereby advocating flexibility. (Olins, 1989, p.78). Understandably, for a company such as Unilever to use Olins’ rhetoric would have been a questionable choice. The associations of their brands have been built up with customers over a period of more than 100 years. A long heritage of trial and trust had been established based on the benefits of the products associated with these producers and their identities became unique as a consequence.

From the Industrial Age until the 1980’s, branding and advertising was all about selling features and benefits. The brand reflected what the company wanted people to know about brands, and the benefits of brands. Companies told people what they thought people needed to know. Armstrong (2009) cites a 1989 Paul Rand discourse:

From little buckslips [‘with compliments’ slip] to big buildings, the visual design problems of a large corporation are virtually without end.

It is in the very solution of these problems – well designed advertisements, packaging, products and building – that a corporation is able to help shape its environment, to reach and influence the taste of vast audiences.

The corporation is in a singular strategic position to heighten public awareness (p.69).

Leading ad man David Ogilvy described how the best thing you could do to produce advertising that sells, is to find out as much as you can about the product. He describes how he “spent three weeks reading about Rolls-Royce and came across a statement that said, at sixty miles an hour, the loudest noise comes from the electric clock. This became the headline, and was followed by 607 words of factual copy” (Ogilvy, 1985, p.11). Ways of communicating to audiences were through traditional channels such as newspapers and television. Messages were pushed out to customers en masse. This approach did work and was successful, so much so that Ogilvy (1985) made predictions at the back of his book, *13 changes for the future*. No. 2 suggests that there “will be a renaissance in print advertising,” and no. 3, “advertising will contain more information and less hot air” (p.217). Less hot air? Ogilvy’s pragmatic approach demanded facts.

For brands to be successful they needed to be disciplined. Strategies remained unchanged and corporate identity structures were established in order to help the customer identify who their products and services were actually coming from, in a time of mergers, acquisitions and privatisation programmes of state industries (Julier, 2000, p.27). The better designed the symbols for the identity, the more successful the company. A company’s personality, and its identity, became the most significant factor in making a choice between one company and its products and another (Olins, 1989, p.9; Ogilvy, 1985, p.155).

"Before the 1980's companies wished to sell chocolate or pasta. After 1980, they wanted to sell KitKat or Buitoni"
(Kapferer, 1992, p. 18)

After 1980, the hot air that Ogilvy discussed may have signaled a new way of thinking. Globalisation increased competition and demanded that customers pay greater attention to what was going on in different parts of the world.

Brand ethics was brought to the world's attention through Klein's seminal *No Logo* (Klein, 2010). She exposed brand bullying in Third World workplaces. This was important because trust, or the exchange of trust (trustworthiness), between workers and customers (Kidder & Bloom, 2001, p.60), became an issue for brands. Losing trust was akin to a brand's reputation becoming darkened (Arnold, 2010, p.20). There was also increasing evidence of brand value gain if a brand was associated with ethical behaviour (Moon & Bonny, 2001, p.1). However, with the advent of the internet, a further dimension to brand transparency was added. In the wide, open world of the web, people are very quick to criticise through blogging about things they dislike or distrust. The term *value* takes on a different meaning here. Value creation in this context is about creating ethical value for people, to which they will respond with trust and loyalty. "True value is created when a brand offers people something [they might believe in] and they are persuaded to provide something in return, e.g. their time, money, attention, allegiance, brain power and so on" (Ind, 2003, p.227).

It is largely accepted that making money is often the result of creating value and a prerequisite for sustaining an organization's value-creation activities (Miller & Muir, 2005, p.207). Aaker and Joachimsthaler (2000) describe brand equity by defining it as brand assets or liabilities, linked to the brand name. The product or service can be added or subtracted from the brand name and thus equity can be determined. "Assets may be grouped into four dimensions: brand awareness, perceived quality, brand associations and brand loyalty. These four dimensions guide brand development, management and measurement" (p.17). According to Blackett (2003) the repetition of leveraging underlying (emotional) appeals is the bedrock of brand equity (p.18). Today's best brands are in touch with their humanity (Interbrand, 2012, p.3). Apple currently occupies the top spot in the world (Forbes, n.d). "Every so often, a company changes our lives, not just with its products, but with its ethos" (Interbrand, 2013, p.12). This is an example of a brand that has transformed humanity. It has revolutionised the way we socialise, and continues to build on integrating human-centred design with socialisation and mobilisation. It has also taken critiques to heart over worker conditions in China (Interbrand, 2013, p.13).

The Internet, which began as a public project in 1991, was the domain of technical academic and industry experts (Committee, 2001, p.124). Restrictions in the technology required practical solutions such as the incorporation of website tables around 1995. This enabled information to become more organised. However, as it was a futuristic technology, and text at that point was king, coders "animated it, made it scroll across [the] screen and fly all over [the] browser,

whilst designers put more focus on text color, which led to seizure-inducing text sites that excited visitors of the time” (Carlson, n.d.). The success of the Internet is in the innovation of what appears to be a single network which allows a platform “to reach nearly every customer and business, creating enormous market opportunity” (Committee, 2001, p.132). Graham (1999) claims that the Internet allows a greater degree of autonomy than ever before, and calls into question the power of the state as a dominant force in social life (p.37).

Foucault’s theory of power was not structural, but rather discursive, which in essence meant if individual behaviour and interactions could identify larger patterns, eventually national norms or regulations (power) would grow out of them (Taylor, 2010, p.19). May (2006) links Foucault’s discursive/non discursive to genealogy (p.63), which provides a metaphor for the idea of the Internet. Although this technological advance (the internet) was a major enabler of bringing people together globally, the cultural shifts (postmodernism) during this period placed emphasis on the consumer/reader rather than the producer/author. Perhaps these movements (post-structuralism and postmodernism) were a catalyst for an idea like the Internet to germinate? Graham (1999) compares the social transformation of the Internet to revolutions (Agricultural and Industrial in Europe) in two ways: a fulfillment of human desire, and, in the wake of a revolution, large scale alterations in the structure of social and cultural life (p.28). The issue with modernism is that the construct did not allow for connections between people. We are inherently social creatures, thrive on relationships, are emotional and multisensory. This may suggest why modernism started to come under pressure quite early. “The twentieth century kept

producing a long series of events that supplied testimony against progressive hopes once vested in human control; the inability of modern knowledge to stop the deprivations of the great depression, the shocking role of science and technology in increasing the horrors of war” (Breisach, 2003, p.26).

In conclusion, this section has discussed early branding theories and strategies. These theories and strategies arguably served branding well. However, the landscape has changed for branding, and business grapples with the intangible entity that it has become. According to Guzman & Iglesias (2012), “recent research by Nielson (2012) unveils that 92% of consumers around the world trust *word of mouth* (WOM), and 70% trust *user-generated content* (UGC), more than any other form of advertising, social media or email marketing” (p.388).

How then can a brand provide multisensory brand experience when customers have more control than the organisation does?

For business owners in NZ who are unsure about how to go about branding, it is possibly a confusing time because the traditional ways of advertising are still being sold and the way it is sold continues to advocate traditional features and benefits techniques. A recent example from *The Dominion Post* demonstrates this, comparing the benefits of placing advertisements between print online, newspaper and radio. Social media is not offered as a comparison, (see Fig.7: *Dominion Post advertisement*.) This may become a challenge if a company wants to stay relevant in a rapidly evolving and globalised marketplace where socialisation interacts with technology.

Fig. 7: *Dominion Post* advertisement.
Retrieved June 20, 2014 from *The Dominion Post*, p.14



Fig. 8: *Nano with me and my friend.*
Retrieved July 29, 2013 from flickr.com



An example of the type of communications about a brand posted online by a person (customer or otherwise) depicts an image of a Nano car in India with three men. The car is draped with a colourful flower arrangement accompanied by the caption “Nano with me and my frnd.” This example suggests emotional connection with the Nano brand, (see Fig. 8: *Nano with me and my friend.*)

Another observation about the literature from the period preceding the advent of the Internet, is that there is limited discussion about the five senses. Most discourse relating to branding and sense experience appears to have come after the Internet became part of everyday life. The next section discusses branding theory and strategies in this evolving world, in order to locate sense experience and the AST continuum in this context.

2.2 Brand theory and strategy

I have called the AST a continuum because continuum as a theory is concerned with what happens in the gaps or boundaries of continuous things and how the boundaries of constituent parts of a continuum might form a whole (Kavanaugh, 2007, p.101). Aristotle asked how could a thing be one, suggesting three possibilities:

1. The continuous is divisible ad infinitum, so that an aggregate of atoms would not constitute a continuum, rather a mere collection of things.
2. Indivisible is undivided and is therefore whole.
3. An analogy of one – one and the same (identical) (Kavanaugh, 2007, p.79).

For Brentano, the continuum was a base concept and not constructed with a sum of points. He thought about the relation between “the object and the act in terms of the relation between part and whole” (Moran, 1999, p.9).

How is it possible for a continuum to have a beginning and an end?
Whatever holds for a continuous thing seems also to hold for the relationship between two continuous things. Hence the infinite divisibility of continua also applies to the boundaries between continuous things. Every conceptualization thus becomes impossible, every boundary and separate entity fuses into a magma (Albertazzi, Libardi & Poli, 1996, p.62).

While Brentano sought to reform Aristotelian theory through “intentionality” of consciousness, it was Sartre who noted a gap between thought and its objects, for example, “desire & desired, hate and the hated” (Garvey & Stagroom, 2012, p.322).

The notion of the AST continuum as a whole (one) not structured by a sum of parts, references gestalt theory (Klanten, Mischeler & Bilz, 2011, p.31), and post-structural thinking. Theorists of post structural theory “shared in a profound disenchantment with the main tenets of modernity: that full rationality would provide complete knowledge [therefore their new theories denied] autonomy of reason and desirability of control” (Breisach, 2003, p.59).

Branding through the AST continuum in this environment considers human emotional and subjective capabilities. “Gone are the days of lifetime employment and lifetime brand fidelity . . . say hello to the age of individuality where a new

‘me first’ generation has understood the ‘art of the deal’” (Gobé, 2001, p.xix). As this was written ten years after the Internet augmented globalism it implies a western-centric view. Are these privileged customers with Internet access? This contrasts to the billions throughout the world who live in poverty and do not have a computer. There are the implications of prioritising individual First World values over communal solidarity, or privilege over poverty. Unfortunately a few big US brands continue to use this to their advantage. Many governments are reluctant to curb significant revenues (*Research*, 2003, p.15) and brands such as Coke are accessing latent (American youth culture) demand, which seems unwise (Miller & Muir, 2005, p.42) . . . because the world balance is shifting as emerging economies grow.

“Today, China leads the wave of emerging economies poised to recast the Western-dominated geopolitical balance. Its development over the past three decades has turned it from a rural backwater – the “Sick Man of the Orient” – into the world’s second largest economy” (Wu, 2013). Consequently, western luxury brands have come to symbolise success and social standing (Chevalier & Lu, 2011, p.54) and although these brands were reluctant to use the Internet at the beginning of the twenty-first century, things are changing (Chevalier & Mazzalovo, 2012, p.230). The global financial crisis appears to have had little impact on luxury brands, which Ricca (2012) suggests is due to the rise of conspicuous consumption in developing countries, which is offsetting a noticeable slowing or contracting of mature markets (p.117).

The internet has become one of the most potent touch-points for brands to connect with global customers. However, how people choose to engage with social media is personal (MacKillop, 2011, p.20) and customers are aided by the proliferation of social networking sites, which facilitates three main activities:

1. Customers can engage with new brand experience
2. Customers can monitor brand transparency
3. Customers can brand bank

The idea behind brand banking means that brands with strong associations to each other from a customer perspective are collected, organized and made available to others through sharing sites such as pinterest and flickr.

These activities are important for the AST continuum because this is where socialisation interacts with technology. Agresta and Bonin Bough (2010) tell us that branding could benefit from this way of thinking by shifting impressions to connections, campaigns to conversations (p.10). People rapidly form interconnected networks through this social web (Evans & Bratton, 2008, p.54). Gerbaudo (2012) suggests the rise of the Internet came to be hailed as opening up a new space, but for some this escapist culture has bred hacktivism which effectively re-appropriates physical public space (pp.158-159).

The notion of space takes on abstract meaning when discussed in the context of social media (cyberspace). Shields (1998) discusses Lefebvre's *l'espace*, in particular his "spaces" of representation; in other words, space is made up of space (p.154). The reason this is important is because filling cyberspace

indicates how the AST continuum might play out inside social media, and it also suggests that there may be two ways that this proposed strategy might be viewed. In both, a dynamic relationship occurs, but firstly the relationship is somewhat uncontrolled. People create their own content (expression of aesthetics through artistic means), (Agresta & Bonin Bough, 2010, p.2) and share their feelings about that content through technology (social media). In doing so they may be accessing deeply held belief codes (primal codes, discussed further on pg.48) which potentially stimulate further connections. Secondly, the AST continuum might follow a more logical (sensible) path. Designers create brand experience (art), scientists measure how people might respond (science) and technology is utilised as the main channel in which branding occurs. Perhaps both are viable options, since WOM and UGC appear to be the most trusted forms of communication (Guzman & Iglesias, 2012, p.388). But where does sense experience fit into this strategy? I believe there are apparent contradictions between the senses, which are soft, and technology, which is hard. I refer to the interface of technology when it comes into contact with human touch, sight, sound, smell and taste. When a person is engaging with technology, are they transported somewhere else perhaps, like watching a good movie. Does this really happen for customers? What if the chair they are sitting in is uncomfortable or the room cold? How can brands benefit from a deep understanding of what might be discovered between this interaction of sense experience with technology? What are the effects of this apparent contradiction in brands?

2.2.1

Sensation, subjectivity and emotion

Auriol (ca. 1280–1322) held a medieval view, which divided our cognitive brain into a sensory part and an imaginary part. The five senses combined fed the common sense and the imagination stored, retrieved, and sometimes manipulated the sense data, which was then sent it to the intellect. He used *esse apparens* (apparent being), and other synonyms including “intentional” or “objective” existence for this phenomenon. “According to Auriol, in any cognitive act — whether sensory or intellectual — the cognitive power puts the object of cognition into this special type of existence, and the object of cognition in this special type of existence is the object as perceived, [and he employed] at least two different approaches to argue for this view: one based on intellectual cognition, the other based on sensory cognition” (Friedman, 2014). Broadly speaking, sense experience refers to these two parts, a sensory part and a judgment or perceptual part. The first part is a “view that experiences are raw feels, or sensory affectations of the subject, that do not purport to represent the world in any way at all” whilst the second part is a “version of adverbialism about visual experiences, according to which such experiences are nothing more than modifications of a subject that can be characterised by specialised adverbs specifying how one is visually” appearing to be (Siegel, 2013). Therefore

visual experience may be tainted by perception based on prior experiential knowledge, and sensation closely aligned to perception, representation and misrepresentation. Descartes observed that the senses had the ability to misrepresent the material world as sometimes things did not appear as they should, for example oars appeared bent in water (De Rossa, 2010; Garvey & Stanroom, 2012, p.211). The perception belied the reality. “When one speaks of the contents of a bucket, one is talking about what is spatially inside the bucket. An analogous use of “the contents of perception” would pick out what is “in the mind” when one has a perceptual experience” (Siegel, 2013).

De Rossa (2010) uses “externalism and internalism” as two different types of representation (p.67), and relates externalism to being causal (based on what we believe it to be), whilst drawing on Descartes theory. Externalism arguably does not go far towards deciphering nonverbal haptic, kinaesthetic or synaesthetic sensations, because it relies on sight and experience (belief) to try to locate a perception about that sense experience. However, internalism within sensory representation “comes from the innate ideas of the body and extension which are present in sensory representation despite the fact that we may not be aware of them” (De Rossa, 2010, p.124) and may go some way towards deciphering haptic or kinaesthetic sensation.

Centuries after Auriol, Nagel’s 1974 famous “what it is like” criterion aimed to capture [a] subjective notion of being a conscious organism. [A human] being is conscious just if there is “something that it is like” to be that creature, i.e.,

some subjective way the world seems or appears from the creature's mental or experiential point of view" (Van Gulick, 2014). Twenty years later Nagel (1995) continues to discuss subjectivity. "Egocentric predicament remains a central occupation [and this] solipsism (the theory that only the self exists, or can be proved to exist) coincides with pure realism" (p. 47). Nagel (1995) rationalises this through Wittgenstein's *Tractatus Logico – Philosophicus* (1921): everything in the world is equally real – from my sense impressions to the stars – but still the world is my world" (p.47).

In other words, because we use intellectual cognition and language to describe what it is like, what we see, smell, hear, taste or feel, the description becomes a personal worldview which makes it real. What about concepts or feelings that are extremely difficult to describe? Or, descriptions of sensations that simply can not be described but are instead felt? To describe what it might feel like relies on description, but to describe a sensation for another creature appears almost impossible. If I am a bat, what does the wind feel like on my skin when I am flying, or what do other bats sound like to my bat ears? As humans, we can only imagine. We can never emphatically understand what it is like to be another creature because sensation is purely subjective (Garvey & Stangroom, 2012; Van Gulick, 2014). However, "science proceeds by moving from appearance to reality, from subjectivity to objectivity" (Garvey & Stangroom, 2012, p.386). Maybe sometime in the future, science (neuroscience) could help find the evidence to test Nagel's theory. It could be argued that Auriol, Nagel and De Rossa are all offering similar philosophies about sensation which when combined describe

the opposing theories: intellectual cognition/externalism (perceptual)/objectivity versus sensory cognition/internalism/subjectivity.

Roberts (2004) said all of our knowledge comes to us through the senses, which are sophisticated gatherers of information because they interpret and prioritise. When we feel emotionally connected, we say, "that makes sense" (p.105). That makes sense, aligns all five of our human senses, smell, taste, sight, hearing and touch. That doesn't smell so good leads to an assumption that it won't taste very good. Or conversely, that smells wonderful, when said in conjunction with a visual cue, can also be a feast for the eyes. A sight, taste and olfactory sensation can be further enhanced with music and a beautifully crafted eating utensil. "I'm touched you care," implies something more than the tactile. It is an emotional response to an action. The receiver of good news may respond with, "that's music to my ears". Goody (2002), describes these different expressions of the senses to have narrower and wider references. *Narrow* refers to the senses as distinguished by Aristotle, *wider* refers to the wider usage of the term, for example, a sense of humour; and an even wider term "covers the capacity to understand, to make sense, to have common sense" (p.17). Why is this important for branding? This is important because all of these expressions lie at the heart of our emotions, which are stored in memory and are core to our sensate being. Connections between memory and the senses is discussed further on, see pg.32.

The BRAND Sense study conducted by Millwood Brown and Martin Lindstrom revealed smell as being the second highest ranked sense when environment

is evaluated (Lindstrom, 2005, p.69). However “83% of all commercial communication appeals only to one sense – our eyes”. Lindstrom based *Brand Sense: Build powerful brands through touch, taste, smell, sight and sound* on the premise that in order for future brands to survive, they should be integrating as many sensory touch points as possible. Brand-building models have neglected this dimension up until now (Lindstrom, 2005, p.18). Lindstrom’s theory places a focus on smell, highlighting anecdotal experiences this sense evoked in transporting him back into happy childhood memories. One could also apply this thinking to sound very easily. We all are transported back in time through music, and it opens up opportunities to relive shared experience. “The higher the number of sensory memories activated the stronger the bond between brand and customer” (Lindstrom, 2005, p.69). This study is further discussed in 4.5.3 Overall results for the context questions, p.133. Some of the focus group questions were designed to test Lindstrom’s findings in relationship to social media.

Designing sense experience into brand communications may be effective if the experience manages to appeal to most if not all of the five human senses (Yohn, 2013, p.126). Within a retail environment (bricks and mortar), sight, sound (music) and touch (garments or books) can be carefully controlled or considered. Smell could also be introduced in this environment. A restaurant brand can utilise the senses to great effect, but bulk store shopping experiences can be anything but sensual. How does a product possibly convey all of its brand attributes when it is sitting on a badly merchandised shelf, in a harshly lit environment, and is jostling with many other potential great brands? The

product has to work hard to connect with the customer. The brand that is that product has to conjure up emotion and experience. Roberts (2004) said “the senses are the fast track to human emotions” (p.105), but what about designing sense experience for an online brand environment? Yohn (2013) suggests firms need to enrich sensory experience, but the web does not allow users to taste or smell objects (p.128). Clark (2004) counters this view with the notion that sense experience may be developed in specific ways “from very concrete appeals to the senses to more abstract ideas and deeply imbedded first impressions” (p.67). This refers to accessing memory or a type of sense layering over a period of time (Clark, 2004, p.81), and potentially adds further dimension to a brand experience when a customer is experiencing brands online.

The issue with utilising just one aspect of human emotional connection, the senses, is that it could become limited. To this end Roberts (2004) places sound, sight, smell, touch and taste in his sensuality box. His other boxes are mystery (great stories and inspiration) and intimacy (commitment, empathy, passion). These are the elements that he believes make a “truly great lovemark standout” (p.76). Legorburu and McColl, (2014) go further and advocate how by combining storytelling with systems thinking, there is an opportunity to leverage enabling technologies to create powerful story systems (p.7). Both theorists suggest structure, which in turn suggests a modernist approach. It seems only natural that the senses should form one dimension of brand experience, as the experience of a brand in postmodern culture has become more about emotion and subjectivity, it is less logical. Therefore brand strategy might consider

designing for both multidimensional and multisensory brand experience, which combines the senses with story telling and memory. Customers do not buy products and services per se, but they seek stories, engagement and meaningful experience the product or service conveys. Customers define, create and build their story through the “acquisition and application of products and services” (Legorburu & McColl, 2014, p.82).

Gaining a deeper understanding of how important memory and emotion is to current branding requires a rudimentary understanding of the anatomy of the brain, (see Fig. 9: *Anatomy of the brain*.) The amygdala is located in the limbic system. “The connection between our senses and our brain is direct, and [marketing] can appeal directly to the emotions and stored memories of their customers” (Dooley, 2011, p.35). It is believed that the amygdala plays a significant role in the enhancement of memories (Reisberg & Hertel,

2003, p.57). Fig. 10: *Sense connections to the amygdala*, describes these connections.

Pradeep and Meerman (2010) discuss “studies of humans and animals [which] have led scientists to conclude

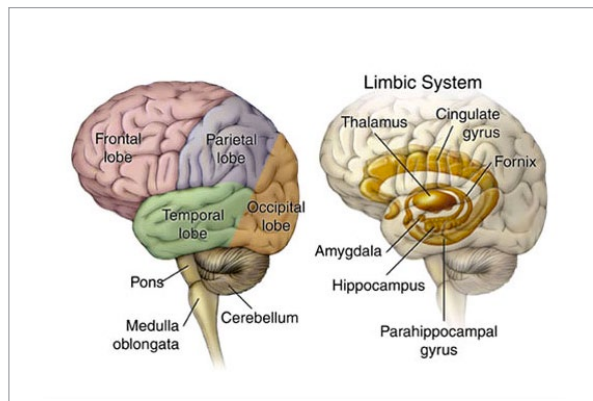
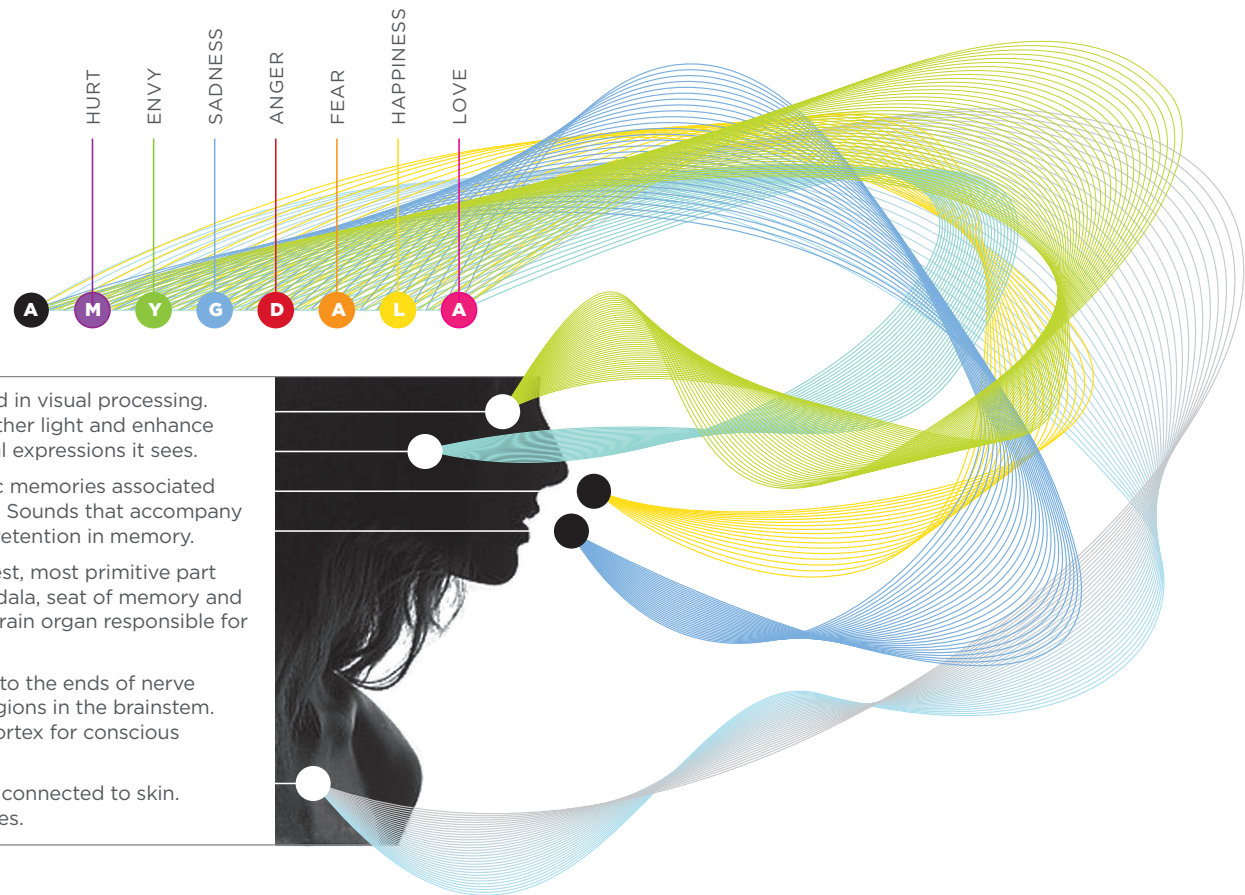


Fig. 9: *Anatomy of the brain*. Retrieved October 2, 2013 from <http://kb4brainfunction.com/anatomy-of-the-brain/>

that no single brain center stores memory” (p.39). There is evidence that many parts of the brain combine for permanent conscious and unconscious memory storage. For example, the hippocampus, para-hippocampal region, and areas of the cerebral cortex (including the prefrontal cortex) comprise a system that supports declarative, or cognitive, memory, such as remembering phone numbers. Different forms of behavioural memory, such as knowing how to throw a ball, are supported by the amygdala, stratum, and cerebellum (Pradeep & Meerman, 2010, p.39). The amygdala and the hippocampus become linked when emotion associates with memory.

“The hippocampal complex, by forming episodic representations of the emotional significance and interpretation of events, can influence the amygdala response when emotional stimuli are encountered. Although these are independent memory systems, they act in concert when emotion meets memory” (Phelps, 2004, p.198). Lehrer (2009) takes this further and says “the orbitofrontal cortex, is responsible for integrating visceral emotions into the decision-making process. It connects the feelings generated by the “primitive” brain – areas like the brain stem and the amygdala, [to the stream of conscious thought]. When a person is drawn to a specific receiver, or a certain entrée on the menu, or a particular romantic prospect, the mind is trying to tell him that he should choose that option. It has already assessed the alternatives – this analysis takes place outside conscious awareness – and converted that assessment into a positive emotion” (p.24). Neuro-imaging observes these correlating activities (Reisberg & Hertel, 2003, p.62).

SENSE CONNECTIONS



VISION. About one-fourth of the human brain is involved in visual processing. Evolved to be at the top of sensory hierarchies. Eyes gather light and enhance focus. The brain makes sense of the colors, shapes, facial expressions it sees.

HEARING. Hearing allows us to generate deep, nostalgic memories associated with highly emotional moments accompanied by sound. Sounds that accompany peak experience are critical to its enjoyment, and to its retention in memory.

SMELL. Olfactory bulbs are part of limbic system, deepest, most primitive part of the brain. Separated by two synapses from the amygdala, seat of memory and emotion, and six synapses from the hippocampus, the brain organ responsible for storing memories. 1% of our brain is devoted to smell.

TASTE. Taste signals in the sensory cells are transferred to the ends of nerve fibers, impulses are sent along cranial nerves to taste regions in the brainstem. Impulses are relayed to the thalamus and the cerebral cortex for conscious perception of taste.

TOUCH. Sex is the number one touch pleasure. Touch is connected to skin. At 6-10 pounds, our skin is the largest organ in our bodies.

Fig. 10: *Sense connections to the amygdala.* Adapted from (Pradeep & Meerman, 2010, pp.42-52). 44

In the 1920's, Hans Berger first proposed that the brain's full activity should be measured, not just a portion of it (Pradeep & Meerman, 2010, p.7). It has been calculated that human brains have 100 billion neurons, each with over 1,000 connections to other neurons. Each connection is capable of performing about 200 calculations per second. (Moravec, 1997 & Delio, 2002). The retina is "connected by the optic nerve, a million-fiber cable, to regions deep in the brain" (Moravec, 1997). Our eyes combined with all other senses are taking in about 11 million bits of information every second. Lehrer discusses a study which measured brain reaction with regard to shopping. While a group of students were debating the pros and cons of which products to buy, "scientists [measured] the relative amount of activity in each brain region, [and they] could accurately predict the subjects' shopping decisions. They knew which products people would buy before the people themselves did" (Lehrer, 2009, p.193).

Until very recently, we have not had a way to learn "how the brain feels" about the messages, products, packages, and shopping environments we create (Pradeep & Meerman, 2010, p.29).

When we are first exposed to something new, the nucleus accumbens (NAcc) is turned on. The NAcc "is a crucial part of the dopamine reward pathway, and the intensity of its activation [is] a reflection of desire for the item". The more intense the desire, the more flooded the brain becomes with dopamine. However, when price comes into the debate, "the insula and prefrontal cortex

[is] activated. [The prefrontal cortex is the rational computing part if the brain]. "If the emotional brain is pointing you in the direction of a bad decision, you can choose to rely on your rational brain instead. You can use your prefrontal cortex to discount the amygdala" (Lehrer, 2009, p.115 & pp.192-193).

Some may suggest that observing emotional brain response to activate customer behaviour is in some way manipulative; "retail stores manipulate this cortical setup" (Lehrer, 2009, p.192). However, neuroscience is a developing technology, studying human behaviour at a micro level, and I contend that it offers benefit for brand strategy through the insights gained from this empirical observation. This is because, neuroscience has the potential for brand strategists and business owners when drawing up business models to consider brand communications for products and services that meet real human needs and desires, not perceived needs as was the case in the pre-digital days of branding. This is also where I have associated a link between this technology (neuroscience) which is enabling a much deeper understanding and observation of human behaviour and the use of the term science, within the AST continuum. Here lie the synergies and the reason why science (behavioural) and empirical observation are used as parallel terms for the strategic AST continuum.

Neuroscience is enabling observations of emotional and rational decision making deep inside the brain and bringing to life some of the theories that early philosophers espoused on emotion. "Plato [liked] to imagine the mind as a chariot pulled by two horses. The rational brain, he said, is the charioteer;

it holds the reigns and decides where the horses run. [The] obstinate horse represents negative, destructive emotions. The job of the charioteer is to keep the dark horse from running wild and to keep both horses moving forward. [This] “division of the mind is one of Plato’s most enduring themes, an idea enshrined in Western Culture” (Lehrer, 2009, pp.16-17). The division of the rational and irrational brain conjures up a view that emotion is perhaps a tidy theory.

This is far from the truth. Delving into the theory of emotion has proven that it is very complex. Fig. 11: *Deciphering theories of emotion*, whilst rudimentary, provides a road map to aid understanding of the differing classical and recent philosophical views. “It is not surprising that most of the great classical philosophers — Plato, Aristotle, Spinoza, Descartes, Hobbes, Hume — had recognisable theories of emotion, conceived as responses to certain sorts of events of concern to a subject, triggering bodily changes and typically motivating characteristic behaviour” (de Sousa, 2013).

Stoklosa (2012) introduces the notion that the (1890) James-Lange theory of emotions whilst largely fallen out of vogue in recent times, “marks a starting off point for emotion research [and is a feeling emotion].” The theory supports the idea that an actual physical reaction takes place in reaction to an emotion. “We feel sorry because we cry, angry because we strike, afraid because we tremble, and [it is] not that we cry, strike, or tremble, because we are sorry, angry, or fearful, as the case may be” (de Sousa, 2013).

Perceptual theory within emotion asks, “do we love X, because X is lovable, or do

we declare X to be lovable merely because we love it?” (de Sousa, 2013). While this asks the question objectively, it could also be subjective. The perception of “I love it” has relevance in a consumer environment. “Underinvesting in perception [may] leave you undifferentiated versus competitors” (Clark, 2004, p.71). Perceptual theory is different from cognitivist theory in this context. Cognitivist theory purports to understand how “the cognitive processes underlying emotion can be either conscious or unconscious, and can involve either propositional or non-propositional content” (de Sousa, 2013). In other words, no emotion should be enacted unless there is a reason to enact: I won’t become envious unless I see you have something better than I do. This follows the Stoics in identifying emotions with judgments (Baltzly, 2013). These theories underpin what I call the push pull of branding which relates in many ways to Plato’s division of the brain theories. The customer may fall in love with the idea of a new pair of shoes but common sense may over-ride a motivation to purchase them.

Emotion is arguably one of the most important words to understand in current branding practice. Gobé (2009) is considered an influential thinker on this word in relation to branding, and in his updated version of *Emotional Branding: The new paradigm for connecting brands to people*, he discusses the benefits of using emotion in branding. “Branding bridges the gap between the provider and the receiver – between authority and freedom. It is about trust and dialogue. Powerful emotional branding comes from partnership and communication. Building the right emotion is the most important investment



Fig. 11. Deciphering theories of emotion. Adapted from de Souza (2013). 47

you can make in a brand” (Gobé, 2009, p.xxix). Through the “borrowing” of the term *ten commandments*, Gobé advocates that his framework should be followed to ensure a code of branding as such, rather than a code of living as prescribed by religion. I question aspects of this theorist’s framework. There are double-ups in the thinking, and it could have been more succinct. Number 5. *From notoriety to aspiration*, and number 6. *From identity to personality* suggest similar human aspirations in concept (Gobé, 2009, xxxii). Both discuss identity of brand as recognition (notoriety and identity), and it is implied that brand identity should impart character and charisma. Linking brand identity to emotion in this context is tenuous, because aspiration may or may not be emotional but rather contrived. Human emotive qualities are also less likely to be activated if the product being branded is something like asphalt. Gobé also missed an opportunity by not exploring religion further. Linking brand religion and emotion to brand loyalty ensures greater potential for long-term success (Lindstrom, 2005, p.167).

The proposed AST continuum requires a deep understanding of emotion, and of measuring emotion. Although the discussion on emotion and measuring emotion accesses the science aspect of the continuum, and has been discussed here in isolation, it should be viewed as an integral part of the continuum. In fully understanding and subsequently designing for the customer’s latent needs and wants there is the potential to ignite emotion and motivation for brand engagement. “Much of what we do is to satisfy our deep needs, although we often do not realise this. If brands, and those responsible for managing

them, lack the depth to reach for alignment with these very real drivers of our behaviour, then those brands are effectively disconnected and drifting beyond the people they seek to influence” (Ind, 2003, p.149).

An analysis of the sign-sense-referent continuum: semiotics and primal codes, is discussed in the next section. Why do certain designed signs and symbols activate motivation, emotional or otherwise?

2.2.2 Semiotics and primal codes

“Semiotics can furnish disciplined and valuable insights into the nature of brand equities that lead to strategic cues for evolving the meaning, relevance and position that brands can ultimately play in the lives of customers” (Conley, Berry, DeWitt & Dziersk, 2008).

Now more than ever, graphic and brand designers would be well advised to understand the connections between art and science because they are the ones who are at the beginning, or are conceptualising, the shaping of desired meanings. To illustrate how the sign-sense-referent model delivers meaning, I have looked to the work of Saussure and Pierce, as they provide the most obvious starting point for semiotic study in the twentieth century (Cobley & Jansz, 2010, p.36).

As discussed by Stam, Burgoyne & Flitterman-Lewis (1992), I believe that Saussure's two-sided entity (Dyad), which consisted of the *Signifier* represented by letters and sound and the mental *Signified* - concept or picture in one's mind, to have been limited (p.8). Pierce, a pragmatist, was closer to a more complete experience because he expands Saussure's idea into a triangulation of representament/firstness *sign*, object/secondness, *actual* and the interpretant/thirdness *mental picture* (Cobley & Jansz, 2010, p.27).

He added the physical actual to the sign, which links to emotional associations sense, which therefore derives inherent meaning. This is relevant to the study because it becomes a cycle of associations, which draws upon human behavioural factors including emotion and experience. Fig. 12: *Semiotics of three car brands*, demonstrates and links these associations of meaning to well known brands that have been built up over time. BMW is the ultimate driving machine, Volvo is the car for people who are safety minded and Toyota market themselves as the leaders in green technologies and use the word *believe*. This is perhaps the least effective because it suggests a negative. If there has been limited exposure to the Toyota brand, why should a customer believe? Despite this, the three car-brands are positioned to exploit the sign-sense-referent continuum. Brand experience, brand emotion and brand trust have all been encapsulated in the logos.

Semiotics has more application than the design of a two-dimensional sign/logo. The designer of a logo has to have a deep understanding of behavioural science as well as a strong understanding of semiotics - its meanings, and its

representations. The design also requires a deep understanding of primal codes, which are ancient and locked deep inside our brains. "Sometimes the drive to discover and deploy the primal codes of phenomena converges with the dream of recovering the primal words of Adam" (Whitman, 2000, p.263). This may explain why certain designed codes/symbols incite such instinctive and emotional, rather than rational, reactions. The benefits of understanding these human codes are key to creating persuasive and emotional brand design.

The symbols in Fig. 13: *Symbolism, meanings and representations*, are all powerful signs in their own right and evoke strong meaning, but are also quite similar in their representations. Firstly, the swastika, which has two quite opposite emotional/sense responses when people interpret its meaning. The swastika is a symbol of prosperity and good fortune, the word being derived from the Sanskrit *svastika*, meaning *conducive to well-being* (Swastika, n.d.). Millions around the world revere this symbol. Love is the resultant referent. The Germans, however, appropriated it, reversed its arms and used it during the Second World War, leaving a legacy of the opposite meaning. Quinn (1994) describes this referent for some as a "nostalgic evocation of loss (the good and civilized Aryan) and a hostile rejection of an abhorred race bound up in one image" (p.50).

The cross is a sign whose implicit referent has not been used or appropriated for use at the opposite ends of the emotion/sense spectrum. The Christian cross and the Red Cross symbol both have very similar representation and meaning. Amongst other things they both signify pain and suffering, and they also symbolise healing. The designer of the Swiss army knife brand has tapped into

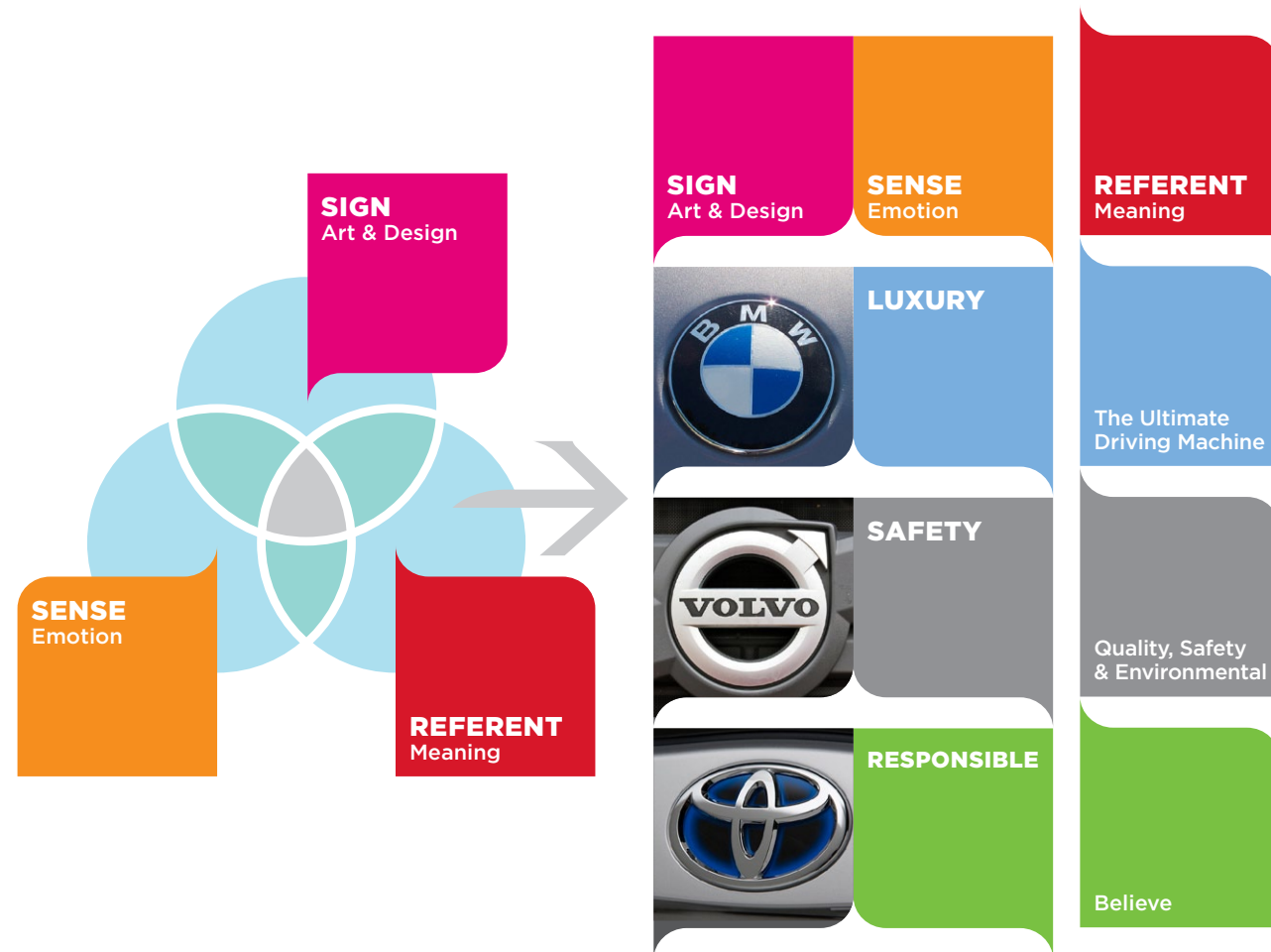


Fig. 12: Semiotics of three car brands. 50

the semiotic cues of the cross sign, applying it to the product, implying that it is a healing/fixing tool, which may be used for emergencies.

Thirdly the apple symbol has become one of the most powerful symbols of brand experience in a technological environment. The implied meaning of an apple is health. The current design of the sign/logo is a slick, technological and innovative rendition of an apple and signifies a visit to the All One Farm by Jobs. (Isaacson, 2011, p.63). Jobs must have sensed that his brand would become a world leader in bringing people and communities together, perhaps in a similar way to people working together out in the open air in an orchard. The emotion and meaning we attribute to a brand such as Apple can border on the obsessive. "Apple is the archetypal emotional brand. It's not just intimate with its customers; it is loved" (Kahney, 2002). Customers can become so loyal to a brand, and in particular to contemporary brands such as the Apple, that they go as far as to tattoo the logo onto their skin. One has only to look at photo-sharing sites to find examples of this. There is an interesting link to be observed here, between people tattooing brands, and the origin of branding which comes from burning marks into the hides of animals. Like branded animals, people perceive there will be a sense of belonging to a group. They connect with like-minded people in an exciting, global online world. Individual endorsement from an individual to a peer enables the building of tribal culture and community based around brand identification. As discussed by Kahney, Gobé talks about the Apple brand in the online version of *Wired*. "It's like having a good friend, that's what's interesting about this brand. Somewhere they have created this really humanistic, beyond-business relationship with users and created a cult-like

relationship with their brand. It's a big tribe, everyone is one of them. You're part of the brand" (Kahney, 2002).

Finally a very good exemplar use of the sign-sense-referent continuum is seen in the use of the omnipresent *like* symbol. This thumbs-up symbol derives implicit meaning based around a very casual and friendly, behavioural human gesture. I critique the sign as not well designed for two reasons. The use of the colour blue is passive, therefore suggestive of a *like* expression which may be interpreted as a casual *like*. Had a more assertive warmer colour been used, the potential is for the symbol to be interpreted as much more emotional. On occasion I have observed that when a person wishes to express that they *really like*, the symbol is used multiple times. It also lacks the personality of a human hand, which may have also been an opportunity for the expression to be interpreted in a more emotional way. But it is well recognised, and a good enough rendition to have become a powerful expression of brand approval or endorsement by both local and global audiences. It contributes to brand awareness and brand building. People like to feel they have a voice and a choice. If they like something they will click the like symbol. Marketers are promoting the use of it on the internet. The strength of the like symbol, is in the enablement of individual expression.

The issue with linking meaning and referent to brand is time. Time builds trust and loyalty (Dooley, 2011, p.105). Despite the world's religions using visual methods over centuries to create bonds of belief and loyalty, it took branding longer to make this connection (Simmons, 2006, p.210). It is only after a certain period of time that a brand gains traction in the market place with a symbol;



Fig. 13: *Symbolism, meanings and representations* 52
 Hitler image retrieved May 23, 2013 from <http://www.ushmm.org/wlc/en/article.php?ModuleId=10007453>.
 All other images retrieved May 23, 2013 from <http://flickr.com>

after time has passed, the meaning may become lost, or less well known as younger customers enter the market place. Take, for example, the Nike swoosh which first appeared in 1971. Nike the brand is named after a Greek goddess of victory. She is linked to force, speed and has a wealth of historic meaning. Blogs on the internet tell us that the swoosh represents her wings. Other interpretations may include that the tick is a positive mark. Linking this device through marketing and adding the tagline “just do it” has resulted in Nike becoming an extremely recognizable, powerful and profitable brand (Klein, 2000, p.4). Meaning has been infused through years of hard work and strategic brand design.

Semiotics plays a significant role in brand design and visual identity design. The link between semiotics and a logo is perhaps expressed through the meaning of logo. “The term logotype and its shortened form logo come from the Greek *logos*, meaning *word*” (Mollerup, 1997, p.109). According to Quinn (1994) a trademark or logo is a form of communication. The trademark has since been superseded by the logo and in doing so has moved from an expression to define a distinct grouping of manufactured objects or commodity which is bought and sold, towards a corporate personality, in which the design of the logo, articulates and reveals a relationship to the consumer (p.126). The role of design and semiotics within these changing perspectives and continually evolving brand environment is discussed in the next section.

2.2.3 The role of design and semiotics within changing perspectives

Design and semiotics continues to evolve through a shifting brand environment because of cultural and social changes as was briefly discussed on pg.26. These changing perspectives are redefining how design and branding is approached.

Modernism in graphic design theory was concerned primarily with formal methodologies [detaching design from a disruptive aesthetic agenda] which resulted in the graphic design international style values of neutrality, objectivity, and rationality expressed through tightly gridded layouts and restricted typography (Armstrong, 2009, p.14). Paul Rand, the iconic American designer, espoused these values and his designwork drew heavily from these influences. There was no cross-fertilisation with branding in the 1980's, with branding (corporate identity) still being driven in modernist terms by writers like Wally Olins, who were building on the Paul Rand tradition of objectivity and organisation.

According to Heller (2008) “by 1993, modernism was under heavy attack by academics and hothouse habitués as a cold, ridged and bankrupt style that had lost much of its relevance as corporate identity devolved into a litany of clichés” (p.221). Heller, like many designers, views modernism as a style, rather than a way of thinking and approaching the world. I argue that even though

most graphic designers are enculturated into a neo-modernist way of thinking and designing, a modernist approach may still be necessary when information is to be conveyed through graphic design. Structured, hierarchical design with typography that is clean, simple, organised and “modern” enables clear communication for audiences.

This contrasts with postmodern culture and post-structural thinking. Crow (2006) writes, “unbridled from the need to continually expose the ‘subtext’ (implicit meaning), the post modernist experiences life as a series of signifiers. Their sensibility is ‘figural’ as opposed to ‘discursive’, (expansive rather than abbreviated) and their approach is ‘holistic’ rather than ‘analytical’ (p.182). Thakara’s (1988) edited series of essays discusses the changing order. Julier (2000) criticises the essays to be no more than an honoring of the diversity of practices (p.50); the essays offer some insightful views, however, even if they are from separate design disciplines which prevailed at the time. Thakara (1988) suggests that at that point in time, design was used only to improve styling or cut costs, and that in the future Western design based on “production-led” needs to shift towards the Japanese model of using technology to create what customers actually want (p.20). While this relates to product and industrial design, it does, however, locate a point, which may have redirected thinking towards subjectivity. One of the essayists, Dona (1988), asserts that “communication is undergoing a crisis of content that calls into question its very purpose and functioning, which depends on the privileging of particular linguistic systems and the reproduction of certain sets of signifiers” (p.157). Dona asserts that everyone needs to

speak the same language, regardless of location, and should have a shared understanding of symbols. Time has proven that this crisis of content has been somewhat resolved. Strategic brand design has furnished customers with signs, signifiers and referents that have global meaning, for example, the Apple brand.

The modernist ideals of legibility, clarity and simplicity were put to the test in the 1970-1980’s. New technologies were made available, namely the computer and the photocopier, which more or less coincided with the beginnings of post modern expression in design. “Angry modernists protested the work as ‘ugly’ and ‘impractical,’ kicking off the ‘Legibility Wars of the 1990s’” (Armstrong, 2009, p.81). This was a fascinating time for the discipline. As exemplified by graphic designers like Terry Jones and Neville Brody, experiments with these new innovations led to new and different design solutions for creative briefs. Emotion, speed and excitement played a big part in adding texture and corruptions to type and imagery, which in turn led to illegibility and complexity. “It all helped to create the immediacy, a total contrast to the over-sophistication and lack of soul” (Jones, 1990, section 3). “Powerful modern design tenets were shaken; designers lost faith in the rationality, objectivity, and universalism of the early century” (Armstrong, 2009, p.57). Emotion, intuition and feelings were starting to flex some muscle. Expressive typography is one of the most visible and immediate examples of this. The typeface *Blur*, a delightful post-modern contribution from Brody, contrasts greatly with the classic modernist 1960 typeface *Helvetica* designed by Max Miedinger (Linotype, n.d.). (See Fig.14: *Comparisons between Blur and Helvetica.*)

Blur

Blur

Blur

Helvetica

Helvetica

Helvetica

Perhaps it was a coincidence that Blur was designed in 1991 just as the internet became a public project. It reflected “the present transitional period [and it] made headlines appear more fluent after the harsher geometry of Industria and Helvetica. Blur emulates a physical process. In this sense it is undersigned, a sign of digital technology starting to dictate its own language” (Wozencroft, 1994, p.14). Both fonts are still used extensively in brand communications today, which may signal connections combining the best of modernism and post-modernism graphic design aesthetics.

In the 1960's post-structuralism was a trend in philosophy that discussed and was concerned with the de-centralisation of meaning, and all that is relative. This played a larger role in discourse at the time than it did within modernism. The diffusion of contemporary semiotics (Sebeok, Posner & Rey, 2010, p.11), and the introduction of the Internet left us with a post-structural semiotic metaphor - the *web* (Sebeok et al, 2010, p.x). This particular metaphor is a modern development, but historically Mollerup (1997) asserts that metaphorical signs share conceptual qualities with an object which relate to figurative and descriptive marks (pp.84 & 104-105). As yet however, it appears the notion of the computer being integrated into the inner emotional world of people as a personal friend has not been investigated as a semiotic phenomenon (Maranda, 2010, p.517). This is important to note because this study investigates the effects of social media on branding and increasingly as customers carry their technology with them (mobile devices) and linguists may describe them as *friends*.

Fig.14: Comparisons between Blur and Helvetica.

It is the designers in the broadest sense (design, architecture, fashion), who are the ones constantly striving to construct new narratives and new experiences based on post-structuralist sensibilities that are paving over modernist overtones. Hughes (1980) argues that “the modernist achievement will continue to affect culture for at least another century. Histories do not break off clean, like a glass rod; they fray, stretch, and then come undone, like rope” (p.375). With the foundations laid for brands, branding began in the 1990’s to focus more on the customer’s understanding of the brand rather than the internal processes of developing the best image for the company. Designers are designing humanistic sensation over company interpretation as they witness an “increasing fluidity between [social media] technologies” (Crow, 2006, p.182). The advent of the Internet coincided with changing perspectives. It continues to be a major game shifter, and if companies do not to understand how their brand design interacts with customers through this medium, may be to the detriment of their brand communications and ultimately, business equity. Understanding customers and who they are is discussed in the next section. “To be a brand in cyberspace, it is essential to understand this culture and work within the realm of the mind-set [of] savvy consumers” (Gobé, 2009, p.266).

2.2.4 Customers

Why is it important to understand who your customers are and where they are? Fuggetta (2012), says it is because they become brand advocates, and customers trust advocates, not ads (p.10). Advocates are customers who discuss your business without prompting, and potentially create purchase intent (Gerson, 1998, p.76; Pradeep & Meerman, 2010, p.117) Advocates are different from fans (Fuggetta, 2012, p.12); advocates use WOM. Brand building increasingly relies heavily on WOM recommendations spreading rapidly through our networked society” (Kim & Mauborgne, 2005, p.127). WOM in social media is social currency. “If you give social currency of value to someone, you can then pass it on as something valuable to another person” (Oatway, 2012, p.11).

What this means for business is that it is difficult to measure how much economic profit is derived from particular customers or segments and therefore difficult to ascertain how much should be invested in attracting or retaining customers (Randall, 2006, p.22). This is further compounded in social media. Where are the customers and how can they be engaged? Or, how do customers find your business? Harden & Heyman (2009), report a 2008 global study which found two-thirds of customers will go to a site they know, and the other third randomly surf. This behaviour is typical of *business to business* (B2B) customers (p.67). I would argue that as B2B is a term associated with professionals, for

example, architects searching for lighting solutions, the study may have been associated with older demographics. This is because customers come from all walks of life, and are at different life stages, and are therefore concerned with different things. Existing within the generation divides are different types of customers.

Prosumer derives its meaning from a meshing of the two words *professional* + *consumer* = prosumer. Prosumers are rewriting the rules of persuasion and help us understand social media phenomena such as UGC, blogs and podcasting (Jaffe, 2008, p.38). Prosumers may be digital immigrants (analogue users who have adapted to technological advances) or digital natives. The latter were born during or after the introduction of new technologies and are more conversant in its concepts (Sorman-Nilsson, 2013, p.11). They will be the true citizens of the digital world (Dixon, 2014).

The latest, greatest, newest thing according to a global trend-watching website are virgin consumers. Who are virgin consumers? They are customers who, far from being coy, lust after, try out, and experiment with all these new brands, products, services and experiences more than ever. They navigate through the insane levels of choice offered by the 19,000 new apps that Apple says are added to their store every month (Virgin consumers, 2013). The report also describes *newism*. Pradeep & Meerman (2010) correlate newism with novelty. They contend that the “brain can’t ignore novelty [as it] is the single most effective factor in effectively capturing its precious attention, [therefore] novelty recognition is a hard-wired survival tool all primates share” (p.29).

The issue with following a trend such as novelty, is that innovation becomes restricted when you draw on the same narrow range of information as everyone else (Yohn, 2013, p.75). However, some customers such as *lead users* have been characterized by virtue of being more competent, resourceful and interested in innovation. They may lead product innovation and are different to later users (Haddon, 2002, p.152). Neumeier (2009) strongly advocates innovation. “If you wanna innovate, you gotta design” (pp.8-11).

There are also differences to be considered with regard to First World countries and Third World countries. Developed countries are experiencing sharp declines in fertility and declining populations, whereas developing countries have higher birth rates but lower life expectancies. Haub (2102) provides a graph which tracks this world demographic divide (see Fig.15: *World population growth*.) Statistics NZ has a very useful interactive population pyramid tool, which demonstrates the aging trend in NZ, (see Fig. 16: *NZ population 1991-2013*.) Baby boomers register as the largest age group and are moving up the scale as they age. However, I argue that it is difficult to establish what type of customers baby boomers are. They may not be as concerned with the latest, greatest, newest thing. Or they might be. Population trends, life stage, and general inclination or socioeconomic status are important in understanding who your customer is and are key when developing brand strategy. To better understand this, Fig. 17: *Inter-generational customers* proposes a model which considers all of the different customer types within the accepted parameters of different generations.

Fig.15: *World population growth*. Retrieved May 16, 2013 from <http://www.prb.org/Publications/Datasheets/2012/world-population-data-sheet/fact-sheet-world-population.aspx>

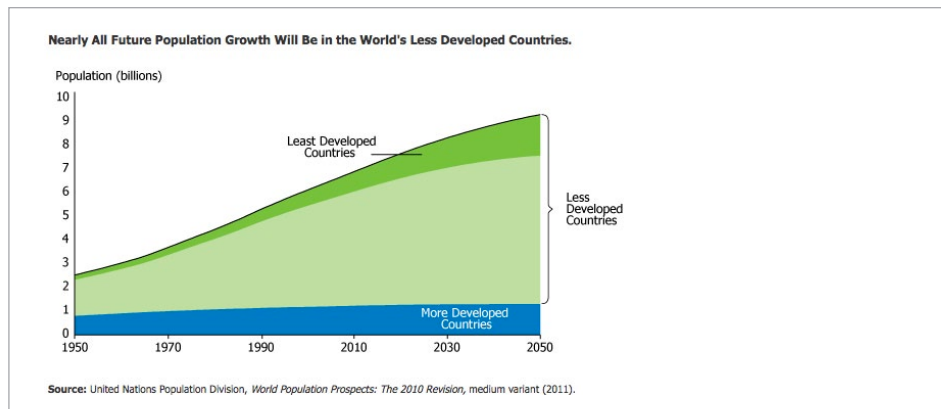


Fig. 16: *NZ population 1991-2013*. Retrieved May 30, 2013 from http://www.stats.govt.nz/tools_and_services/tools/interactive-pop-pyramid.aspx

A bell curve or wave shape is suggested because the effect of adding early, late majority, and laggards to innovators and early adopters from the generation divide is cumulative, indicating the “diffusion of the idea in society at large, until it reaches critical mass” (Sorman-Nilsson, 2013, p.139).

Concluding this section acknowledges views offered by a theorist. Analogue still has a role to play in socialisation, and digital interfaces (skype) have limitations. “Nothing beats a stinking hot Australia Day [because] culture, identity and community speak to the analogue heart” (Sorman-Nilsson, 2013, p.41). Perhaps sense experience is experienced better offline than online because of similar reasons. *Senses and Sensibility* tests this, and conclusions are discussed in chapter 5: *Concluding the research*.

There are further factors to consider with regard to how customers behave. Commensurate with sensation, subjectivity and emotion which have been discussed see 2.2.1 pg.30, is identity, consumption and desire. These factors are discussed in the next section.

All customers combined

Gen Z. Born after 2000 (13yrs to date 2013)

Gen Y / Millennial. Born 1981-2000 (19yrs)

Gen X. Born 1965-1980 (15yrs)

Baby Boomers. Born 1946-1964 (18yrs)

Traditionalist. Born 1925-1945 (20yrs)

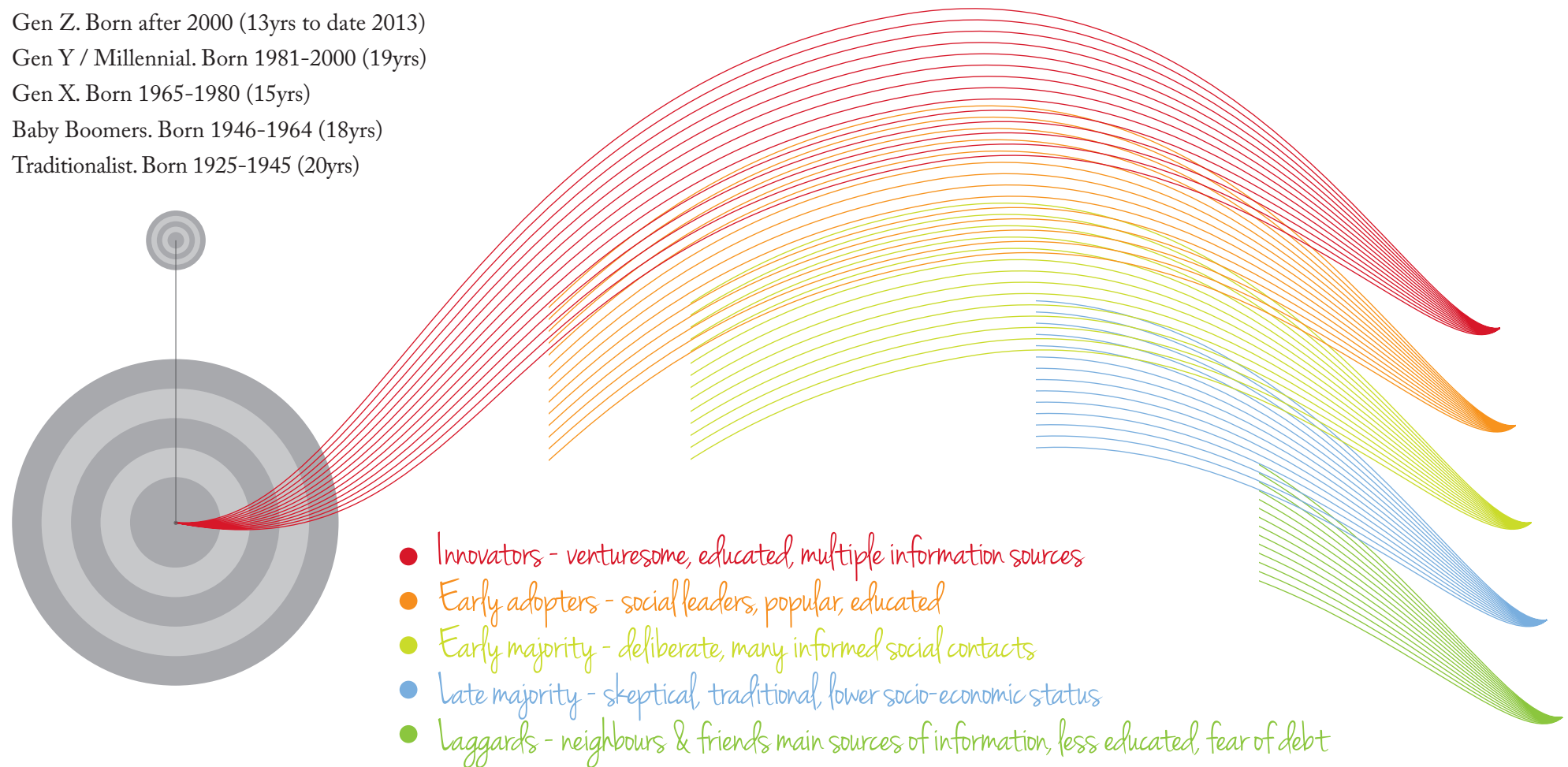


Fig. 17: *Inter-generational customers* 59
Adapted from Gobe (2009); Haddon (2002); Sorman-Nilsson (2013).

2.2.5

Identity, consumption and desire

Firstly, a distinction must be established between two types of identity, to avoid confusion with the terminology employed here. Identity (brand identity), describes the tangibles that work together to deliver a brand. Tangibles are any number of visual brand elements that are designed to come together to help deliver the communication of the brand. Tangibles can include, and are not limited to, the sign or symbol that represents a brand, a colour palette, typography and imagery. This structure has its origins in the 1980's ideas about corporate identity.

There is also another kind of brand identity. This is the type of image we as customers wish to convey about ourselves: who we are, and what we represent. Brand identity taps into the psychological aspects of personal self which is embedded within multiple social contexts (Harter, 1997, p.81). Ashmore and Jussim (1997) distinguish self identity as “individual-level phenomena from self identity as societal-level phenomena” (p.5). Taylor (2010) describes Foucault's examination of conscience as a formation of the self as an effort to “cultivate the relationship of the self to itself” (p.138). It is also arguable that even the most *non-branded* individuals are branded in some way. “Some of us are bound to self concepts we defined long ago, while others are tweaking our lives one day at a

time in a constant journey to change” (Vincent, 2012, p.122).

Within these separations exist multiple identities (one might describe oneself as more than one type; for example, I am a mother, a daughter and a designer) which Thoits & Virhup (1997) suggest may combine in two ways, through “modifying one another or merging with one another” (p.128). This is important for branding because customers actively shape, create or validate expressions for multiple identities through brand consumption (Elliott & Wattanasuwan, 1998, p.132; Laurence, 2012, p.122; Peters, 2003, p.163; Neumeier, 2007, p.20; Gobé, 2009, p.258).

The collective self has given rise to brand tribes who share a set of values and/or beliefs. Tribes are unlike brand communities in that there is temporary affiliation. “Tribal consumption seldom exhibits the long-term moral responsibility or religious zeal towards a brand” (Belk, 2001, p.63). People join different tribes for different activities, and they “don't like to be sold - they like to buy” (Neumeier, 2007, p.146). Brand communities on the other hand, according to Belk, (2001), are more likely to exist in structured social relationships and they might admire brand experience as a series of shared rituals, traditions and a sense of responsibility towards others (p.61). There are questions about both of these phenomena, especially within social media. Do people who belong to either tribes or communities buy individual brands which relate to a particular lifestyle or ethos, or are they more interested in social connections, which means they buy into the activities of the group rather than consumption of brands?

What are the long-term implications for a brand? “For most consumers, most of the time, brand relationships are thin (but not negligible), and most collectives or brand communities are imagined” (O’Guinn & Muniz, 2009, p.178).

Veblen linked identity with self and consumption. His ideas grew out of his observations of the leisure classes in America, and their ownership aspirations. He never actually used the term, or made specific references to, *conspicuous consumption*, but wrote about the compulsion toward extravagant displays of wealth, “conspicuous consumption,” and “honorific waste” (Bush, 1978, p.282). Veblen (1898) himself wrote “[women are valuable as] conspicuous evidence of his possessing many and efficient servants, and they are therefore useful as an evidence of his superior force” (p.365). This Victorian attitude is referencing identity and suggests the emergence of a new emotional culture that later developed in the West (Stearns, 1994, p.34). Questions raised include: how did objects become sacred in Victorian times when branding hardly existed, and why is brand linked to current identity? Vincent (2012) discusses sacralisation “we transform ordinary things into sacred objects that become attached to our identity” and we do it through [rituals]” (p.123). Ritual could also refer to habit. Tam, Wood and Mindy (2009) theorise on the distinction between consumption for habit and consumption for brand loyalty. Perhaps this is why some objects for Victorians became sacred; “once habits have formed, the simple perception of the context in which the action has been performed in the past can activate the associated response in memory” (p. 44). This is like a form of cultural capital.

Brand loyalty requires this cultural capital especially within social media because it connects the emotional and the experiential. It is a commitment between a customer and the brand. Chiou, Hsu and Hsieh (2013) argue that there are two types of brand connection, brand *self connection* sense of oneness and *brand prominence* connections developed over time and therefore committed to memory (p. 911). Individual judgements join a pool of other judgements (O’Guinn & Muniz, 2009, p.173) through blogging, posting and conversations. Modern day branding takes this cultural capital, redefines it to become linked to a brand story and sells it. Hell Pizza in NZ is a very good example of cultural capital working within a brand. The cheeky and sometime downright provocative headlines they employ can become quite polarising. “Committed to giving you the best damned pizza in this life or the next,” is perhaps one of the tamer pieces of communication found on their website (<http://hellpizza.com/nz/about>). This brand has become sacred to some, and may contribute to a particular person’s identity. They may become an advocate. For obvious reasons, however religious people may never choose this brand. “Once a brand reaches that sacred status, it’s indelibly attached to who we are – not because of its specific form or function but because of how it relates to our identity” (Vincent, 2012, p.123). Edwards and Day (2005) suggest that to construct identity one requires symbolic resources. Symbolic resources include symbolic brands (p.52). But why do customers desire one brand over another? Past research tells us consumption is also driven by desire.

The theory of desire is complex, but the aspect for consideration here is the state of mind, which acts in certain ways, feels in certain ways and thinks in certain ways (Schroeder, 2009). This action-based theory suggests that if there is a desire to have a thing, then the motivation is to act upon that desire and maybe do something about it, to get it. Schroeder (2004) briefly relates action to bodily movement, and suggests that reward theories of desire are more likely to draw conclusions for action (p.108). Morillo (1990) attributed motivation to the reward event (p.173). “Objects of desire all lead to a common consequence in the brain, *a reward event*, and this common consequence in turn is what is responsible for the power of objects to motivate behaviour. Here symbols and metaphor in communication come into effect (Feldwick, 2003, pg.133). Morillo (1990) establishes a by-product theory in which human motivation is outwardly focussed, pleuristic and not causal to any associated internal reward event (Wordsworth effect, nostalgic memory that lingers and dissipates over time), and compares the by-product theory to a (BLTM) a *behaviouristic learning theory of motivation*. BLTM factors genetically wired motivations. For example, food and water are rewards because we need them to survive (pp.171-172). Despite the apparent differences between these two theories “a reward is a reward, is that which contingently satisfies us” and the “theory provides a most suggestive framework for thinking about motivation and desire” (Morillo, 1990, p.173). Neuroscience has since gone deeper into reward events, and links learning signals to desire. The learning signal tells neurons something better than expected just happened, so if you just did something that might have contributed

to that better thing, do it again in the future (Schroeder, 2004, p.50).

Reward-based learning (Schroeder, 2009), describes an experience that is conscious and loved, and therefore repeated, depending on the pleasure gained. On the other hand, if reward-based learning is unconscious, Russell (1995) suggests a behaviour cycle. “A behaviour cycle is a series of voluntary or reflex movements [which] tend to cause a certain result [and] the purpose of a behaviour cycle is the result which brings it to an end, [providing] there is no interruption” (p.50). This example may relate to desiring a meal because we are hungry and there is a need for food, rather than going to a restaurant for a meal because we desire something pleasurable. This acknowledges that instinct and primitive desire are different from conscious desire. “Conscious desire is made up partly of what is essential in desire, partly of beliefs as to what we want” (Russell, 1995, p.52). Designing pleasure-based reward into brand experience may potentially motivate consumption of brands. Taylor (2010) maintains marketing is unfortunately not overly effective at doing this because, according to Foucault’s “disciplinary power” theory, people find themselves “caught up in an intricate web of compulsion and choice, desire and necessity” (Taylor, 2010, p.132).

Other theories of desire exist: good-based (belief in goodness) and attention-based (links to reason) theories (Gerson, 2013; Schroeder, 2009). However, they are of lesser importance to *Senses and Sensibility*.

Platts (1991) outlines the diversity of desires and consequences for the theory of value as recognition of this diversity (p.69). Value is something we all decide for

ourselves as a hierarchy, yet Platts (1991) says talk of value is impersonal and has no natural place within desire (p.73). Post (2004) uses the term *value fix* (VF) and requests the reader to think about a brand that you personally like (desire) and buy. “What value does it deliver to you? This VF is probably a strong driving factor in your buying process” (p.9). The list of values includes: achievement, adventure, artistry, authority, community/belonging, expression/creativity, fame, hip-ness, independence, learning, self-expression, status and tradition” (Post, 2004, p.9). The reason I have included all of these values is to point out that this theorist is not talking economic value, but personal value. Although the link to desire may be considered tenuous, value is anchored by belief. This is important for brands, because brand value may be anchored by belief.

“Belief in a brand must relate to a purpose [and] what a person believes in, at the deepest level, will determine that person's values” (Edwards & Day, 2005, p.42).

Google is an example of a brand belief that has been embedded into a brand, in order to foster customer belief about that brand. “We want to organise the world's information – is a belief of breathtaking scale, implying mastery of almost unimaginable complexity” (Edwards & Day, p.49). This theory has implications for *Senses and Sensibility*. The research seeks to identify how the five senses respond to an imposed purpose or belief, in order to test connections between brand loyalty and positive or negative effects of social media on sense

experience. There may be changes in brand evaluations (personal values) based on sense experience, which may compromise the AST continuum. *Senses and Sensibility* asks, what happens to a brand if a brand belief is absent? “Brand belief is irrelevant if a brand can do nothing to contribute to its fulfilment” (Edwards & Day, 2005, p.42).

This section concludes with a discussion on how identity, consumption and desire might connect. An expression of designing self identity and brand advocacy is found through customisation, a tangible way to display an individual's individuality. Nike offers an example of this through their NikeiD site. They ask their customers to create the ultimate statement piece. http://www.nike.com/us/en_us/c/nikeid. Pandora invites their customers to create their own jewellery design by choosing from the many beautiful and expensive beads. <http://www.pandora.net/en-us>. Both of these examples use the word *create* to very good effect because it is a word that taps into the belief that every individual has the ability to be creative. “Businesses have been forced to abandon mass production because we live in the era of mass customisation” (Marken, 2005, p.7). This is questionable because companies like mobile phone giants, Apple and Samsung produce certain phone models by the millions, chasing massive economies of scale. The products are identical, but how customers embellish a product (for example a mobile phone) is personal.

Gownder (2011) argues that digital technologies will turbo-charge customisation. His process describes a cyclical journey for an individual customer who might

participate meaningfully in the design of products they will buy. Three emerging trends are identified:

1. Today's supply-chain technologies enable more efficient production
2. Today's customer-facing technologies are cheaper and easier to deploy than ever
3. Tomorrow's customer-facing technologies will be revolutionary, which will allow for designs to become richer and more plentiful.

The AST continuum could potentially add value through customisation within social media. The innovation of mobile technologies such as smart phones has changed the customer landscape by allowing more choice and individual customisation, not only with reference to the design of the mobile phone, but to the design and innovation of contents inside the technology (Holtzclaw, 2013, p.36). "When everyone has a laptop and connection to the world, then everyone owns a factory. Instead of coming together physically, we have the ability to come together virtually, to earn attention, to connect labour and resources, to deliver value" (Godin, 2011).

Entrepreneurship, innovation, human-centred design and design thinking also have a role to play in the AST continuum. This is discussed next.

2.2.6 Entrepreneurship, innovation, human-centred design and design thinking

Godin (2010) suggests that entrepreneurs and innovators are linchpins (p.49). Suri (2008) writes "innovation is an activity that socially and emotionally affects everyone involved" (p.54). Entrepreneurship and innovation in the context of brand building is pivotal. Branson spends five minutes a day creating "billions of dollars' worth of value every few years" by "seeing new opportunities, making decisions that work, and understanding the connection between his audience, his brand, and his ventures" (Godin, 2010, p.51). As a consequence, Branson drew on entertainment aspects from his early business offering Virgin Records for his customers, when they chose to travel on Virgin Airlines. Similarly, Jobs had vision for his brand. "The main thing in our design is that we have to make things intuitively obvious, [rather] than letting engineering drive design" (Isaacson, 2011, p.127 & p.344).

Entrepreneurs and innovators consider *human-centered design* (HCD) and *design thinking* (DT) when formulating strategy.

While HCD is a term more commonly applied to product or spatial design, in the context of this study it seeks to understand how HCD might affect human behaviour during technological interactions with social media. By employing



this concept and the term *technology* for the AST continuum, I argue that it is important for NZ SME's to also understand how 5 senses may be implicated, during these interactions and what type of behavioural response is enacted (and privileged through the senses) when a customer interacts with a brand through technology (the Internet). Love (2005) describes how important it is to understand context of use and issues of use for the user (pp.76-81), and Pierson, Mante-Meijer & Loos, (2011) assert that HCD may become responsible for new human behaviour (innovative behaviour or empowerment); for example, the discovery of ease of use, either individual or collective, (p.29). These connections between technology and human-centred design outline where the synergies lie and reason why technology and HCD have been used as parallel terms for the strategic AST continuum.

Design thinking is human-centric (Mootee, 2013, p.196), and it is about people. It requires a team effort, a multidisciplinary group made up of interdisciplinary people, that cultivates empathetic design within an analytical world. This strategy combines emotional intelligence quotient (EQ) and intelligence quotient (IQ) in order to create loyalty and equity (capital). (Au, Suri, Horowitz & Jack, 2013; Olins, 2001; & Mootee, 2013, p.198). Design thinking (DT) in this context has relevance for the AST continuum. This is because DT potentially offers a pathway to solutions for business value, and the AST continuum is a designed strategy for the benefit of NZ SME's to potentially enable brand equity. DT is an enabler of building emotional capital between brands and consumer relationships. As a strategy, DT is advocated by IDEO and is adopted by many professional consultants.

“Design thinking can be described as a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity” (Brown, 2014).

Three stages of DT strategy are described on the Economist website (Schumpeter, 2013). The first stage employs ‘lots of different eyes’. It engages people from wildly different backgrounds - surgeons and anthropologists as well as engineers and designers - and lumps them into multidisciplinary teams. The second stage is to look at problems from the consumer’s point of view and the third stage is about making everything tangible. The company produces mock-ups of its products and processes. These three stages appear to be very simplistic, almost linear.

Designers understand DT, but fear what might happen if managers are taught how to employ this philosophical approach; however, there are differences between design and design thinking. “Gifted designers combine an aesthetic sensibility with deep capabilities for visualisation, ethnography and pattern recognition [whereas] DT is a systematic approach to problem solving [which might] be taught to managers” (Ogilvie & Liedtka, 2011, p.5). I argue that although there are differences between being a designer and design thinking, when these two combine, there is the potential for magic to happen. It’s the spark or innovation that occurs when great ideas synergise. Neumeier (2007) asserts that until recently design has never been used for its potential to create rule-bending innovation across the board (p.12). This is the reason why I have

used the parallel terms art (aesthetic and designer sensibilities) and DT.

It is the little things that need to be captured and interpreted: the way people respond, the things they do that are habitual and almost unthinking. “Imagination, empathy and intuitive leaps – so important in innovation – also need to be informed by experience and tempered by continual doses of reality” (Suri, 2008. p.54).

I propose a model to describe how the terms used for the strategic AST continuum are linked or used in parallel, and the model seeks to underpin the strategy with a design thinking method, see Fig. 18: *Experience innovation to create customer loyalty*. The aim is to capture curiosity, ignite desire and integrate social technical optimisation into branding in order to create loyalty and experience innovation for the customer. This model has been adapted from IDEO, see Fig. 19: *Ideo definitions of design thinking*. These models define design thinking and link desirability to business and technology in the notion that experience innovation is gained through creating emotional capital. Emotional capital (loyalty) becomes transformed into business equity as described by Brown (2014), “design thinking can be described as a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity.”

Finding innovative ways to connect with customers, through strategies DT may enable brands to grow and prosper. Insightful and empathetic (respectful to

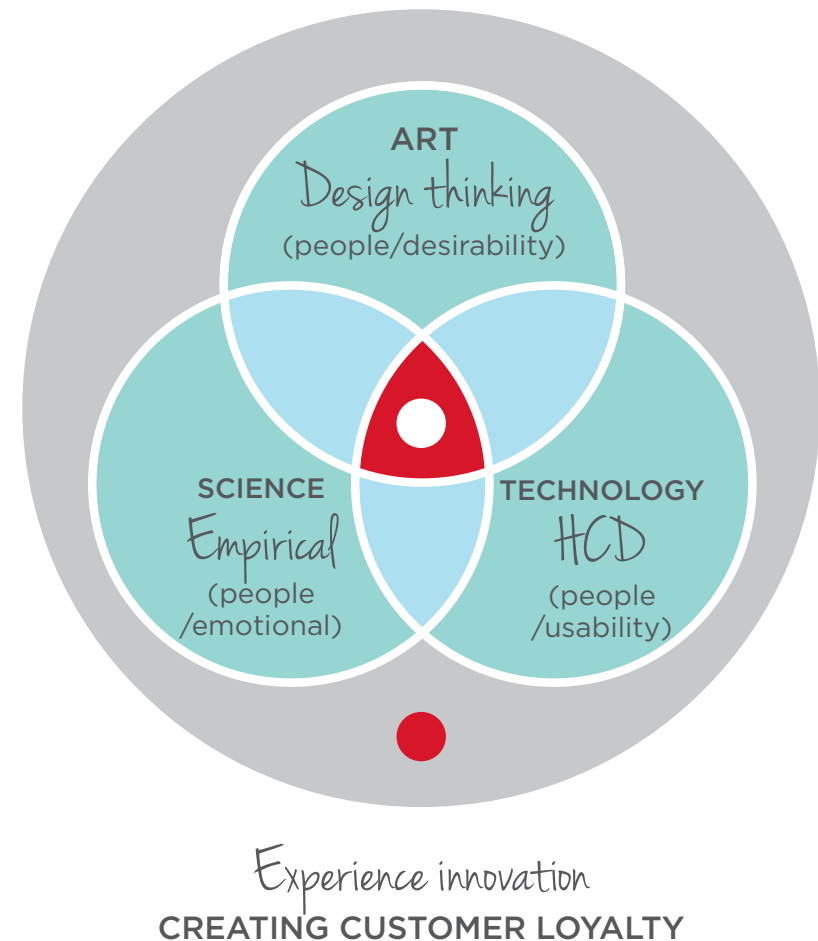


Fig. 18: *Experience innovation to create customer loyalty*. 66

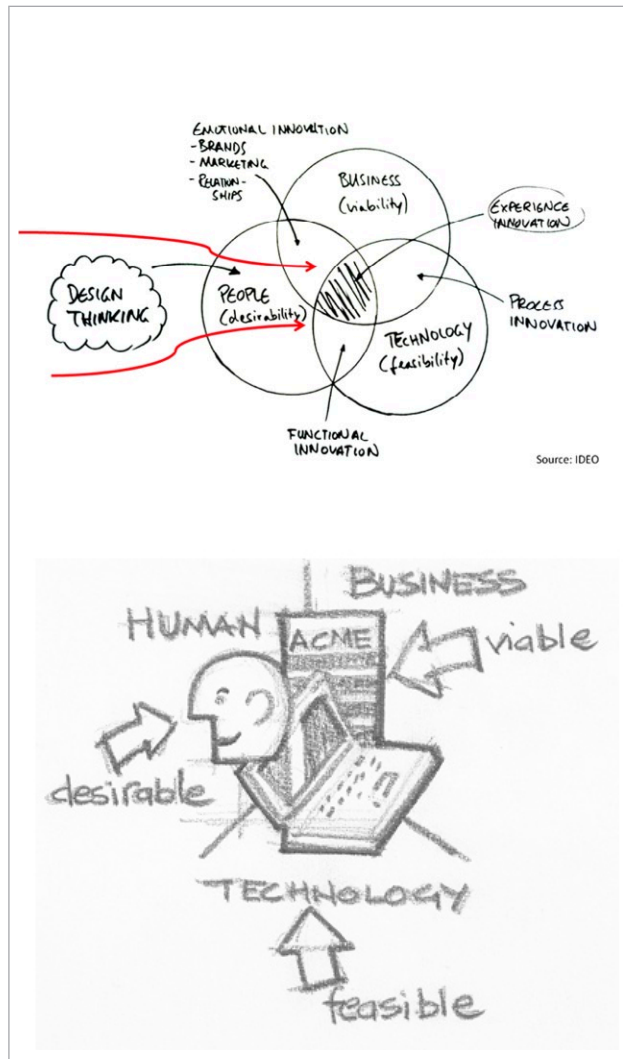


Fig. 19: Ideo definitions of design thinking.
Retrieved 2 October 2013 from <http://dthsg.com/design-thinking-method/>

human sensitivities and sensibilities) application of design thinking may break through the clutter within social media.

The new world of Social Media is among the most actively analysed, misunderstood, and at the same time, celebrated mediums affecting businesses today. At the very least, it introduces a renewed sense of vigor that is challenging creativity and convention and also inspiring more human connections in the process (Solis, 2010).

The process of DT suggests an art of solving problems. This is more than just aesthetics. It is a transformation observed across a wide range of design practice including architecture, industrial design and graphic design. We see graphic designers designing environmental graphics and architects designing interior spaces. Design used to be broken down into different disciplines, but now these disciplines are re-emerging in different forms as they integrate through DT.

The reason for this is that there is a need for design to be practical and accessible. Nowhere is this more evident than in an integration that is currently taking place. Technology is becoming mobile. It is moving from desktop computers to mobile devices such as iPads and smart phones. People come to the Internet to interact, share and communicate in real time, regardless of location. The mobile device has become part of our culture, with the physical movement that this technology has enabled. This has cultural and societal implications for brands and branding. It is part of how we connect with other people. The implications for business are that brand design, and business strategy, should go hand in hand.

2.2.7 Connecting culture and technology with the 5 senses

Brand culture surrounds a brand in much the same way that NZ culture surrounds a NZ person. Wally Olins, the great advocate of modernism, gives us a more contemporary view that links culture and branding to a desired outcome for business (loyalty).

Brands and branding are the most significant gifts that commerce has ever made to popular culture. Branding has moved so far beyond its commercial origins that its impact is virtually immeasurable in social and cultural terms (Olins, 2003).

“More recently, externally focused definitions of culture have taken a semiotic turn” (Prinz, 2011). “[Man] is an animal suspended in webs of significance he himself has spun, I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretive one in search of meaning” (Geertz, 1973, p.5). Geertz discusses culture as being the thing that is most important in understanding motivations of the human mind. “The location of the mind in the head and culture outside of it no longer seems to be but so much obvious and incontrovertible common sense [but does not answer a] subversive question, Where does mind stop and the rest of the world

begin? [This] is no more answerable than its equally unnerving correlate, Where does culture stop and the rest of self begin?” (Geertz, 2000, p.204). In other words, culture may help define an expression of identity but where does it stop and start and how can this affect loyalty to a brand which has contributed to identity?

Jenson (1999) claims that the sun is setting on the information society, that the future will be a dream society, and that globalisation is now the core of our cultural life. “Currently we are saying goodbye to many local and social traditions” (p.93). But are we? How has globalisation influenced local social practices, imagination and identity? Faccioli and Gibbons (2007) say it is because our physical environment is full of visual signs that enable us to experience the global scenario every day (p.5). Places are not necessarily defined as sites where we live, but as “sites chosen by particular groups wishing to announce their identities” (Longhurst, 2007, p.52). There are implications for successful branding in a global social media context. It is a form of brand imperialism, to impose your ideas and aesthetics into someone else’s context, for example importing American brand culture into Arabic culture. Tension is the inevitable result. Scantly clad Calvin Klien models clash with Arabic values. What we share globally has to be recognised locally, to avoid tension. Large brands such as Coca Cola can rely on recognised appeal, but the question is: how do other (smaller) brands appeal to local taste and values? Theorists suggest it is about nuancing of ideas to appear to be relevant to local global + local = glocal (Faccioli & Gibbons, 2007, p.5).

A recent story in *The NZ Herald* highlights this problem with regard to the traditions of NZ culture on brand attachment. The headline read “Brands matter little to kiwi shoppers.” Chapman-Smith (2013), reported that “Nielsen surveyed about 29,000 people online in 58 countries and found marketers faced one of their biggest challenges in the New Zealand market.” [We are apparently far] “less concerned with how famous a brand was than its quality, authenticity and usefulness.” [This makes New Zealanders, the most] “savvy, intelligent and cynical in the world when it comes to their receptivity to advertising and branding. Only 17% of Kiwis said they would be willing to pay more for designer products than for those with the same functions. That compared to 74% of Chinese customers and a global average of 44% who said they would pay more for top brands.” This is because as previously discussed, luxury brands have become symbols of social standing in China. James Bickford supports the research and is reported as saying NZ’s practicality is “part of our culture. Yes, there’s an emotional side to it if you’re buying a car but overall it’s the functional side” (Chapman-Smith, 2013). We are a different market to overseas markets, and function and logic are important for us.

Whilst interacting with technology the human is drawn into a web of interpretation of symbols that surround a particular image and is simultaneously drawn into the world or context it refers to. Therefore the interpretation of an individual is perhaps dependent on his or her cultural and social context but also reactionary (consciously or unconsciously) and therefore emotionally and sensitively (sense experience) responsive to the symbols encountered. According

to McEvilley (1991), these are cultural codes and are based on how one locates oneself with a cultural context: “self constitutes itself from surrounding cultural codes and then, looking at these codes again, seems to recognize itself in them” (p.82). The question remaining is: how does social media affect sense experience?

Social media is an interface which enables sharing and socialisation. Interaction with this interface requires a hand to pick up a mouse, or touch a screen, and location of the interaction may influence another type of touch sensation; for example, a person may feel the rain when outside with an iPad taking photographs. Does this interaction with technology therefore add the touch sense? Not necessarily if you are buying shoes, because wearing shoes feels quite different to touching metal or feeling the wind on your face. How therefore does a designer design for stimulation of the senses not catered for in technology, such as smell and taste, and can this impact on brand loyalty? Evoking the memory of a smell or taste sensation through imagery or sound may be one way of achieving this. Dooley (2004) describes how a barbeque sauce brand used visual and sound stimuli to “evoke imprints that then drove the customer to smell and taste the barbeque experience right through the glass on the TV set” (p.101). Although this was written ten years ago, there are learnings to be made because computer devices also have glass screens.

2.2.8

Making connections: a conclusion

An overall observation about the literature reveals that most of it offers a single or siloed view. Operating in silo will not produce loyalty or equity because every separate discipline will have a different set of agendas and the individual motivations will be different. One could never safely say that one approach is more important than another. Lindstrom's (2005) singular and structural advocacy seems out of date and suggestive of modernist thinking. He "analyses which of the senses are most important in branding specific categories of products and services" (Marken, 2005), and maintains that "all five senses are important in any form of communication" (Lindstrom, 2005, p.69). This appears misleading because it is similar to utilising traditional ways of doing things (imposing a message onto customers) when it comes to branding. However, designing sense experience into branding is useful because "sensory elements can be the key factors distinguishing one brand experience from another" (Gobé, 2009, p.71). To this end *Senses and Sensibility*, is factored by (and not limited to) connections between primal codes, emotion, motivation, desire, cultural perception, identity, consumption, social media and sense experience.

Can the AST continuum be located in the context of the literature? I believe aspects of it can indeed, be found. The literature discusses strategies such as design thinking, HCD and tactical applications of strategy; for example, neuroscience that is employed by brands that exist in the world market place. But how is this relevant for small NZ SME brands? Business owners may benefit from the broader knowledge about the role that human-centric aspects, such as sense experience, emotion, desire and consumption play in customer purchase decisions; and how by employing a design thinking (multidisciplinary) strategy for branding activities, their brands might grow further and be more successful. HCD may potentially address concerns about the apparent disconnects between the interface of social media (technology), and socialisation; but, how realistic is it for a NZ SME to apply insights gained from the literature about neuroscience, which is implicit in the design of the AST continuum? Discussions with the Chairman and CEO of Designworks (Australasia's largest strategic design practice), have revealed that Designworks are in the process of building this capability through a partnership with a China-based social marketing/research business who use very sophisticated social listening technology to predict behaviour patterns in order to serve relevant content to customers. Designworks will be licensing this system in Australia and NZ. Their clients may have the opportunity to benefit from this service, but it is possible that NZ SME business will not benefit, because of economic limitations. Perhaps small business will have to wait until tomorrow's future technologies to enable some sort of accessible interface, yielding information

about customer behaviour patterns, in order to design their brand strategies. This suggests that the strategic notion of the AST continuum may not be useful for NZ SME's at this present time.

Quite a few theorists agree that the customer is at the core of the purpose of branding and brand strategy. "Brand strategy [requires] an in-depth knowledge of customer motivations" (Aaker & Joachimsthaler, 2000, p.13). "Thousands of strategic plans fail because they weren't translated into compelling customer experiences" (Neumeier, 2007, p.96). Much of past research has identified that brand loyalty is achieved by creating desirable, memorable brand experience through innovation. "Design drives innovation; innovation powers brand; brand builds loyalty; and loyalty sustains profits" (Neumeier, 2009, p.158). WOM has become a motivation for others to experience a particular brand and so the cycle continues in capturing new customers. These factors are well established as underlying dimensions for the creation of past brand strategies (Peters, 2003; Neumeier, 2007; Jung & Soo, 2012). However, establishing and capturing brand loyalty within social media requires an understanding the symbiotic relationships that exist between human-centred philosophies and social media. How might online information sources (friends and contacts in social media) affect brand loyalty? At present it appears the association between brand loyalty, the internet, and factors affecting brand loyalty, particularly within an e-commerce context, is limited in the literature (Hong-Youl, 2004; Chiou et al., 2013). From my observations, also limited in the literature, are associations between social media and sense experience.

Guzman and Iglesias (2012), in a final reflection, suggest that future research might explore topics such as the requirement for "developing consistent multisensory brand experiences across all touch-points; media planning and the role of social media in the current brand environment" (p.389). The general theoretical literature in the context of measuring sense experience and brand loyalty within social media appears inconclusive.

This study seeks to identify how a source of information about a brand (social media contacts), affects sense experience and brand loyalty, when an individual is faced with both positive and negative feedback/opinions about a brand.

Building the study *Senses and Sensibility* is discussed in the next section, Chapter 3.



3.1 Introduction

This research proposes a model that maps the relationships between *Senses and Sensibility*. It explores the ways that these concepts move between the logical, objective and the magical, subjective and emotional for the purpose of brand building. Fig. 20: *Framing Senses and Sensibility*.

“A brand is the strongest engagement tool a business has because of its power to connect” (Yohn, 2013, p.24). Branding is a core business activity that interfaces with the AST continuum. The research argues that branding in the online era environment benefits from this approach because there is the potential to harness the considerable advantages of the Internet to build brand value. The Internet has moved business to an age of permanent innovation where knowledge is the asset (Jansen, Steenbakkers & Jagers, 2007, p.67). Key to building brand equity is the strength (engagement) of emotional connections with all stakeholders, customers, employees and the like (Vallaster & Fisher, 2010, p.213). Theoretically, it is proposed that the AST continuum is a robust process, with the ability to better endure competitive pressure because brand strength (strong brands) reduces business risk (Miller & Muir, 2005, p.241). Building a strong brand requires a company to create, deliver and capture value through new, innovative, business models. “Value is in the eye of the customer and companies should define how they create value in the context of customer needs and problem solving” (Kaplan, 2012, p.19).

Jansen et al. (2007) describe two developments that organisations now face: growing individualisation, and how the capacity for doing business focussed on customers’ needs has increased sharply because of developments in information and communication technology ICT. The Chameleon business model integrates these two developments (p.45). This model is presented as an innovation model, applying research and development to create a business innovation factory that devises radical new ways to create, deliver and capture value rather than implementing incremental changes (Kaplan, 2012, p.16). However, “the evidence shows that business model innovation is often pioneered by start-up firms and new entrants rather than established players in the industry” (Markides, 2008, p.121). Many factors can influence failure. Leadership, timing, resources, luck, competitor reaction and being the first to identify a market gap do not always guarantee success (Markides, 2008, p.121); yet there is an implicit assumption that changes in leadership values, qualities, and behavioural styles may ultimately translate into high performance (Chan Kim & Mauborgne, 2014).

Sinek (2011) calls his leadership business model “the golden circle” because it provides compelling evidence of how much more we can achieve if we remind ourselves to start everything we do by first asking why (p.39). Although Sinek is visible in the business world he is less considered in the academic world perhaps because his work may appear on the surface as lacking academic rigour. However, his golden circle applies a certain common sense, which is easily understood by business. The model demonstrates how entrepreneurial leaders think from the *inside out* rather than the usual *outside in* business model which

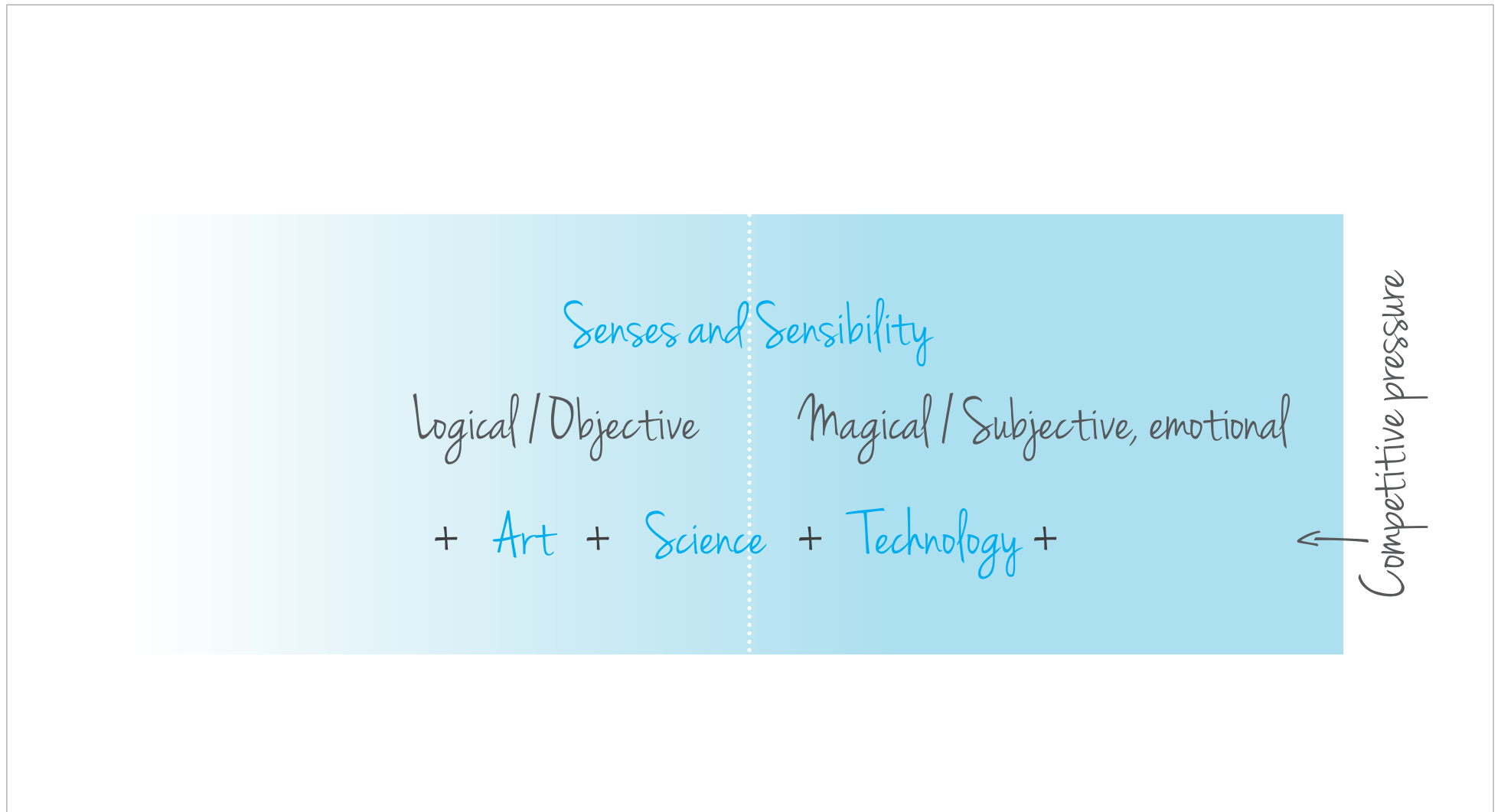


Fig. 20: Framing Senses and Sensibility. 74

considers objectively what it is and how it works first, and then wonders why the idea is not working (selling). It may not be working because the why question, which comes from a place of purpose or belief, is not being properly considered (Edwards & Day, 2005, p.42). Sinek links his model to the biology (not the psychology) of the human brain, and explains how a top down, cross-section of the brain is similar to the golden circle (Sinek, 2009). As was discussed in the literature review, early philosophers explored divisions of the brain (see pg. 30.) This model is similar to the Chameleon model, which “involves a more or less traditional way of organizing possibilities” (Jansen et al., 2007, p.98) and as a design thinking method, has been useful for designing a strategic (logical) approach for senses and sensibility. In essence however, the AST continuum more closely aligns to the notion of the Foyer model as an overall approach. This model ventures furthest away from conventional ways of doing business as it represents the virtual community and is characterised by authenticity, shared identity and a personal relationship between the participants. The organisation may join or act as a facilitator, in keeping with the (emotional, subjective, magical) contemporary values of the age (Jansen et al., 2007, p.99).

3.2 Building the research

There were three contexts to consider in order to build *Senses and Sensibility*. The research is located in the interpretivist paradigm.

1. Ontology: study of being or what is. With regard to the study of being, Garvey & Stangroom (2012) describe this as Descartes’ “I think therefore I am, or the Latin *Cogito, ergo sum*, or Cartesian dualism.” (p.214) “There is ample evidence that Descartes held the view *the object that is thought of* is the external object (whether it exists or not) represented by the idea” (De Rossa, 2010, p14). Various passages of Descartes’ *Meditations* lay the groundwork for his perceptual theory. “On his view of sense perception, our sense organs and nerves serve as literal mediating links in the perceptual chain: they stand between (both spatially and causally) external things themselves, and the brain events that occasion our perceptual awareness” (Newman, 2010). How does the study of being relate to the study of what the social world is? Jacquette (2002) suggests “the meaning of language is a function of thought and of the interpersonal social reality in which linguistic, among other expressive phenomena, evolve” (p.223). Therefore, how do we know what is expressed is true? “Truism of thought may change the world, including actions when read as a claim about causal nexus between thought and reality, mediated by human action [however, when beliefs about social reality are mistaken, they] are likely to influence social reality in a way which

matters little whether those beliefs are true or not” (Finn, 1997, p.16). It is not easy to be sure of the implications of truism, or what follows on from it in conjunction with other truths, and the danger is that we might end up with inconsistencies between a set of beliefs (Graham, 2002, p.6).

2. Epistemology: study of knowledge, what we can know, and what are the limits of knowledge, how do we know what exists? Lackey and Sosa (2006) introduce the notion that, traditionally, epistemological theories have focussed primarily on sense perception, memory and reason; however, they believe the epistemic significance of testimony has become more fully appreciated. Literature addresses the debate between non-reductionist and reductionist theories and assumes the role of central importance on testimony (p.2). Therefore, how can I be sure the knowledge gained from the literature review about brands and branding is reliable or unreliable? Amongst others, assumptions about the role sense experience plays in brand building have led to a methodology for the research.

3. Methodology: How do I acquire knowledge for this research? Smith (2013) writes, “traditionally, philosophy [of the mind] includes at least four core fields or disciplines: ontology, epistemology, ethics, and logic.” He proposes (hypothesises) that phenomenology should be added as a discipline because in the field of philosophy the study of experience has validity alongside other philosophical studies. As was discussed in the literature review, the continuum is found in Brentano’s philosophy. Also found in Brentano is phenomenology and a general appreciation of empiricism. “Following Descartes, Brentano believed

in the self-evidence of our grasp of inner mental life – inner perception – as opposed to the fallible nature of outer perception” (Moran, 1999, p.7). There were three phenomenological methods employed by theorists in the first half of the twentieth century. Husserl, who is largely regarded as the father of phenomenology and a student of Brentano, espoused descriptions of a pure lived experience “the phenomenology of the experiences of thinking and knowing” (Moran, 1999, pg.1). Heidegger related experience to context, and all early philosophers studied the analysis of the form of the experience. (Larkin, 2013 & Smith, 2013). In recent philosophical studies of phenomenology, neuroscience has been suggested as a solution to questions about the philosophy of mind. Smith (2013) introduces two additional approaches for phenomenological study, the logico-semantic model and the experimental paradigm of cognitive neuroscience. Neuroscience has been discussed in the literature review with regard to a way of observing subjective experiences of thinking and knowing.

The phenomenology approach is qualitative and is used to describe the lived experiences of individuals or groups of people, and utilises an emergent strategy in the research phase (Waters, n.d). From a phenomenological perspective, multiple realities exist and multiple interpretations that are equally valid are available from different individuals. Reality becomes a social construct (Jha, 2008, p.6). Introna (2011) describes how at the center of the technology/society inter-relationship we find many “complex questions about the nature of the human, the technical, agency, autonomy, freedom and much more”.

There are social and ethical implications when an investigation seeks to understand what the conditions are that make things appear as they do through thinking and knowing: looking, sounding, smelling, tasting and feeling like. Therefore in this sense “phenomenologists would suggest that to understand the technology/society relationship, we need to reveal how they [relate] to each other—i.e. draw on each other for their ongoing meaning and sense” (Introna, 2011). According to Ihde (2010), Heidegger was among the first to see technology as an ontological issue for philosophy. “The anthropological-instrumental definition of technology is functionally ontic, correct but partial, limited to a subjective set of conditions” (p.31). Subjectivity is an issue for phenomenology because of truism, as discussed previously, see pg. 66.

For the research I have drawn on two parts of phenomenology, although other theorists suggest that there are up to “four different I-technology-world relationships” (Introna, 2011). Phenomenology in the broadest sense attempts to get to the truth of matters since it manifests itself in consciousness to the experiencer; for example, “in listening, the taking of sound as music implies an already existing sense of what music is, something that makes it possible for us to take these sounds as music rather than noise” (Introna, 2011). The first step in phenomenology is to avoid all misconceptions and impositions placed on experience in advance (Moran, 1999, p.4). It is difficult to avoid misconceptions and impositions, because I would suggest the phenomenon of experience begins from the moment we are born. Derrida drew his inspiration and style of thinking (deconstruction) from the problems in Husserl’s theories about

phenomenology, problems such as aspects of presence and absence, sameness and difference (Moran, 1999, p.20). However, within the human technology relationship, technology is taken as the medium of subjective perceptual experience of the world, thus transforming the subject’s perceptual and bodily sense (Introna, 2011). In other words through lived experience technology enables me to withdraw into my own sense (perception) about how I perceive my world. “Technology is not merely an artifact or our relationship with this or that artifact; rather, the artifact—and our relationship with it—is already an outcome of a particular “technological” way of seeing and conducting ourselves in and towards the world” (Introna, 2001).

According to Crowell (2012), it was Heidegger who added hermeneutics to phenomenology by suggesting that interpretation is implicit in the description and we interpret a type of experience by relating it to relevant features of context. In other words, the interpretation of a topic is meaning, not being. The technology functions as an immediate referent to something beyond itself (Introna, 2001). *Senses and Sensibility* factors the transparency of technology as hermeneutic rather than perceptual. “Although I might fix my focus on the text or the map, what I actually see (encounter) is not the map itself but rather immediately and simultaneously the world it already refers to, the landscape already suggested in the symbols” (Introna, 2011). Phenomenology becomes hermeneutical when it becomes interpretive by relating experience to context - especially social and linguistic context (Smith, 2013).

This research thus moves towards hermeneutic phenomenology when it seeks meaning, through linguistic descriptions about emotional sense experience in relationship to a context.

The following section identifies and discusses the mixed methods employed for this research.

3.3 Mixed methods

The idea of using mixed methods within any methodological framework has advantages for researchers, because a full picture may be gained through information gathered from a variety of qualitative and quantitative views, rather than employing a singular ethnographic or narrative research approach, which may become open-ended (Crouch & Pearce, 2012, p.129). Triangulation serves to further strengthen research findings. The term *triangulation*, borrowed from navigation and military strategy, creates opportunity to analyse data from multiple perspectives and involve and transition between methods; any inherent bias may become counteracted by one or more of the other methods (Guion, Diehl, & McDonald, n.d. & Creswell, 1994). Triangulation ensures rigour and credibility to the research aims and objectives (Suri, 2008).

Senses and Sensibility sought to further discover how sense experience might affect brand loyalty within social media. The intention utilised both focus groups and a questionnaire. Within these methods, triangulation was carried out through the analysis of three groups of people, who provided three sets of data (Crouch & Pearce, 2012, p.129). Nine students, nine designers and nine customers comprised the three groups. Knight (2008) describes a distinction between face-to-face methods (focus groups), terming them a face-to-face method (p.54) whereas questionnaires are a method for research (longitudinal study) at a distance (p.80).

The focus groups ran as three separate sessions with the different groups of people. The participants filled in a cross-sectional questionnaire at the same time as the focus groups (Creswell, 1994, p.119). The benefit of collecting the data at the same time, was that the participants raised questions and open-ended insightful discussions took place as they filled out the questionnaires. The focus here was on gaining understandings and insights of the descriptions of a series of objects when the participants interacted with them through touch, smell, taste, sound or sight (Creswell, 1994, p.72).

3.3.1 Focus groups

As discussed previously three groups of people were invited to the focus groups. As was indicated in the ethics application process, I began with personal contacts and requested that each contact bring a friend who might be agreeable to participation. It was also indicated that there were potential limitations with this method of forming the focus groups, as participants may come from similar socio-economic and cultural areas. This is discussed with regard to each group.

Student group.

This first group (age range approximately 18 – 25, 5 males and 4 females) came from Victoria and Massey Universities and study different disciplines including: architecture, communications, commerce, humanities and law. Recruitment for this group did not present any issues (free pizza proved a catalyst for participation). However, the limitation was that all students were of European origin and cultural diversity was limited to English, Scottish, Australian and NZ. However, I believe there were differences in socio-economic status. Approximately 4 of the students were on a student allowance and had a student loan, 3 had no allowance but a student loan and 2 had no student loan. The age range for inclusion began at 16, as was indicated in the ethics application. This is deemed the legal age that young people “can start full-time work and earn minimum wage (after a period of probation for 16 and 17 year olds)” (<http://www.occ.org.nz/advice/legal>).

It was not perceived that young people below the age of 16 would add value to the findings. Although they are certainly influencers of brand choices, and marketers do aim offerings to this demographic, some of the questions, such as those pertaining to symbolism, require a degree of contextual knowledge that not all under 16's would have acquired. It therefore seemed better to exclude them from study. However, as it transpired, none of the university students were 16, the youngest being an 18 year-old first year student.

Designer group.

Practicing designers were asked to participate because it was perceived that they might offer different types of responses about branding to lay people. This group (age range approximately 28 – 50, 7 males and 2 females) represented different areas of design, including teaching, web/app design, brand/graphic design, illustration, fashion and product design. Although the designers came from my pool of professional contacts, there were limitations with this group. The notion of a contact inviting a friend proved ineffective, because not all designers have friends who are practising designers. Therefore, I extended the meaning of practising to include teaching. Two of the participants were design lecturers. Most (7) participants were males; of the 2 females, one was an illustrator and the other (youngest participant in this group) a fashion designer. By way of observation over nearly 30 years in the profession, it is sad that females are not well represented in the field of design and this was reflected in this group. Cultural diversity was similarly limited as with the student group, all participants being from NZ except for 3 (Germany, Scotland, England). However, unlike the student group, these appeared to come from a similar socio-economic group.

Customer group.

This final group (age range approximately 30 – 55, 4 males and 5 females) were recruited from a pool of friends who work in different professions including marketing, administration and law or hold government positions. As with the student and designer groups, cultural diversity was not well represented, and neither did socio-economic status differ. However, since the questionnaire did not request a salary/wage indication, I can not be sure that this is correct. The final limitation for this group was that all were professionals, and therefore “at home mum’s and dad’s” were not represented.

There were two parts to the focus groups, the questionnaire which enabled data collection, and a series of open-ended questions. These are discussed in the next two sections.

3.3.2 Questionnaire design

The advantage of using a cross-sectional survey for the research was that it enabled a quick collection of data at the time of the focus groups, and it allowed me to identify attributes from a small group of individuals. There are disadvantages with this method, in that the responses being measured are subjective (subjective assessment) and therefore a limited picture of the issue may be revealed (Creswell, 1994, p.119; Crouch & Pearce, 2012, p.131). The design of the questionnaire utilised words (see Fig. 21: *Questionnaire design part 1*) in the comparative Likert scale because this is effective in measuring people's attitudes in a succinct way (although also subjective) and enabled a hierarchy (1 2 3 positive / 4 neutral / 5 6 7 negative) or a set of ordinal numbers to be located. "The Likert scale was developed by psychologist Renis Likert in 1932 to measure attitudes by asking people to respond to a series of statements about a topic, in terms of the extent to which they agree with them, and so tapping into the cognitive and affective components of attitudes" (Crouch & Pearce, 2012, p 134; McLeod, 2008). In order to "counter a respondent's common wish to censor what they say so as to put themselves in a good light (the halo effect)," a 9-point scale seldom gets used (Knight, 2008, p.86).

The participants were presented with a series of objects one at a time and asked to fill out the questionnaire based on questions that evaluated their responses through all five senses. See Appendix B: *Questionnaire design*, pg.160, for the full design of the questionnaire.

Initially, there were to be five objects tested, as indicated in the ethics application. A lemon, a can of Coke, a Nike shoe, a stapler, and a branded fragrance. Subsequent to ethics approval, the objects were re-arranged into pairs to explore relationships and perhaps identify stories between the objects. Knight (2008) describes how this may be useful for generating meaning amongst other things such as metaphor (p.188).

Relationships that the research has explored:

- Potato / lemon
- Nike shoe / headphones
- Fragrance (perfume/aftershave) / fly spray
- Stapler / eraser

In choosing, I was considerate of selecting a set of objects which best exemplifies those used in my everyday life and profession. The reason for choosing objects (stapler and eraser) from my design profession, was to determine how human-centred responses may provide insight into brand strategy, and I was interested to understand how the designer group might differ from the customer or student group. I also perceived that there may be potential for other factors to be inferred from objects such as a stapler and eraser from all of the focus group participants. For example, a stapler might be representative of work and an eraser representative of mistakes. The lemon and potato are commonly used ingredients and offered potential into brand recognition, which may influence response. Nike is a recognized brand with powerful global and local cachet, even if one doesn't purchase their product, and I chose to offset this product with a pair of headphones in order to better understand how powerful the Nike brand might

be when compared to a stronger sense experience (sound). The fragrances offered similar pathways as Nike (branded fragrances and the flyspray).

A combination of branded and non-branded objects was chosen deliberately as products such as Nike in the mix of objects is useful, because it asks the question: is the system going to work broadly across brands that already exist, and/or is it better for a start-up brand? I was curious to understand differences between branded and non-branded objects, in order to understand if the AST continuum might be more successful for startup brands or those that already exist in the marketplace. If the participant had a preconceived idea/memory about that brand or variety, which of the senses were most associated with the brand? If the brand was not known, or lesser known, which of the senses do people access first?

There were two parts to the questionnaire and a pilot test conducted prior to undertaking the focus groups, in order to reduce the chance of making mistakes with the questionnaire design (Knight, 2008, p.87). The pilot test revealed that the first part of the questionnaire was useful, but the second needed more consideration. This is discussed further on. With the first part there was no change to the five senses being tested (sight, sound, touch, taste and smell), but there were changes in the questions, discussed as follows:

Question 1.

What is this object? How would you describe this (object) by: sight, sound, touch, taste and smell.

I called this question the control question, which did not reference any particular brand. The question was not intended to impose an opinion (belief/purpose) on the participant about the object and was intended to be as non-prescriptive as possible in order to locate an objective opinion about the object as a starting point. It considered how the five senses might be influenced through lived experience, irrespective of branding or social media.

Question 2.

In your opinion this is the **best/worst** (object) brand/variety.
How would you describe this (object) by: **sight, sound, touch, taste and smell.**

This question was called a brand belief question. I gave the name of a brand or a variety name (for example lemon/Myer, potato/Agria) and asked the participant to respond accordingly. If the participants were unfamiliar with the brand or variety name I asked them to locate a brand they thought to be positive or negative for the object. My prediction for this was that when a positive opinion about that brand was suggested (for example Myer lemons are the best variety of lemons) the scale would move to be more positive than the answer provided by question 1. And, when a negative opinion was suggested, (for example,

Chanel perfume is the worst brand of perfume) the scale would move to be more negative than the answer provided by question 1. Positive brand descriptions were applied to the lemon, potato, Nike shoe and the headphones. Negative brand descriptions were applied to the stapler, eraser, perfume/aftershave and fly spray.

Question 3.

You post a pic of (object made into something, or you interacting with the object), comments from your friends **validate** your opinion. How would you describe this (object) by: **sight, sound, touch, taste and smell.**

This question was called a social media brand belief question. The participants were asked to imagine that they interact with social media through posting a picture or commenting about something they had done with that branded object, (for example, Nike shoes are my favourite running shoes, I love feeling the wind in my hair, or Myer lemons are the best for baking a cake). My prediction was that those who engage with social media might move to be more positive or more negative in their view when positive or negative feedback was received from social media contacts. This might suggest that when friends agree with that subjective view, the belief about the brand is reinforced and therefore the same senses might be implicated. At this stage it was less clear how those who do not engage with social media might react, because familiarity with social media was unknown when the questionnaire was designed. Which senses might be implicit when people are not socialising in an online environment?

Question 4.

You post a pic of (object made into something, or you interacting with the object), comments from your friends make you **doubt** your opinion. Describe this lemon by: **sight, sound, touch, taste and smell.**

This question was also a social media brand belief question, but it suggested the opposite of what had been suggested in question 3. For example, friends validated your opinion about the Nike shoe being the best shoe for running in question 3, but this time, the comments you receive back from social media suggest you should doubt that original opinion. The prediction was that the scale would move in the opposite direction from the response supplied in question 3 if people engage with social media. However, perhaps more useful here, is that the information supplied might offer insight into which of the senses people go to in order to say something is negative or positive. Do they go more to taste and smell when talking about the negative, and sight and sound for the positive? My prediction about this was that the lived experience might connect memory and emotion to a particular sense or group of senses which relate most readily to a particular object, for example, sound to headphones.

The second part of the questionnaire was redesigned after the pilot test revealed that what I had called the *what* question (logical/objective) question was in fact intrinsically linked to a purpose or belief about that object. I had supposed, as a latent modernist designer, that I could separate out a logical question. However the pilot test suggested that logical/objective is not viewed in isolation, but

1. What is this object? How would you describe this lemon by: (please fill in line no. 1)

2. In your opinion this is the **best** lemon brand/variety. How would you describe this lemon by:

3. You post a pic of a lemon cake, comments from your friends **validate** your opinion. How would you describe this lemon by:

4. You post a pic of a lemon cake, comments from your friends make you **doubt** your opinion. Describe this lemon by:

A. Sight extremely ugly very ugly ugly neither ugly nor beautiful beautiful very beautiful extremely beautiful

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B. Sound extremely loud very loud loud neither loud nor quiet quiet very quiet extremely quiet

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C. Touch extremely smooth very smooth smooth neither smooth nor rough rough very rough extremely rough

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D. Taste extremely tasty very tasty tasty neither tasty nor distasteful distasteful very distasteful extremely distasteful

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E. Smell extremely smelly very smelly smelly neither smelly nor fragrant fragrant very fragrant extremely fragrant

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Fig. 21: Questionnaire design part 1 84

rather linked to subjectivity, emotion and memory. Therefore the question was recast as a *context* question. I asked the participants to close their eyes and imagine what they do with it and then think about which senses were most implicit with the experience of the object. Participants were asked to rank their senses in order of priority (for example, use in an environmental context: cook it, wear it, listen to it). Fig. 22: *Context questions, questionnaire design part 2* demonstrates these questions which were included in the questionnaire design.

3.3.3 Gathering data

It had been intended that the focus groups would be recorded (voice), but this was not necessary because the questionnaire was introduced into the focus groups. However notes were taken to capture the data. It was necessary to defer rationalisation during the gathering phase because phenomenology is a strategy which employs an emergent approach, utilises open questions and invites description or narration from the participants. I was looking to identify things that matter to the participant that relate to the experience of the object. Context (place, socio-cultural context) was similarly explored within the described meaning or experience so that I might characterise the participants' stance in relation to these things. It was difficult at the gathering stage to discuss inclusion and exclusion because of the nature of this emergence; however, the processing sought to uncover and to discover themes and patterns for inclusion in the design process. The design process for *Senses and Sensibility* utilised information graphics

and data-visualisation, which is discussed at the beginning of the next chapter.

The data was analysed to establish individual group-norms, differences and patterns. These findings were then pooled together to deliver overall insights, overall behaviour patterns, experiences and reactions of the participants to the various objects presented in this research study. Given the small number of participants, it was not expected that the data would be tested for statistical significance. Statistics requires around 665 responses to achieve a +/- 5% statistical validity (Neuendorf, 2002, p.89). However, as the research is for business, a mean was located from the overall participant response of part 2 of the questionnaire for a set of ordinal numbers. This data is discussed specifically in the next chapter. As the questionnaire was quantitative in form because of the use of Excel (XL) spreadsheets for the analysis, this provided limited opportunity for generalisation.

In conclusion, this chapter has discussed how *Senses and Sensibility* was framed and how the research was built. The focus groups and the questionnaire were designed to test the validity of a broader approach to the five senses and whether including the senses in focus groups studies as part of the branding process is going to give better data (about the relationships between the senses, branding and social media), which may enable brand strategy to be clearer. Similarly this approach has enabled *Senses and Sensibility* to understand how the strategic AST continuum may be useful for business through usefulness of the data. The next chapter unpacks the research by first identifying how information graphics and data visualisation may contribute to expression for the data through visual communication design for NZ SME's.

9. Rank in terms of priority which of your 5 senses comes first with regard to what you do with a **lemon**

sight ☐ sound ☐ touch ☐ taste ☐ smell ☐

10. Rank in terms of priority which of your 5 senses comes first with regard to what you do with a **potato**

sight ☐ sound ☐ touch ☐ taste ☐ smell ☐

11. Rank in terms of priority which of your 5 senses comes first with regard to what you do with a **Nike shoe**

sight ☐ sound ☐ touch ☐ taste ☐ smell ☐

12. Rank in terms of priority which of your 5 senses comes first with regard to what you do with **headphones**

sight ☐ sound ☐ touch ☐ taste ☐ smell ☐

13. Rank in terms of priority which of your 5 senses comes first with regard to what you do with a **stapler**

sight ☐ sound ☐ touch ☐ taste ☐ smell ☐

14. Rank in terms of priority which of your 5 senses comes first with regard to what you do with a **eraser**

sight ☐ sound ☐ touch ☐ taste ☐ smell ☐

15. Rank in terms of priority which of your 5 senses comes first with regard to what you do with **perfume**

sight ☐ sound ☐ touch ☐ taste ☐ smell ☐

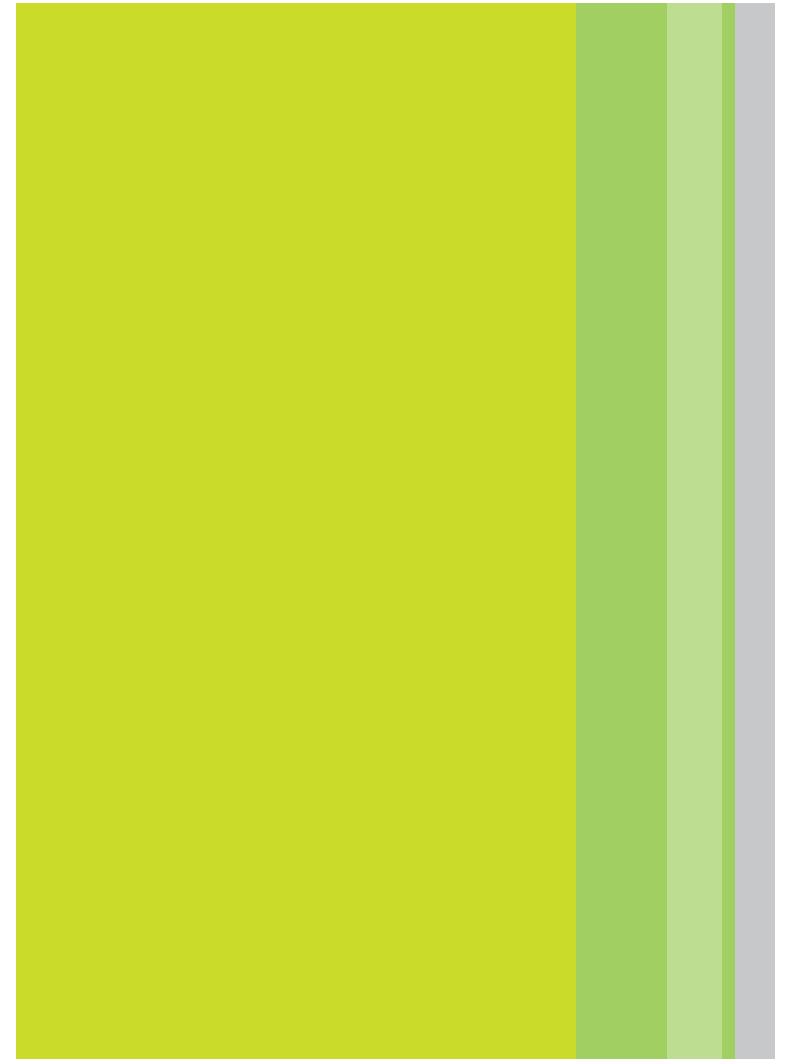
16. Rank in terms of priority which of your 5 senses comes first with regard to what you do with **flyspray**

sight ☐ sound ☐ touch ☐ taste ☐ smell ☐

what?



Fig. 22: Context questions, questionnaire design part 2.
Images retrieved March 10, 2014 from Google images.



4.1

Information design or data visualisation?

"The purpose of visualisation is insight, not picture"

(Klanten, Ehmann, Bourquin, & Tissot, 2010, p.7).

Turning observational or empirical data that falls out of any research, into something useful or actual, requires an approach that has its origins in graphic design, or more specifically, visual communication design (VCD) which means that the design should communicate a visual message, the goal of information design. Information design, mapping and data visualization are increasingly viewed as a disciplines in their own right, rather than design streams within VCD. The goals are much more than just typographic. "Goals are contextual, and it is the information designer's responsibility to assess each situation, and all the factors that are likely to influence the design" (Yap, 2009). Contextual factors to be considered include: target audience (different demographics), placement within an environment (analogue, magazines, books, outdoor environmental graphics, digital, websites, blogs) and relevance of information for that particular group of people or target audience. The ideal of a good graphic is to present information that is relevant and may be perceived without mental effort (Myatt & Johnson, 2011, p.103).

The use of information design and data visualisation for this thesis is born out of a desire to present the data (results of the research) in a fairly new and emerging VCD discipline. As I am a practicing graphic designer, there is nothing more delightful than a challenge of this kind. Graphic designers are "trained to communicate precisely through visual language and experienced problem solving" (Klanten et al, 2010, p.6). There is a difference between information graphics and data visualisation. Information graphics under the broadest definition utilises graphical elements (objects) and relates them to each other (organizes them) in space. Maps are amongst the oldest graphics (Myatt & Johnson, 2011, p.65). Data visualisation on the other hand utilises data findings. Deriving insight from large amounts of complex data (big data) usually requires new interactive tools, which are future technologies (Simon, 2014, p.120). I will be designing with both types of visualisation approaches, and the data I collect from the questionnaires will be managed (a manual process which looks for patterns) through Excel, and translated through VCD in Adobe illustrator 6 (Simon, 2014, p.4).

As a discipline data visualisation appears to be linked mostly with quantitative analysis. This is the reason this graphic design approach has been chosen to convey the research results. Envisaging data through data visualisation has the potential to yield a result that goes beyond template designs offered through Windows 8 so commonly used. It is about summarising, communicating and documenting the findings in a way that escapes traditional approaches. Tufte (2008) calls traditional approaches a "flatland". "Escaping this flatland and

enriching the density of data displays are the essential tasks of information design [and can be achieved through methods which] include, micro/macro readings of detail and panorama, layering and separation of data, multiplying of images, colour, and narratives of space and time” (p.33). Up until recently interpreting quantitative data was the domain of science and business as they handled large volumes of information. This was largely ignored by designers because it was seen as deeply unglamorous (Klanten, et al., 2010, p.6).

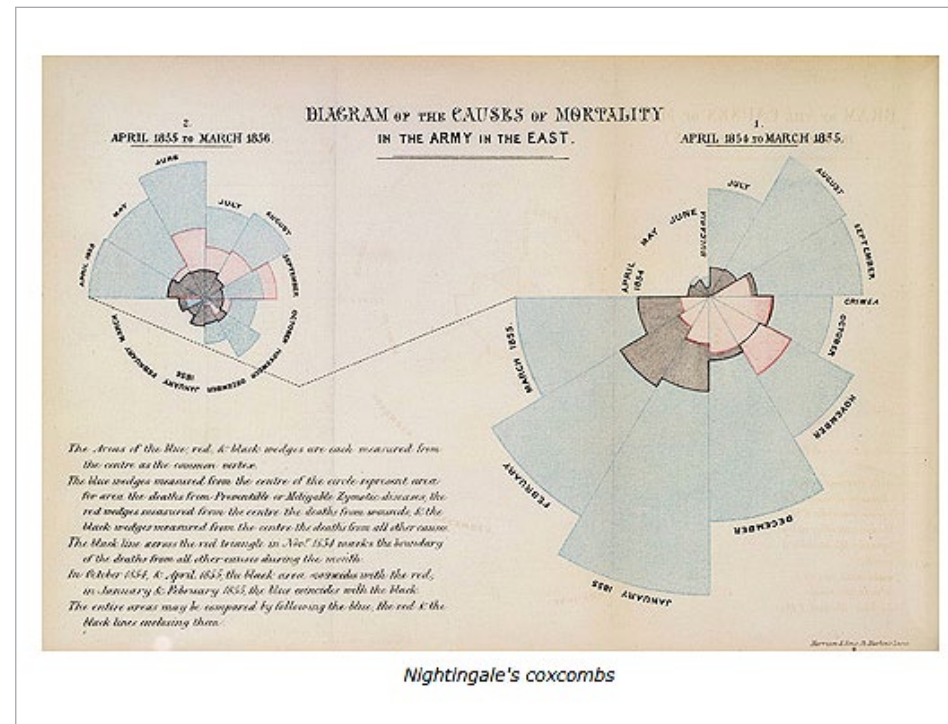


Fig. 23: Nightingale's "Coxcombs."
Retrieved November 19, 2013 from <http://understandinguncertainty.org/coxcombs>

Advances in software technology have now made it an interesting challenge for the designer to unravel complexities and to communicate information visually. It holds the potential to yield creative solutions.

Qualitative data is different from quantitative data. Human behaviour is difficult to measure scientifically. Mapping behaviour relies on observation, which can be influenced by many variants, such as a person's gender, race, age, creed or political persuasion. "Social science lacks the wonderfully convenient simplifying guarantee of the physical sciences; data is not so clearly defined, results are not necessarily measured as such, [which suggests that the] study of human behaviour is sometimes overwhelmed with multivariate uncertainties about causality, as analysis of after-the-fact historical patterns yield loose, fragile and poorly resolved explanations" (Tufte, 2007, p.138). There are also limitations to the benefits of data visualisation. "The more eye-catching the presentation of the data, the less our critical facilities tend to kick in" (Harford, 2013-14, p.126). Harford was referring to one of the earliest visualisations prepared by Florence Nightingale between 1854 - 1856 see Fig. 23: *Nightingale's "Coxcombs."* These diagrams plotted data on British deaths in the Crimea. She wished for improved hygiene, but the diagrams essentially masked other possibilities for the deaths, and presented the information in a highly persuasive way to focus maximum attention on the issue of hygiene. There is thus the potential to make information and misinformation look similar, which is an issue if the difference can not be spotted (Harford, 2013-14, p.126). This is but one perspective, another would be to observe that Nightingale used her invention of the

Coxcombs to represent data accurately for use as a rhetorical device to persuade decision makers of the necessity of preventing deaths.

Information art is a type of visualisation that does not involve any sort of data, or rather does not use data at all. The goal is not to inform. It is more about data being used to express feelings which touch senses and emotions. Like contemporary art practice, this type of data visualisation seeks to express an idea, rather than solve a design problem. Abstract data has a visual language that has become very common, and is understood through metaphor. Klanten, et al., (2010) chart its beginnings in the movie, *The Matrix*, where green code fragments were part of the movie set. He says that “certain characteristics let us immediately think of a representation of information” (p.231). This is not actual, useful or meaningful information, but rather implied meaning through inference and semiotics.

Translating the process of thinking or developing a strategy for the design of a data visualisation, can cause complexity for the designer. De Bono (2000) tells us that the main difficulty of thinking is confusion. We try to do too much at once. Emotions, information, logic, hope and creativity all crowd in on us (p.176). Human behaviour influences how we decipher information. In this instance it may be useful for the designer to wear the customer’s hat to ensure that their designed interpretation may be elegant, engaging and accessible. Tufte (2008) suggests that “the less complex, the less interesting is the reading” (p.51). This is a contradiction for modernist graphic designers who are taught that it

is a designer’s task to unravel complexity and make it simple. To suggest that information design can fail if the solution is simple, is debatable. There is room for sophisticated reading in simplicity as long as the thinking is clear.

Therefore my task is to employ a strategy for this research that edits, organises and synthesises information for visualisations that are rich in context and content, and focus on the relationships between facts and connections. This makes information meaningful for the audience of this research that includes academics working in the field of branding, in addition to business owners (McCandless, 2009).

“Science and art have in common intense seeing, the wide-eyed observing that generates empirical information.”

(Tufte, 2007, p.9).

4.2

Ideation of interpretations and metaphor

Conceptual stages of ideation occurred during the early stages of the research. There were two goals of this early design ideation. The first was to help define the opportunity for an expression of data collected from the questionnaires. Second, this early conception considered the notion of visualising the AST continuum through information design to aid understanding of this strategy for business application. This section outlines and tracks the progress of these conceptual strategies, interpretations and metaphoric ideation to represent the AST continuum for this purpose.

To proceed, the concept began with a generative stage, which worked in tandem with transformative ideation and background research through the literature review. Aspects of the review continue in this section, most particularly those which ascribe to ideation, brainstorming and metaphor.

There is much literature surrounding conceptual idea generation. Brainstorming in particular is generally regarded as the most efficient and effective way to start generating a great many ideas in a short space of time. Tischler (n.d) provides “seven secrets to good brainstorming” from FASTCOMPANY which are based on the approach of IDEO, a highly regarded American design firm. Mattimore

(2012) suggests that it is a simple three-step process (p.52), whilst Burkus (2013) cautions against the brainstorming myth. He proposes that much of the literature, which promotes the myth of rapid idea generation within a group situation, has the potential to yield novel rather than useful ideas (Burkus, 2013, p.129). My own experience supports this notion. Whilst group brainstorming might be useful for generating lots of ideas for the project, independent research has often resulted in directions which are based on more solid foundations. Brainstorming sits inside the “larger process of bringing creative ideas to the world” and is a technique for divergent thinking working in conjunction with convergent thinking. “Without the right knowledge, it’s difficult to generate the right ideas and difficult to evaluate which ideas have the most potential” (Burkus, 2013, pp.131-132).

In order to visualise the AST continuum, the outcome of the first brainstorming and research exercise drew on metaphor as inspiration. Metaphor “is a distinctively modern development. Ancient philosophers and rhetoricians viewed metaphor as a temporary self-explanatory change in the usage of a general or singular term, typically a noun or noun phrase” (Hills, 2012). According to Kovecses, (2002) “in the cognitive linguistic view, metaphor is defined as understanding one conceptual domain in terms of another conceptual domain” (p.4). To gain clarity around understanding is to decipher its meaning to become “a set of systematic correspondences between the source and the target in the sense that constituent conceptual elements of B correspond to constituent elements of A. Technically these are referred to as mappings” (p.6).

Forceville (1998) argues that metaphor can be found in pictures and “the production and interpretation of metaphor include reference to many contextual elements that are at best only partly linguistic in character” (p.35). Verbal meaning is therefore literal (frame or primary subject), and contextual meaning becomes suggestive (focus or secondary subject). “Each of the subjects is a ‘system of things’ [which] is taken to mean that it labels a complex network of properties or features” (Forceville, 1998, p.35). Metaphor is important because it enables a mapping of clues that may suggest solutions to riddles (Kovecses, 2002, p.9) and if we aim to combine primary and secondary subjects by speaking of them together, “it seems natural to say that metaphor is a form of *likening*, *comparing*, or *analogizing*. The maker of a metaphor (or the metaphor itself) likens the primary subject to the secondary subject” (Hills, 2012).

Three alternative conceptual directions evolved which centered on the branding process for: a product, a service and an identity. Brand development is commonly required for these three business offerings and it is conceivable that they might all utilise the AST continuum as a strategy. A product was tentatively combined with art, science and technology. Treating a service and identity in a similar manner facilitated metaphoric ideas that could potentially be visualised. An elegant triangulation between a product, service and identity combined with art, science and technology became apparent. The word *possibility* became key at this stage. What is possible if a product is defined through an art, science and technology lens of examination?

4.2.1 A product

An apple was chosen to represent a product. In western culture an apple is loaded with symbolism, religious and otherwise. It is also a healthy food choice, and a leading-edge technological product brand.

Hypothetical questions were asked about an apple:

- What are the possibilities and what are the opportunities (inspiration)?
- Can fresh, crisp and crunch be captured?

Applying conceptual thinking to these questions suggested that an apple could be added to water, or the other way around. Could an apple perhaps be cut into cubes and added to water? What colour would it be? Thinking about the five senses posed further questions; what would it taste like, look like, smell like, feel like and perhaps sound like? How could sense experience be conveyed? How could this be represented through art?

Empirical thinking was employed in this product scenario:

- How might customers respond?

The pathway to solutions was augmented through human-centred/user thinking (Kelly, 2002, February).

For an apple there were two technologies considered: *taking it to market* marketing

(Sherlekar, Nirmala Prasad, & Salvatore Victor, 2010, p. 218) technologies, and packaging technologies. At the centre of packaging technologies would be user centered or inclusive design considerations including: how could the juice be packaged in such a way that all people could enjoy this product? (Coleman, Clarkson, Dong & Cassim, 2008, p.12).

There are many more questions that need to be asked, but the main one is how could this process, the progression of a product through the AST continuum, be applied? The branding process could potentially brand the apple juice through multisensory and multi-experiential ways that immerse people in the culture of this particular brand (Legorburu & McColl, 2014, p.57).

Fig. 24: *A product defined through an art, science technology lens of examination* is the preferred design iteration for a product. The issue with this design, however, is that it does not ascribe to the notion of utilising metaphor.

4.2.2 A service

Ideation for a service proved much more difficult. Service is a less tangible proposition than a product.

The background to the Trademe story was located on the internet. Trademe is New Zealand's version of ebay, the online auction website. In 1999, Sam Morgan the founder had a problem. He needed a "small heater for his cold and draughty Wellington flat" (Trade it, 2008). This was the motivation that jump-started the Trademe concept.

Through empirical thinking there were some key ingredients to make this concept successful. This was to do with the supply chain and how people might behave. The traditional model dictates that a product or an object is moved from somewhere, perhaps a warehouse, to somewhere else. The main function of the supply chain model is to "link the dynamic of client, supplier and strategic partner activities to the value chain, continuously working to balance profitability with customer satisfaction" (Gardner, 2004, p.16). Morgan turned the supply chain model on its head quite literally with an idea that could be viewed as an emerging model that illustrates the strategic importance of supply chain models. (Camerinelli, 2009, p.19). By employing the notion that everyone can be a supplier effectively eliminated the requirement for infrastructure (transportation and a warehouse), because goods no longer need to be stored. One also does not

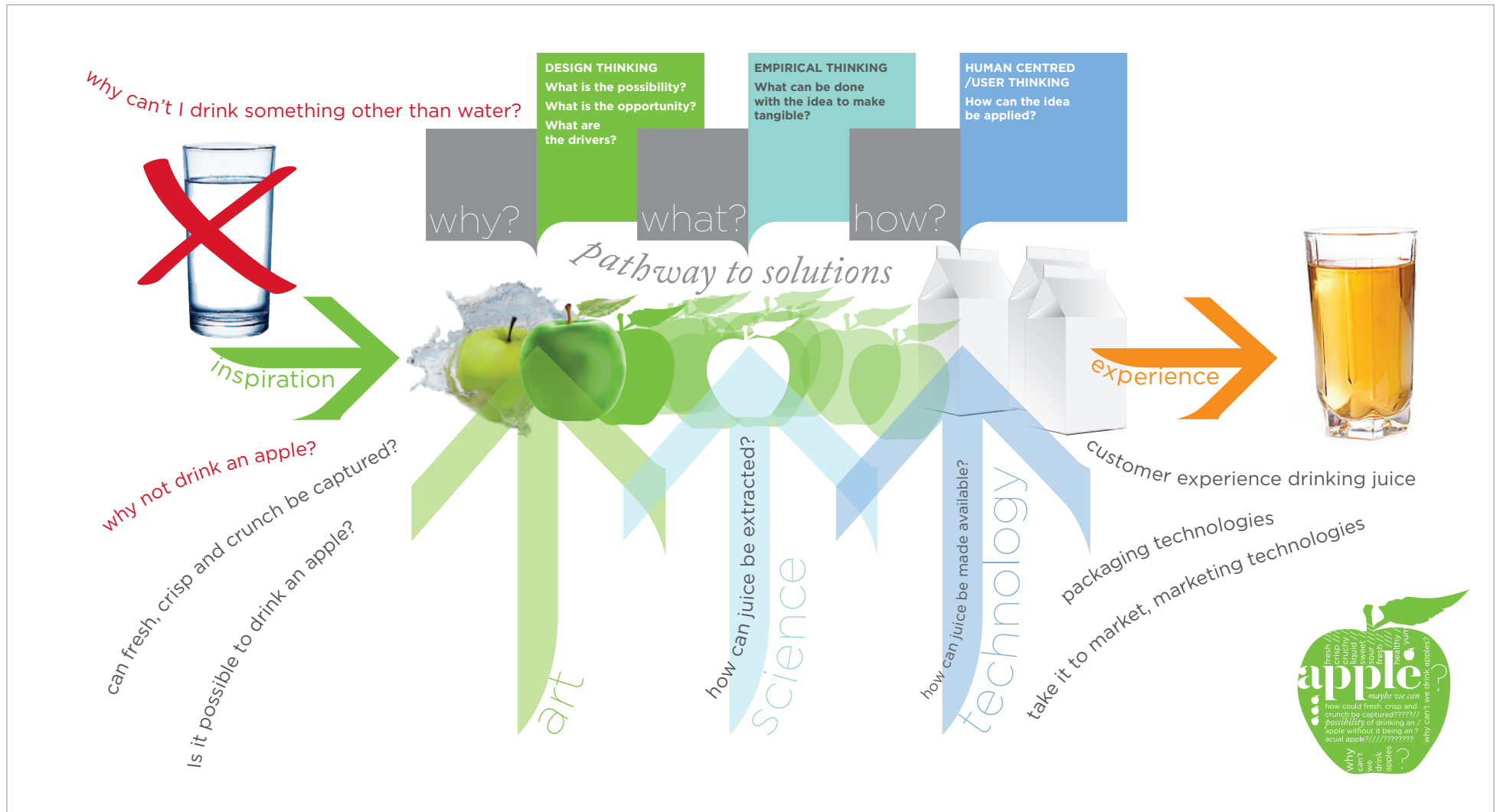


Fig. 24: A product defined through an art, science technology lens of examination. 94

need to distribute the goods because in this model people take control of that part of the process through exchange. A new low-cost supply chain model has thus been developed and that does not impact on the bottom line of the overall service. This may appeal to customer behaviour.

Technology in this scenario was easily observed. How could the idea be applied? In 1999 Morgan “had a go” at building a website in his spare time on his father’s laptop. This was only eight years after the internet became part of our landscape. Fig. 25: *A service defined through an art, science technology lens of examination* demonstrates a design or iteration for a service. Like a product however, a metaphor for service had not been located.

4.2.3 An identity

A design iteration for identity is seen in Fig. 26: *An identity defined through an art, science technology lens of examination*. Thinking about identity proved to be one of the most straightforward ideations. Self identity, as was discussed in the literature, is personal. One’s identity may be subject to dreams and aspirations. The figure in this design alludes to childhood dreams. Perhaps when the adult was a young child, they wished or imagined they were a superhero. A superhero becomes the metaphor. Through art/design thinking the possibilities and opportunities are boundless. How can this be expressed for both male and female genders? How can individuals become fit, fast and amazing, like a superhero? Here empirical thinking has application, because the release of endorphins may affect a persons behaviour towards gaining more fitness. Scientific testing, diet and training make it possible to become stronger. “Physical fitness tests are tests designed to measure physical strength, agility, and endurance” (Nande & Vali, 2010, p.4). Techniques to tell the story and package up the personal brand employ technology. The idea is applied through social media. The outcome for the person is that they may be able to experience the dream.

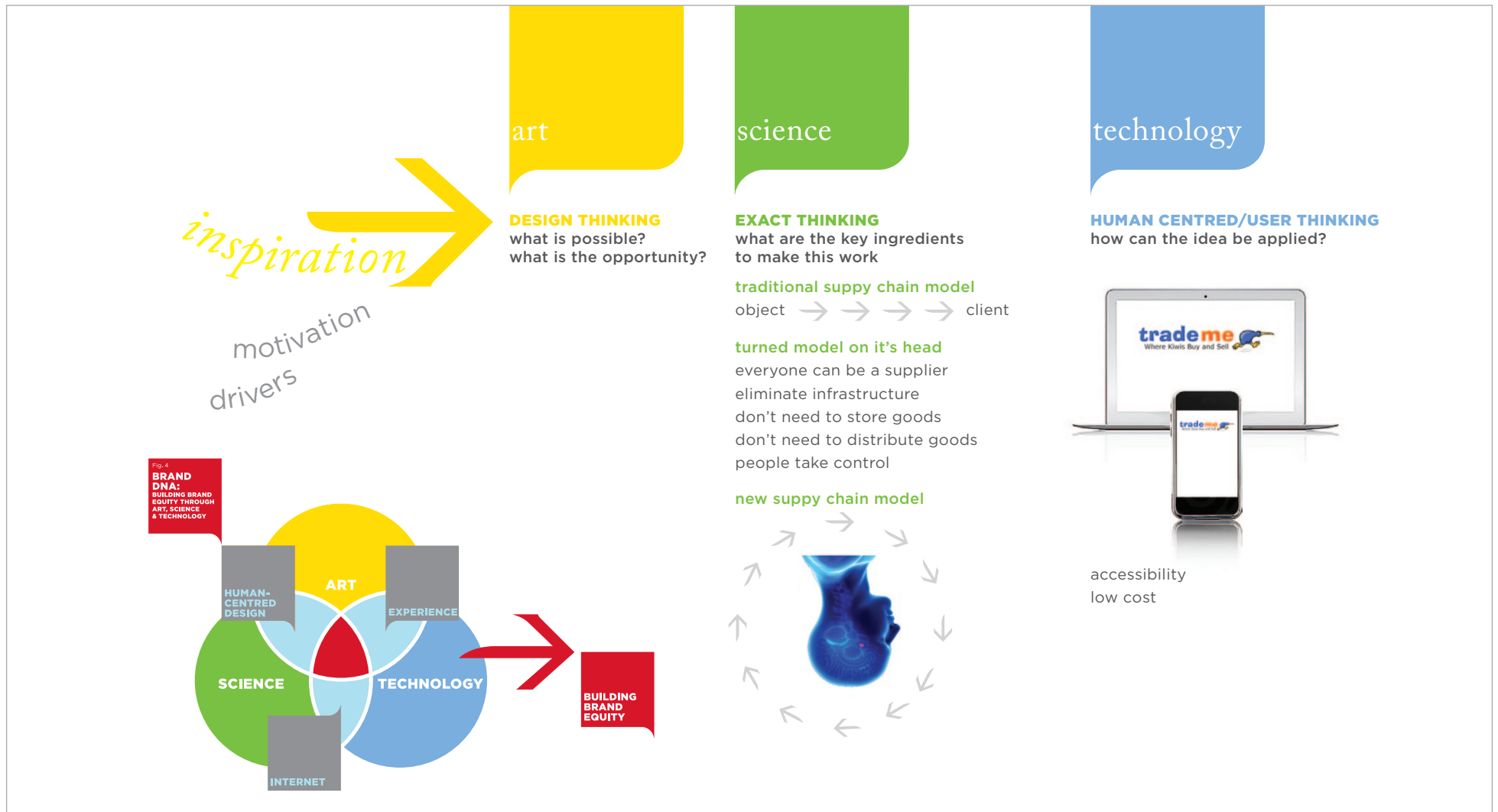


Fig. 24: A service defined through an art, science technology lens of examination. 96



Fig. 25: An identity defined through an art, science technology lens of examination. 97

4.2.4 Visualising brand experience through the AST continuum

As discussed at the beginning of this section, the reason for this early ideation was to explore how the AST continuum might be visualised to aid understanding of the strategy for business application. This next stage in concept ideation required this same ideation process to be applied to the branding process rather than a product, service or identity. This is because it was felt the previous work, as has been described, was falling short in many areas, especially in utilisation of metaphor.

Fig. 27: *Visualising brand experience through the AST continuum 1* describes a linear approach. In many ways this figure shows a simple rendition that captures all the points discussed through the utilisation of a product, service or identity to convey the concept of convergence of interpretations. There is a problem however, when building a brand, the process is iterative. “The idea behind iterative methods is to replace the given system by some nearby system that can be more easily solved [therefore leading to a new linear system. In some cases the correction procedure can be repeated resulting in a] cycle of different approximations” (Van Der Vorst, 2003, p.21). This required a development based on a circular, iterative, thought process, but again there were shortcomings. The metaphor is unlocated. The ideations were simply demonstrating the

concept in a literal way. There is abstraction, but there is limited meaning or imagination. Fig. 28: *Visualising brand experience through the AST continuum 2*.

Before abandoning these early iterations, I tried overlaying brand experience on to the service concept exploration. This yielded interesting results because it depicts the proposed AST continuum as integrated into the branding process. This is important because it represents branding as the interface between art, science and technology. See Fig. 29: *Visualising brand experience through the AST continuum 3* for this concept. Applying a critical design eye to this ideation reveals an unsatisfactory result. The complexity lacks simplicity, the disparate design elements lack cohesion, stylistically, and therefore this exploration was considered not useful. A further iteration Fig. 30: *Brand DNA*, placed the words *equity* and *experience* at the center of a circular strand of double-helical structured DNA. The double-helical structure of DNA was chosen as the metaphor because it constitutes “the blueprint for the structure of proteins of various types that are responsible for the makeup and function of cells and the body as a whole” (Committee, 1992, p.33). Although this metaphor contains an implied mapping of component parts, the concept became abstracted to the point of having limited meaning. What does that design actually say? Why are those words in the center? The objective was to link metaphorical to conceptual thought, but this concept is too complex, and greater context or communication would be needed to add meaning to the idea.

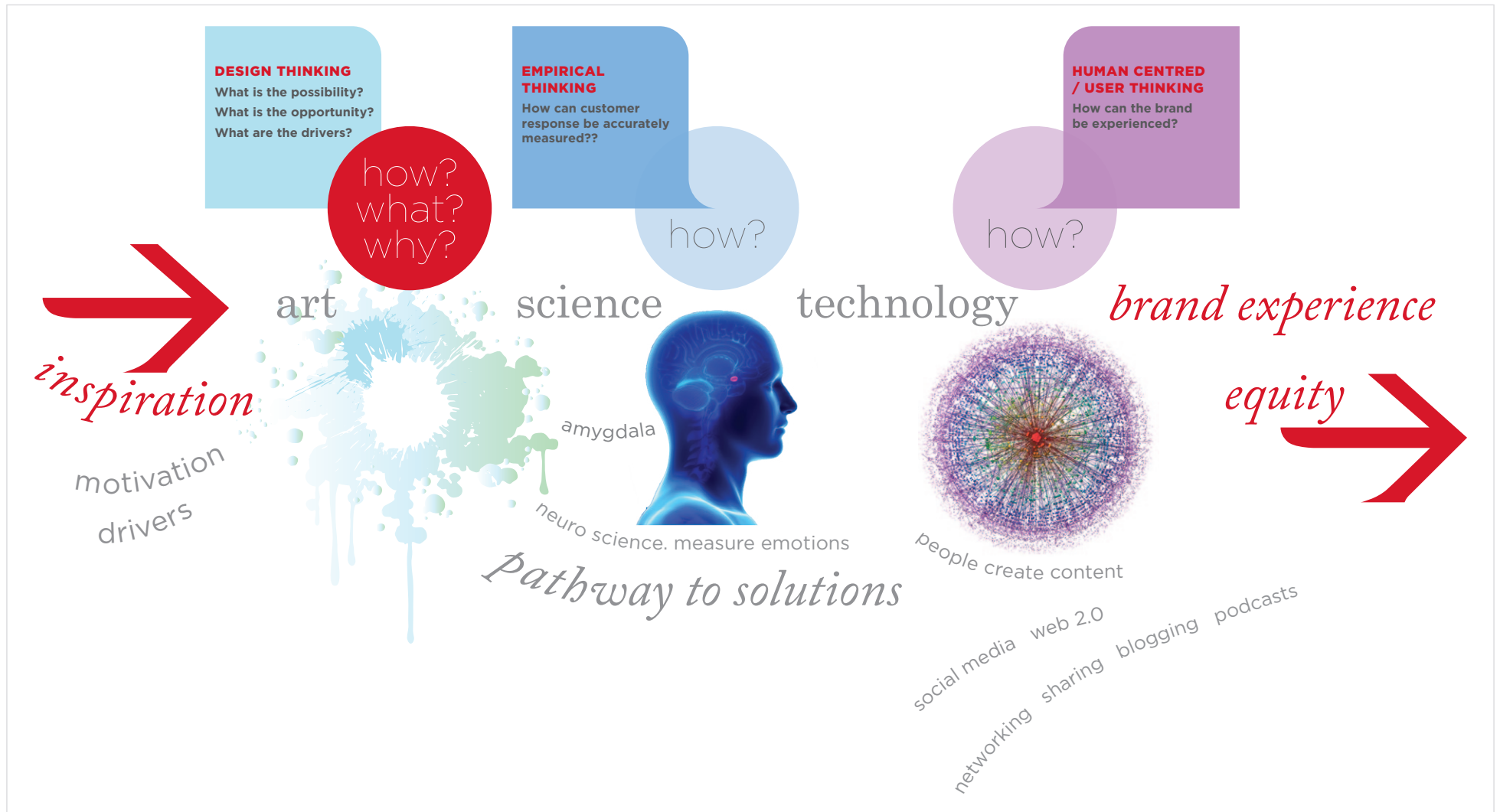


Fig. 27: Visualising brand experience through the AST continuum 1. 99

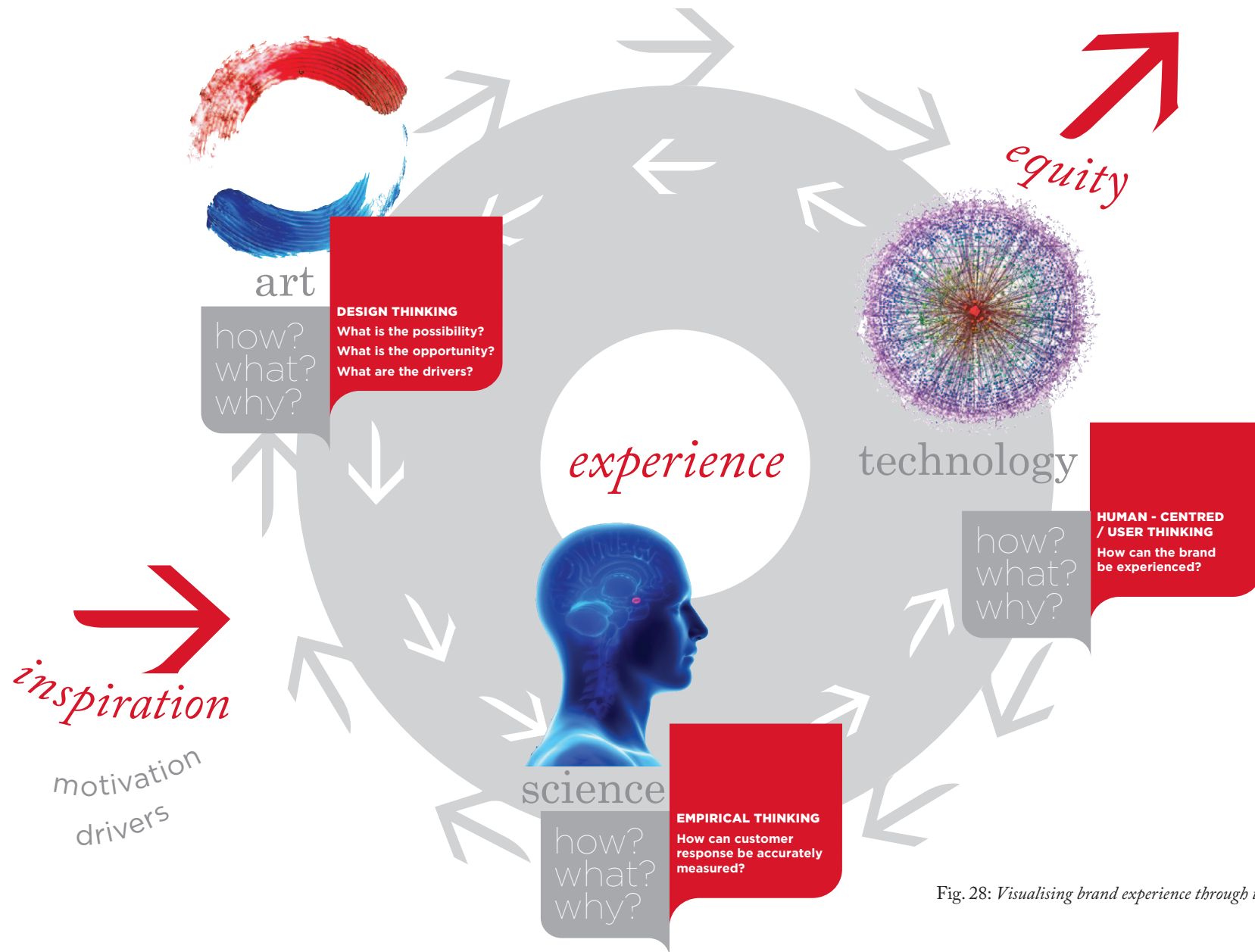


Fig. 28: Visualising brand experience through the AST continuum 2. 100



Fig. 29: Visualising brand experience through the AST continuum 3. 101

4.2.5

Indexing natural and abstract metaphor

A break-through was discovered with a very simple concept, which referenced a natural metaphor. A tree is a metaphor for growth. The roots could be thought of as the roots of a business, and as the tree grows it gets stronger. If art, science and technology are applied through the roots, brand experience (the tree growing) could be integrated into this metaphor. Since trees also convert carbon into oxygen, brand equity becomes oxygen. Oxygen may potentially help a brand to flourish. Fig. 31: *Referencing a natural metaphor to convey the AST continuum* was a very quick concept to convey this idea. At this juncture it became apparent that it may be possible to index either a natural or abstract metaphor.

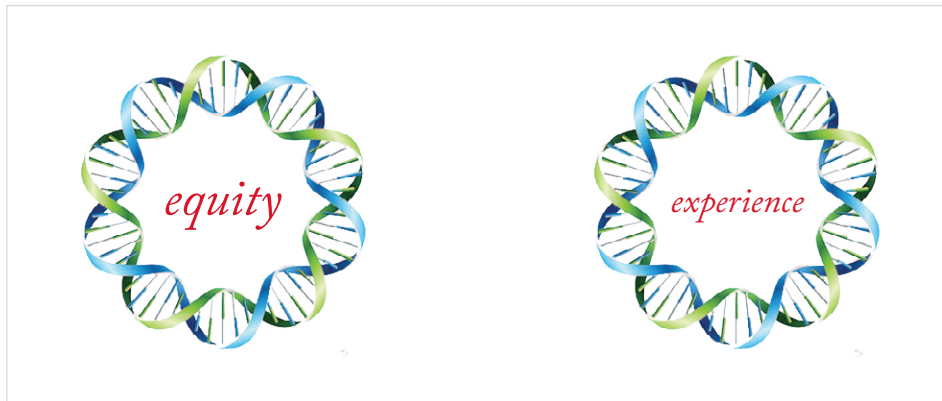


Fig. 30: Brand DNA.

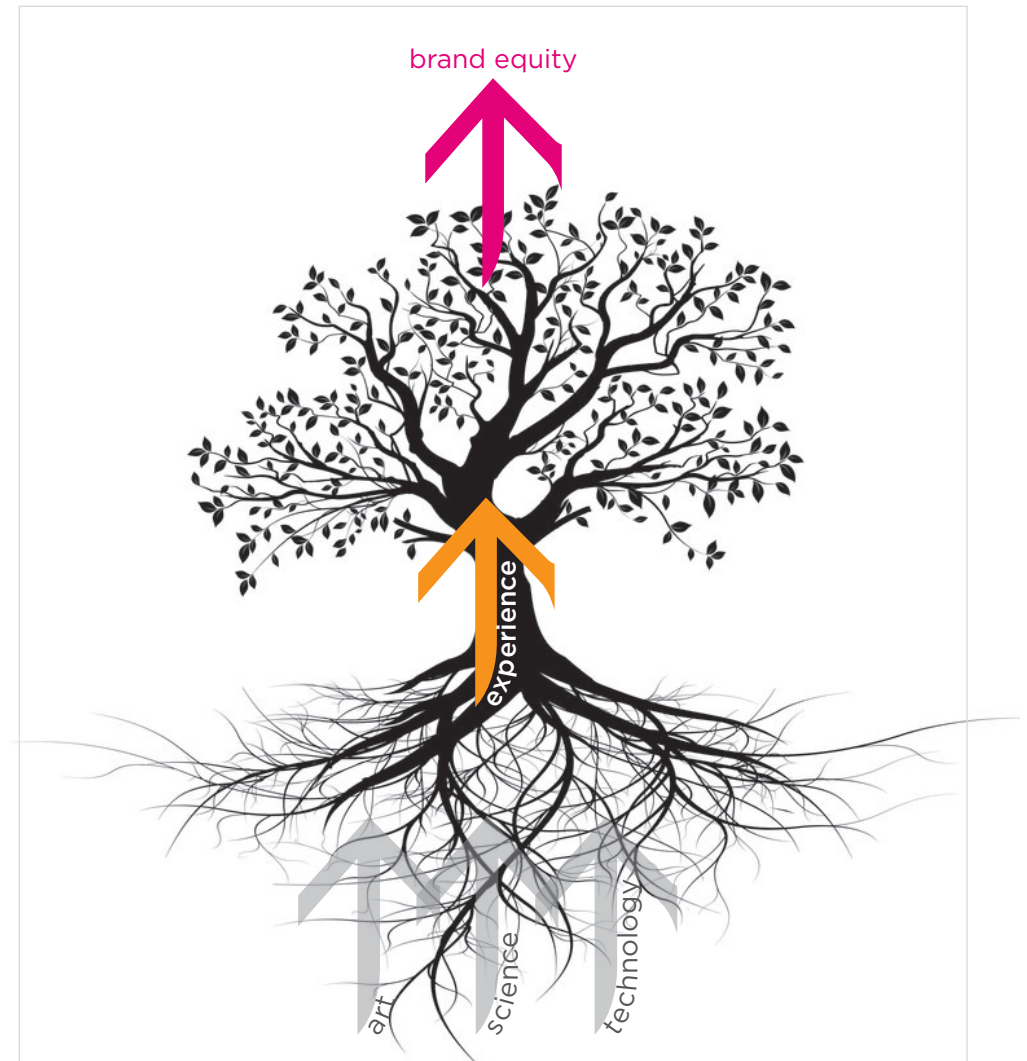


Fig. 31: *Referencing a natural metaphor to convey the AST continuum.* 102

4.2.5.1 A tree

Subsequent to this quick iteration many further iterations were made which included extending the metaphor of the tree to include other aspects of the environment (context/secondary subject). Rain, sunshine and the seasons were included and a tree's production of fruit, shelter and shade. See Figs. 32-34: *Concept explorations for tree metaphor 1, 2 and 3* for design concepts that were explored and subsequently eliminated for a variety of design and aesthetic limitations. However, as this conceptual stage progressed, the notion of utilising this metaphor for the concept emerged as a strength because it is successful in capturing the *oneness* (Kavanaugh, 2007, p.101) of the AST continuum. Fig. 36: *Concept explorations for tree metaphor 4* and Fig. 37: *Resolving tree metaphor concept* depicts a series of colour and graphic interpretations for the typography and tree which were the result of this design stage. These designs drew on symmetry for inspiration.

"Symmetry principles are characterised by a quietude, a stillness that is somehow beyond the bustling world; yet, in one way or another, they are almost always involved with transformation, or disturbance, or movement" (Wade, 2006. p.1). Wade (2006) also discusses "two further basics of symmetry, namely rotation and reflection" (p. 4). This references the concept of *summetron* which is a noun used "quite frequently by Plato in the *Timaeus*" (Lloyd, 2010) which

literally translates as *of the same measure* which has a variety of meanings related to being well proportioned. The first or mathematical meaning can be linked to the relationships between various parts that make a whole, for example "Plato's construction of the equilateral triangle amounts to a tripling of a smaller triangle" and the second is based on aesthetics that utilises *summetron* as a characteristic of beauty. "Plato's god constructs the entire universe on geometrical principles, but a geometry which gives highly symmetrical results, which would certainly satisfy the conditions of beauty" (Lloyd, 2010).

Lloyd argues that although it was true that Plato had a mathematical understanding of modern day symmetry, he was unable to define it, and therefore we need to understand that his ideas and writings were not based on scientific evidence. We could make the assumption that in the eyes of Plato, symmetry and harmony make proportion beautiful (Plato equated beauty to the highest order in the universe) and these three elements combine to help us understand the meaning of the Greek word *summetron* (Lloyd, 2010).

A body of research conducted in recent times resulted in the revelation "that symmetry is more important to our impressions of beauty than complexity is; however, by combining symmetry and complexity, higher beauty ratings [are garnered] than does either factor alone" (Leder, 2011). The research used a series of prototypes to measure the participants' emotional response to a range of factors (simplicity, complexity, familiarity and unfamiliarity). The discovery was made that each factor (separate or combined) was influenced by emotion, or

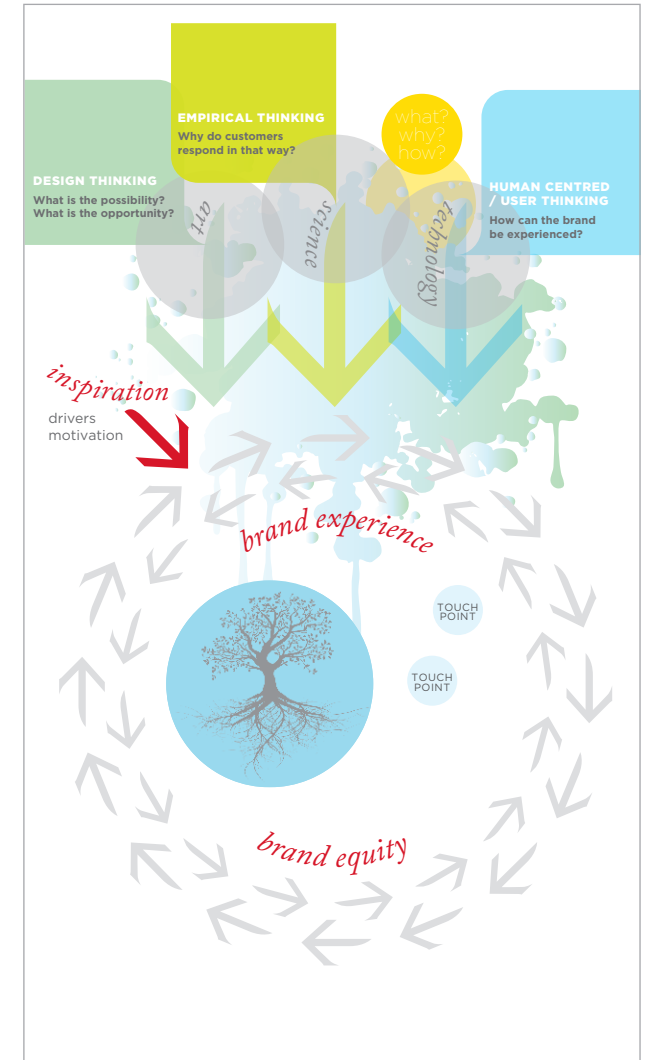
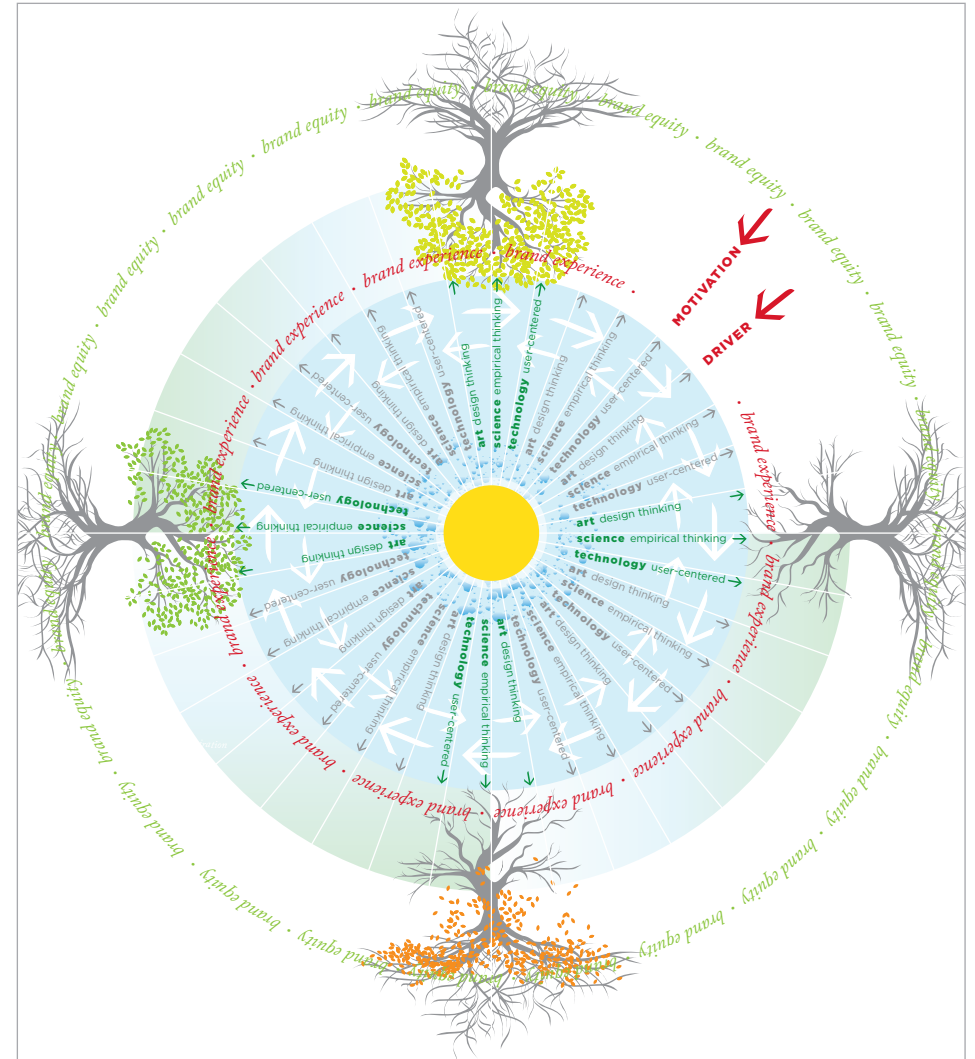
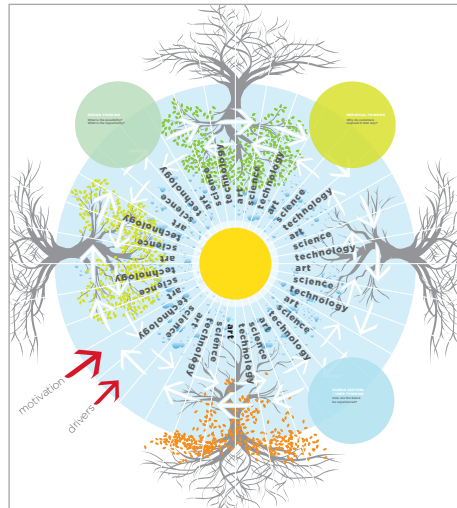


Fig. 32: Concept explorations for tree metaphor 1. 104



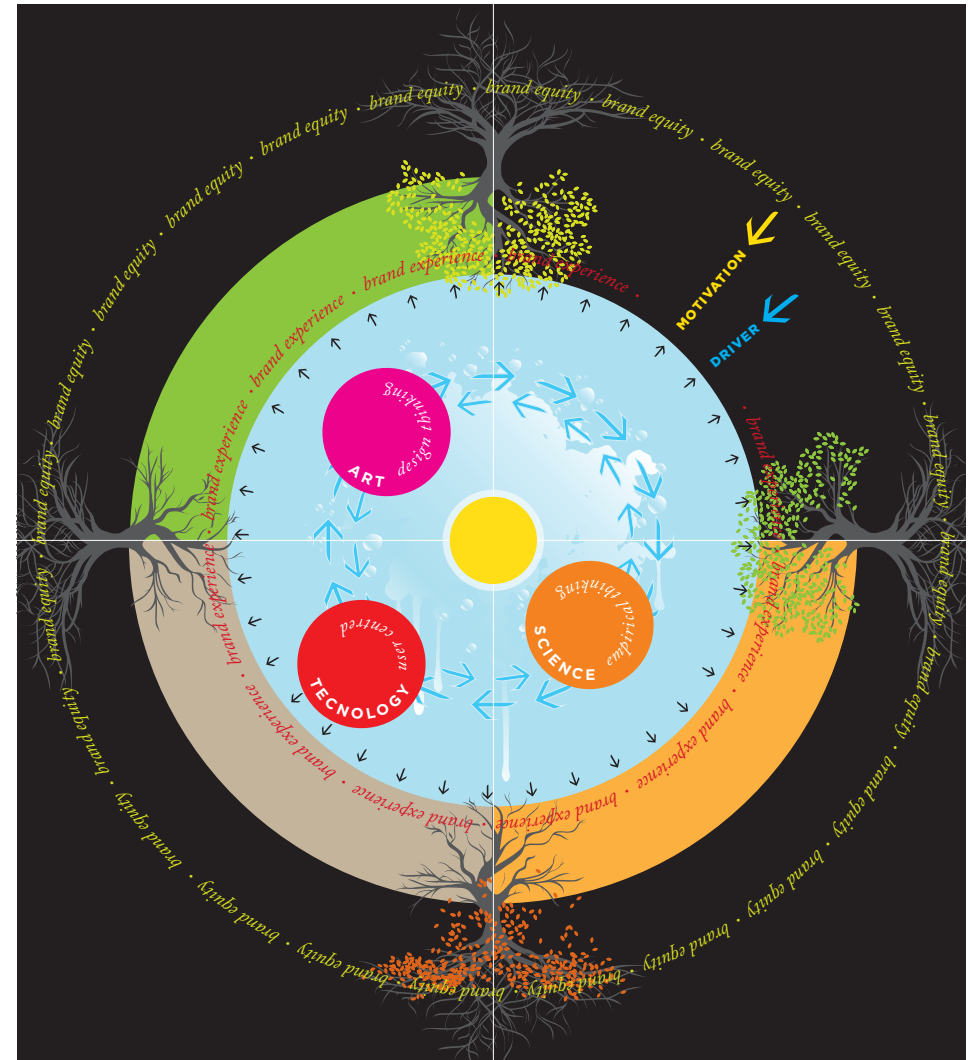
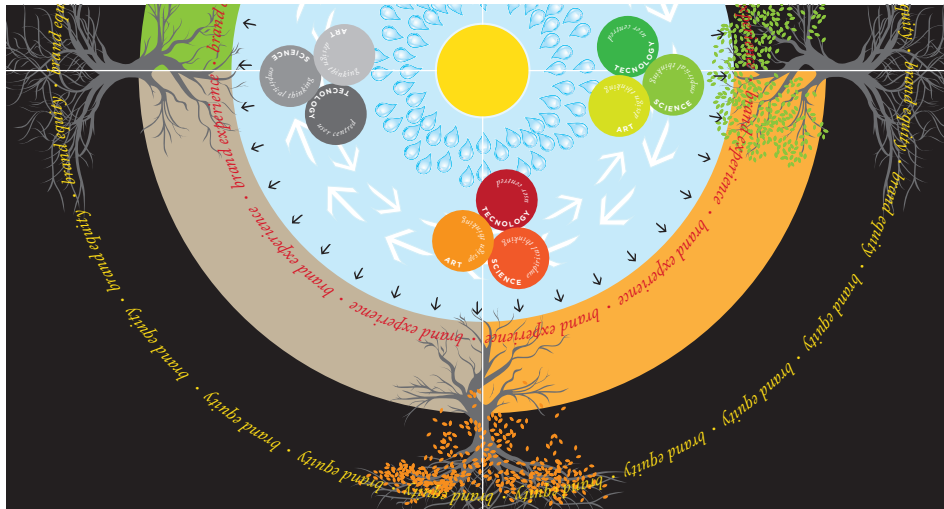
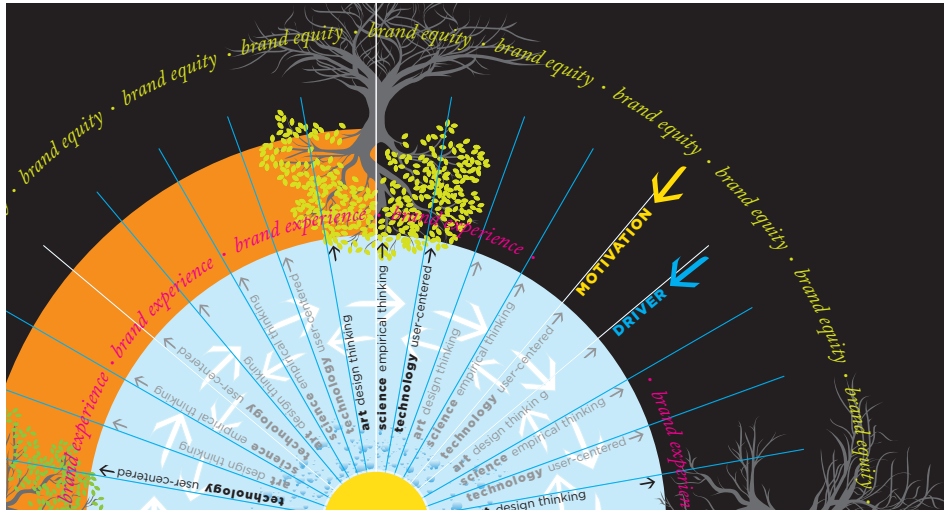


Fig. 34: Concept explorations for tree metaphor 3. 106

the context of the interaction with that object and emotion. “The power of the prototypes may depend on context because shapes can play with our emotions” (Leder, 2011).

“Each person's aesthetic taste seems distinct, and yet that perception belies a large body of shared preferences”
(Leder, 2011).

Along with symmetry, seasonal components were considered useful with this design phase. Most brands conceivably progress through a cycle of seasons. These brands are not to be confused with those that might appeal during particular seasons, for example a summer beverage (Barrett, 2008), but rather a life cycle of a brand represented by the four seasons. Bennett and Rundle-Thiele, (2005) associate the life cycle of a brand to loyalty which transitions through a greater period of time “brand loyalty life cycle is thought to comprise five eras of brand



Fig. 35: *Parts of the visual identity for flyingpig.co.nz*
Retrieved from a promotional brochure developed by the author in 1998 for Brando Creative Ltd.

loyalty: (1) the birth of brand loyalty, (2) the golden era of brand loyalty, (3) latent brand loyalty, (4) the birth of multibrand loyalty, and (5) the final era of declining loyalty.” It could be argued that in the West, tobacco companies are in the winter of their brand cycles due to outside influences, namely government legislation taking effect because of health reasons. I was personally involved with a brand that went through a fairly brief cycle of seasons and unfortunately met its demise not long after launching in November 1999.

Flyingpig.co.nz was sold one year after its birth. The obituary for this brand was located online (Neumeier, 2007, p. 51; Nikiel, 2007). At the time of the brand's demise, there was a widely held view by experts involved, that this was a brand ahead of its time. In the early stages, a visual identity was designed, (see Fig. 35: *Parts of the visual identity for flyingpig.co.nz*), as well as a website for the exciting new world that was happening on the internet. Scoop reported that it was NZ's first internet Super Site (Scoop Media, 1999). There was considerable talk about how this was the new way for retailing. There would be no overheads anymore, no “bricks and mortar” stores, which meant no leases. According to the thinking at the time, people were going to use the internet for purchasing, they were savvy, and NZ was a nation of early adopters of technology. The team looked at amazon.com for inspiration, as this is where the proposition and the business model for the brand lay, and the technology employed to prepare files was new (Quark Xpress).

There was a cycle of seasons that this brand rotated through, which ironically more or less followed the true NZ seasonal cycle. Spring was new, green,

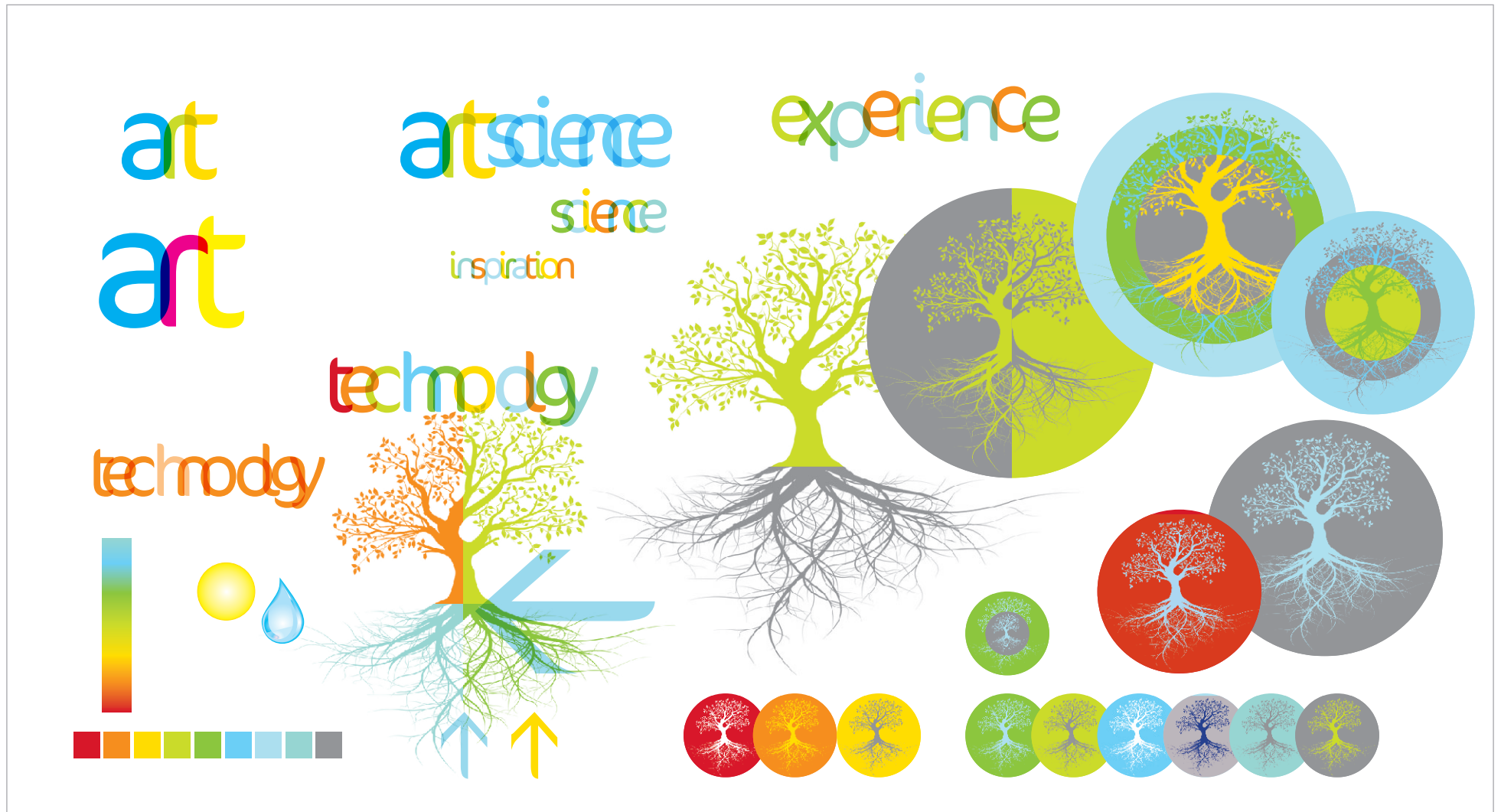


Fig. 36: Concept explorations for tree metaphor 4. 108

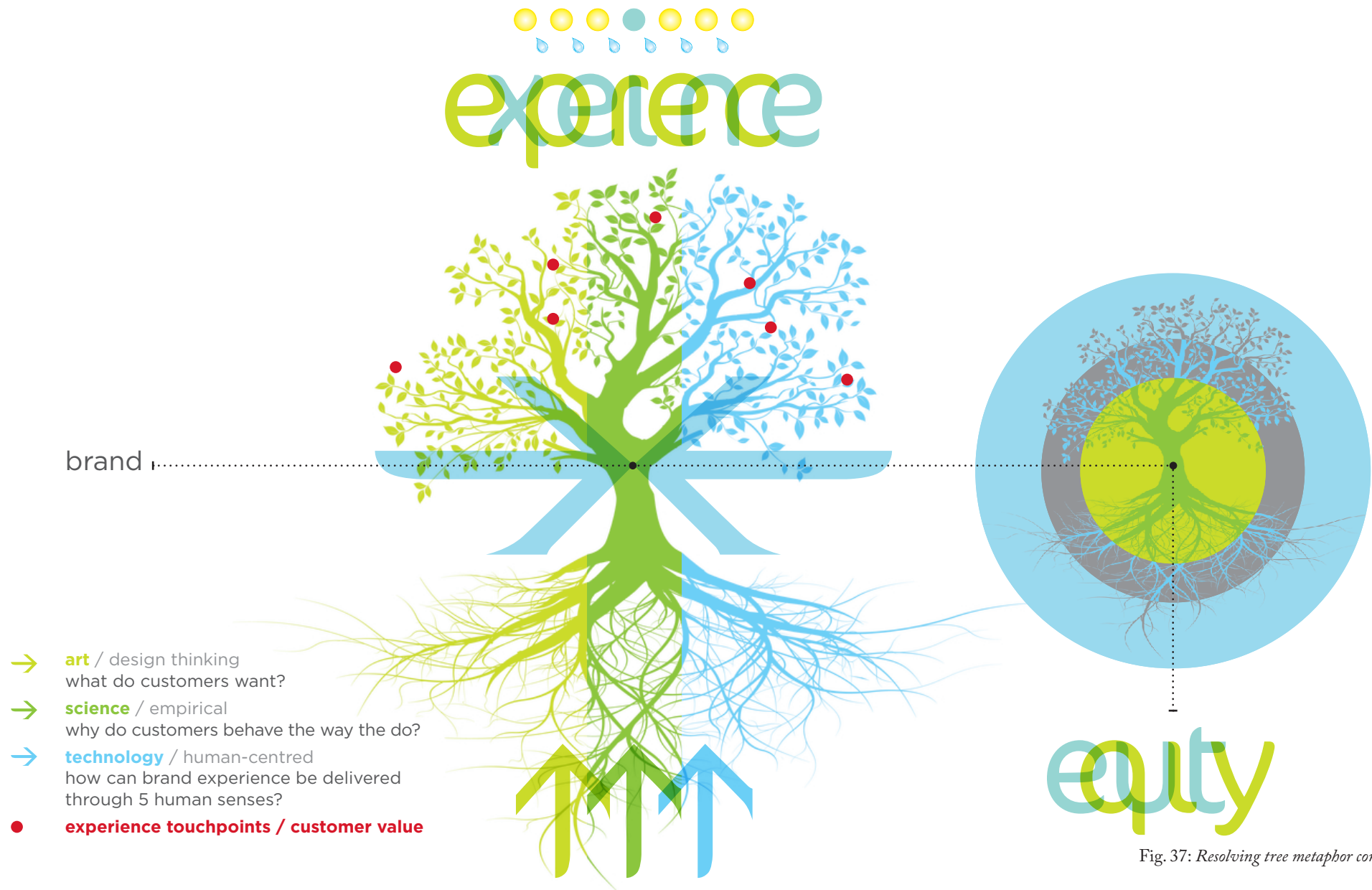


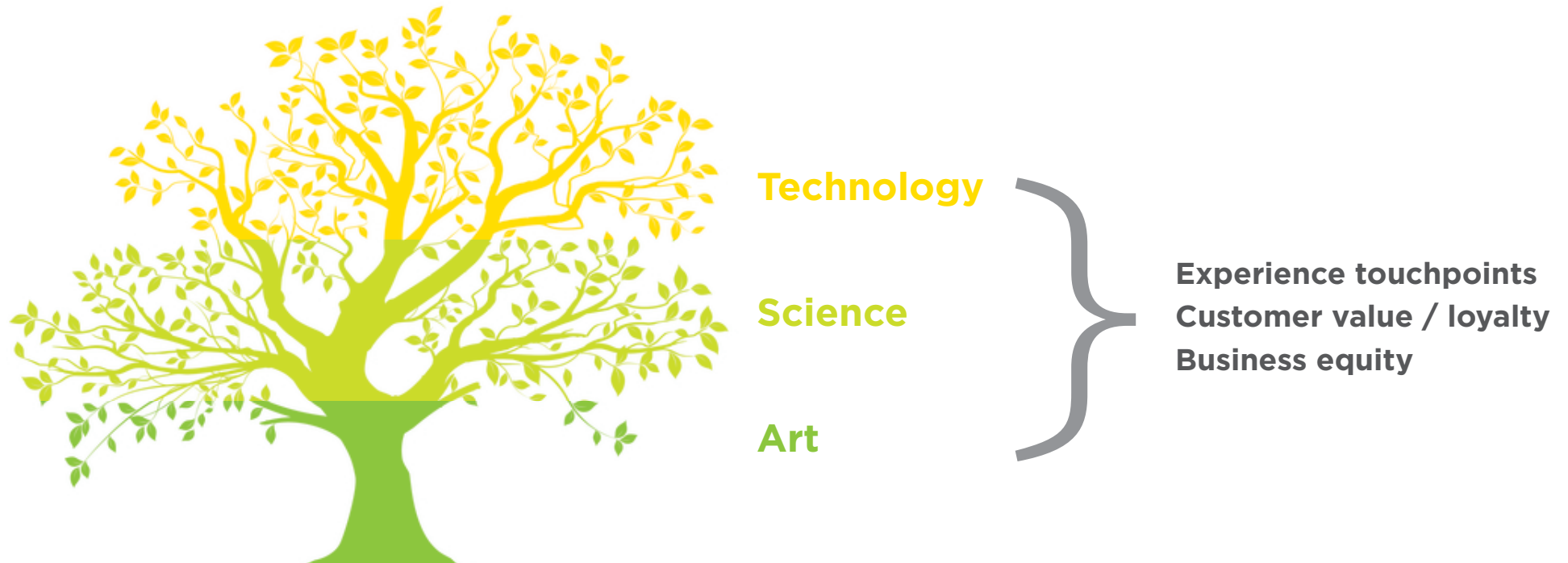
Fig. 37: Resolving tree metaphor concept. 109

exciting, fast and chaotic. Summer was the time of consolidation, firming up of ideas and some success. Autumn heralded a slowdown, misgivings started to appear, and winter became a struggle. However, this was not a failure. It was entrepreneurial and innovative. It was an idea that harnessed a brand-new brand story and combined that story with new technologies available at the time. Did people engage with the brand? Did they love the brand? The time frame was too short to allow for accurate understanding of whether these factors had the desired outcome.

As the purpose of information design is to provide insight to a specific audience, in this case NZ SME's, this design direction proved the most succinct. The metaphor of the tree as previously stated, denotes *oneness*. But the root system impeded clarity, and some of these designs were complicating communication of the strategy. Therefore after this first exploration phase, the design was simplified considerably. The three parts are arranged horizontally in colour bands; art sits across the lower part of the tree, science higher up and technology is higher up still. This banding upwards is designed to denote or indicate a progression of growth. The AST continuum grows, as a tree does. When these three parts combine (indicated by the bracket symbol), in the continuum, there is the potential for experience touchpoints, customer value and business equity to be created. In order to synergise and translate the ideas and reasons why the three parts to the AST continuum combine, a series of questions were also included which relate back to earlier discussion in the thesis (see p.45 & pp.64-66) about the use of the terms as parallel terms. These questions were incorporated into the next design iteration so that this information design might be used as a tool for

NZ SME's own application (see Fig.38: *Final tree metaphor concept. The AST continuum: A tool for NZ SME's to use as a model for their own application*).

The questions are intended to guide a brand strategist towards an application of this devised strategy. They also endeavour to align the parallel terms. For example, art has its foundations in aesthetics, and yet I contend that it aligns with the philosophy of design thinking as an approach to problem solving through design and communications. This is because these two terms enable connections and transformation of ideas across boundaries (Crow, 2003, p.10). Similarly, linking science to the developing technology of neuroscience (study of human behaviour at a micro level), offers benefit for brand strategy through the insights gained from empirical observation. Brand communications for products and services may be designed to meet real human needs and desires, not perceived needs as was the case in the pre-digital days of branding. Finally technology is a parallel term for human-centred design. Brand strategists might question how HCD affects human behaviour during technological interactions with social media. As previously discussed, Love (2005) describes how important it is to understand context of use and issues of use for the user (pp.76-81), and there is the potential for HCD to become responsible for new human behaviour through empowerment.(Pierson, Mante-Meijer & Loos, 2011, p.29). Underpinning all of this, is the role that the senses play in the strategy, and how they should be designed into the information graphic. This highlights a shortcoming. The information graphic here is designed for the eyes only, is static and has not considered any of the other senses. This limitation offers opportunity for further research into the practice-based aspect of the study at a later date.



The AST continuum: A tool for NZ SME's to use as a model for their own application. (Questions to ask about branding).

Art / Design thinking

- What do customers want?
- How could the philosophy of design thinking augment the customer brand experience?
- Who should be responsible for designing the communications, designers or social media users and how can this be facilitated?

Science / Empirical observation

- Why do customers behave the way they do?
- How can empirical observation aid insight of customer behaviour?
- Can the real needs of individuals be met, rather than perceived needs?

Technology / Human-centred design

- How can brand experience be delivered through 5 human senses?
- What is the context of use?
- How does human-centred design affect human behaviour during technological (social media) interactions?
- Can human-centered become responsible for new ways of use or interaction?

Fig. 38: Final tree metaphor concept. The AST continuum: A tool for NZ SME's to use as a model for their own application.

4.2.5.2 A meal

A re-think and a new brainstorming session later, utilising the ingredients for making a meal as a metaphor was felt to be another interesting concept for exploration.

Arranging ingredients is the first stage in preparing a meal. This is the art. Art represents the creative opportunity; it draws on input of emotion and desire. Here is the possibility, what is the opportunity? The creative opportunity adds value based on the motivation of the opportunity. Is the meal going to be hot and spicy, or a staple meal? Is it gourmet/deglustation or comfort food? Perhaps it is sweet? The opportunities appear endless.

Moving into the science of producing a meal involves the application of heat or cold. What can be done with the ingredients to extract the best flavours, enhance the meal? The implements, pots, pans, a wok, utensils, knives and forks represent technologies of this scenario. Finally, how does the opportunity become tangible? How do people connect or engage? They consume the meal.

Customisation as was discussed in the literature becomes part of this “artistic, scientific and technological” process. Adding or subtracting ingredients makes a meal delicious, appetising and lovable. Increasing or decreasing your own combination (spicier, sweeter), along with consumption, becomes the experience.

If this is a restaurant brand, returning customers equates to brand loyalty, and therefore increased brand equity.

Through the development of these conceptual explorations a *connecting* device was sought to link the mapping of the ingredients. In the spirit of *food* a fish net sprang to mind. It is a useful metaphor because of the way it connects and intertwines a myriad of components into an interface, which may become simple and easy to understand. This possibility for visualisation envisaged a network structure to emerge and the links to communicate a type of oneness. Klanten et al. (2010) describes this as “the links tells us more than the nodes” (p.164). Constructing a net device of sorts was outside my technical expertise, but after many trials a new discovery was made. The Adobe illustrator 6 blend tool became a playground for experimentation and subsequent developments, not only for this iteration but also the thesis overall. (Fig. 39: *Experimenting with the Adobe illustrator blend tool.*)

Following this, I returned to some of the earlier conceptual work in order to ascertain how useful this connecting device might be, in resolving issues in the search for a more cohesive approach to represent the AST continuum. Fig. 40: *Experimenting with the Adobe illustrator blend tool and earlier conceptual directions to represent the AST continuum*, presents this concept exploration. Although this solution may appear interesting I have rejected it. This concept is not successful, because the images (paint, head and tablet) are literal and these design elements are limited through lack of an overall cohesiveness within the desired single-minded conceptual direction.

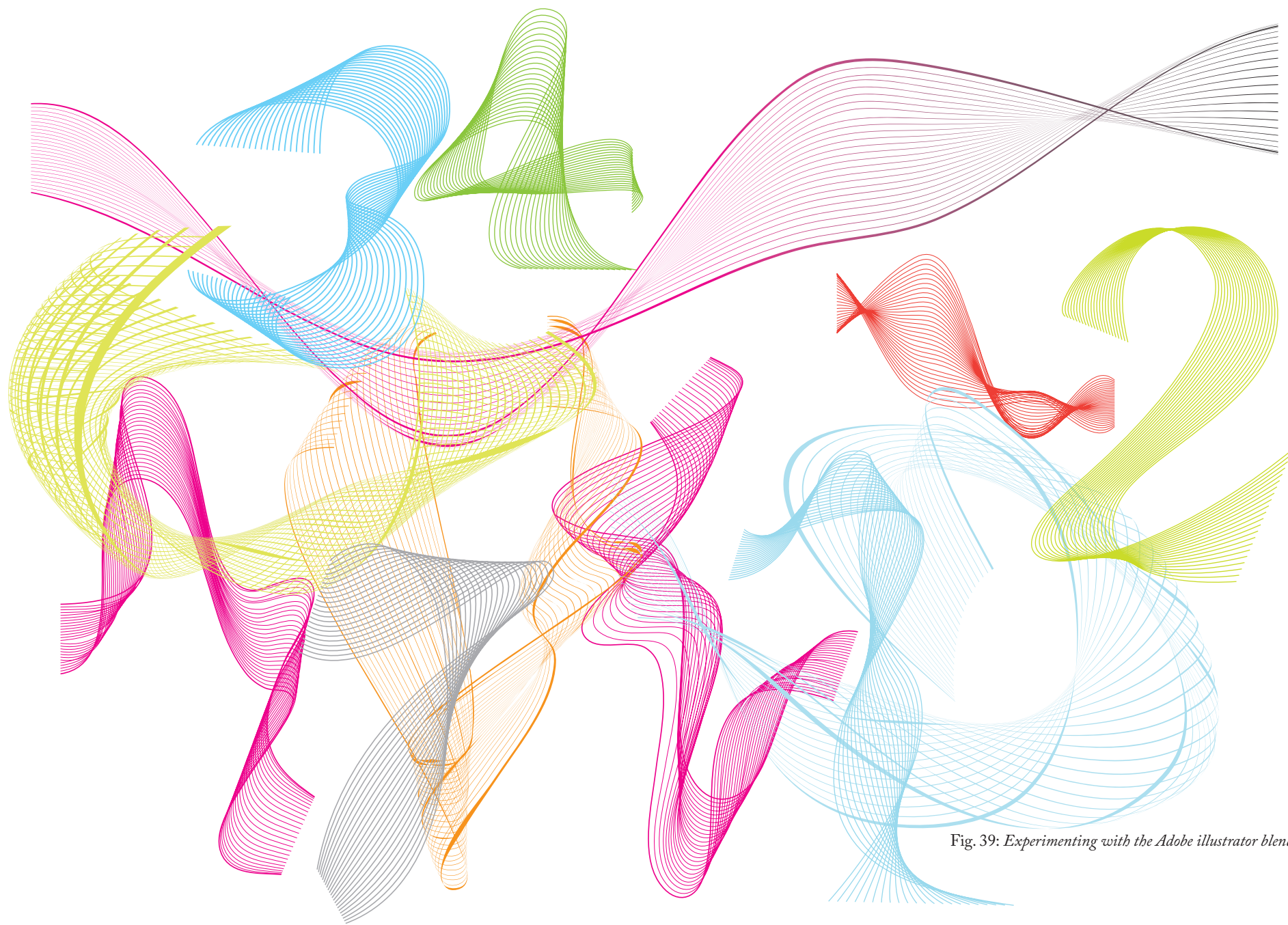


Fig. 39: *Experimenting with the Adobe illustrator blend tool.* 113

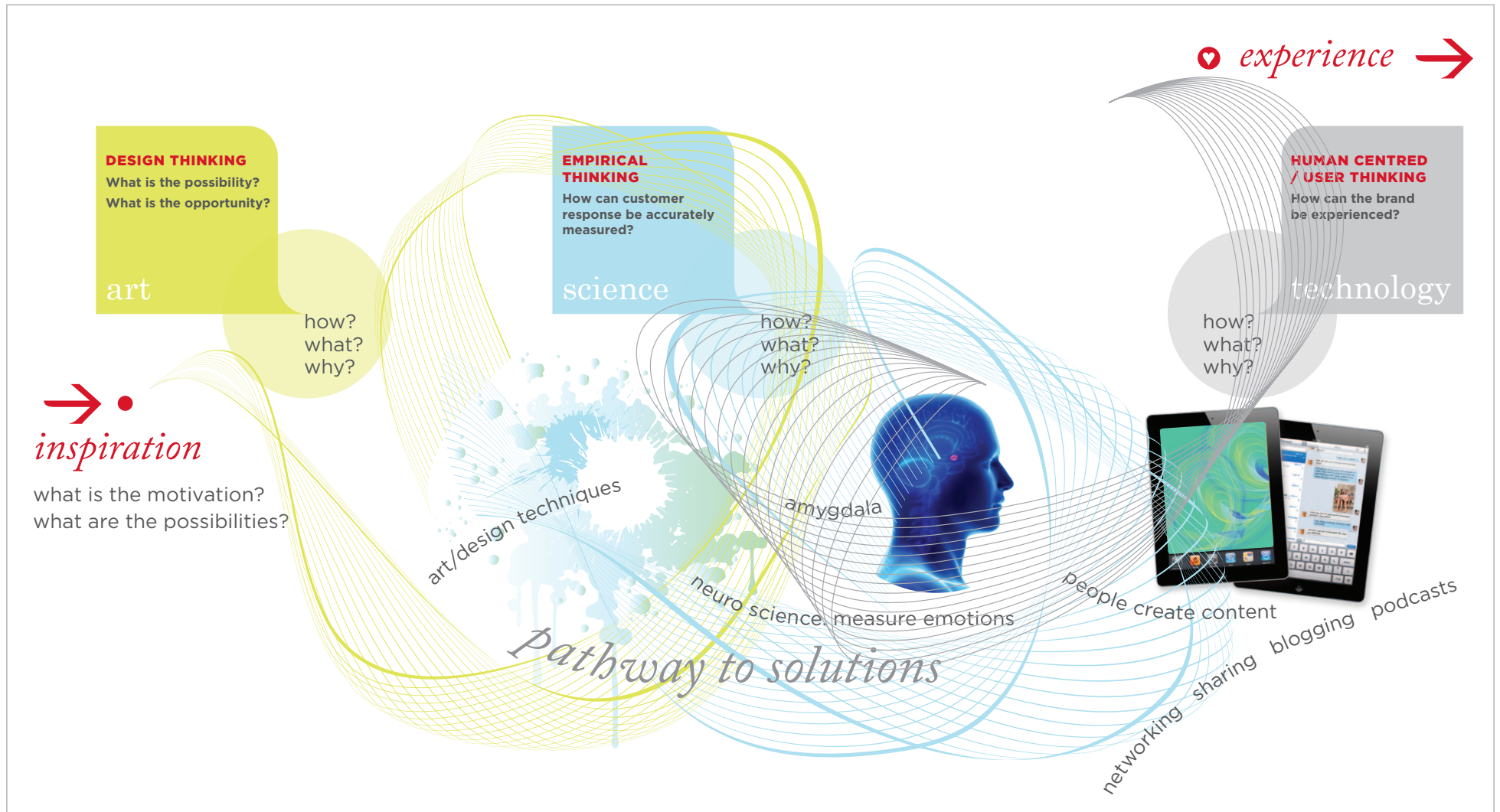


Fig. 40: Experimenting with the Adobe illustrator blend tool and earlier conceptual directions to represent the AST continuum. 114



Fig. 41: Meal metaphor 1. 115

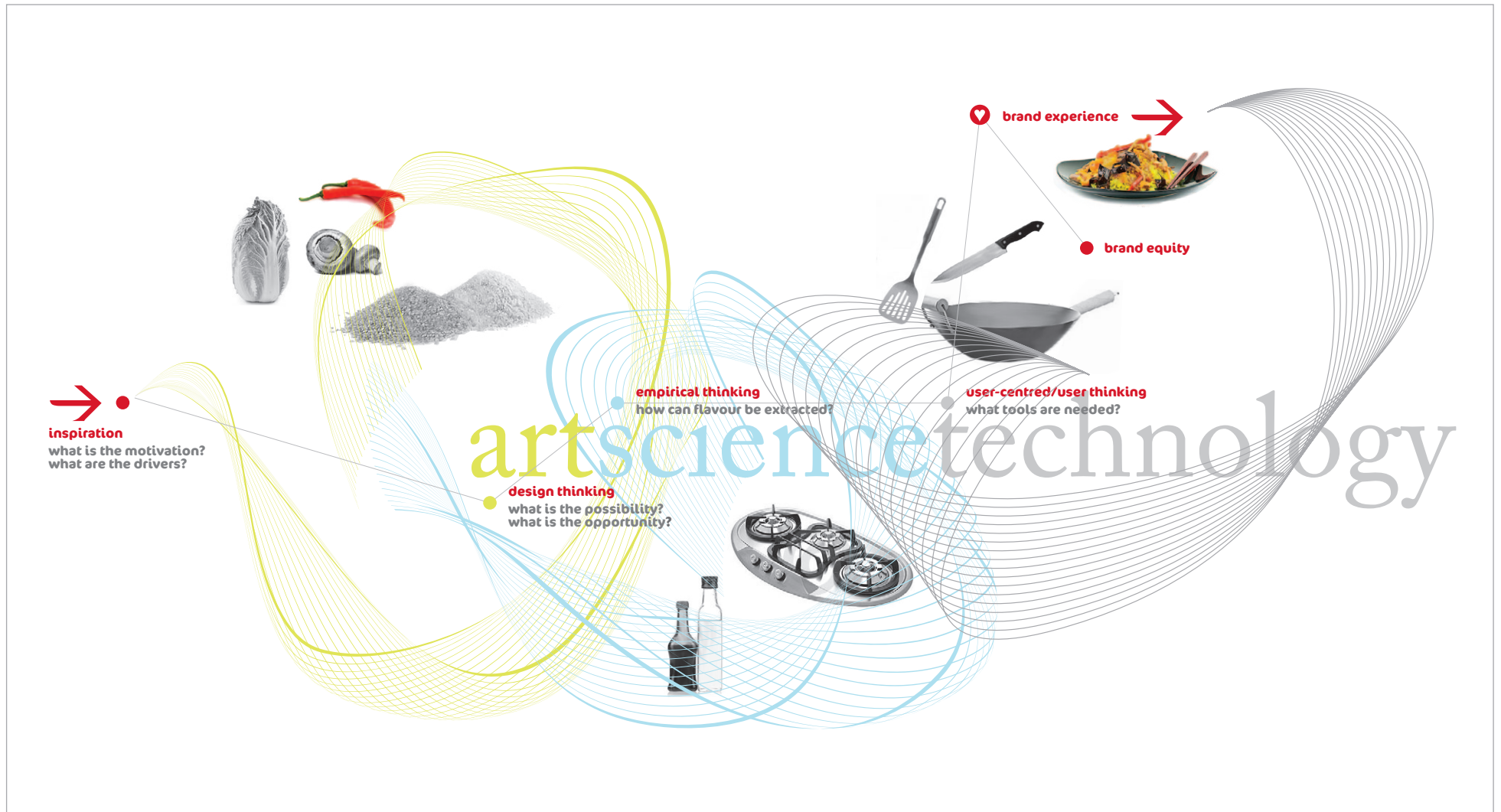


Fig. 42: Meal metaphor 2. 116

To ensure one direction might be exploited, however, I carried on with the meal metaphor by uniting a series of images and the net device and drew them together for two conceptual directions. (Fig. 41: *Meal metaphor 1.* and Fig. 42: *Meal metaphor 2.*) There is a strength to this work, however the overall complexity of the design (typography, images and the net) is not as successful as the simplicity of the tree metaphor concept.

4.2.5.3 Abstraction

Working with a food metaphor proved to be a stepping stone for the next series of conceptual directions. There are limitations with Adobe illustrator. The blend tool can be a cumbersome tool to make nets and it is difficult to convey a sense of finesse. What if there was a better way of making nets more beautiful? “The *what if* approach involves playing with ideas” (De Bono, 2004, p.43). Thinking about technology, a search was undertaken to find an online app that could perhaps help with this what if question. As was discussed in the literature review, 1000’s of apps are being created every day and uploaded (Virgin consumers, 2013).

Flowpaper by Diatom studio was the result of a search. The developers are two New Zealanders based in London. Their website tells us that they are a design

studio “exploring the possibilities that digital fabrication offers, to give the end user a role in the design process”, [with the hope that the products they create] “are enriched by the individual” (Diatom studio, n.d.). This is the ethos that has been made available within our highly networked, open source world. Weber (2004) helps elucidate the main points about open source design, saying it is a voluntary practice which taps into a large reservoir of collaborative work (p.75).

Another consideration was the circle. Previous iterations have considered linear and circular approaches in an individual manner, but a branding process might not necessarily go around and around in an infinite motion. The process may be more fluid than circular. On occasion the brand may become only an update of the original rendition. Only in the case of a re-brand does the process begin. Therefore, a spiral shape was considered as a possibility to represent the AST continuum. If a spiral rotates within its own sphere, in a successive movement forward, it is effectively combining the iterative circular with a linear trajectory. Wade (2006) tells us that spirals are nature’s favourite structures and are found in everything from galaxies to sea shells (p.28). He also tells us that there are three principle types in common planar spirals: the Archimedean (parallel, equidistant lines), the Logarithmic (associated with the Fibonacci series with properties of self-similarity), and the Fermat spiral (successive whorls enclose equal increments of area) (pg.28). Abstractions were made with spirals, which retained earlier ideas about a net metaphor by utilising an Apple ipad and the Flowpaper app see Fig. 43: *Concept explorations with Flowpaper App.* Fig. 44: *Spirals 1* and Fig. 45: *Spirals 2* chose the best of these abstractions and applied the AST continuum communication through typography to the visualisation.

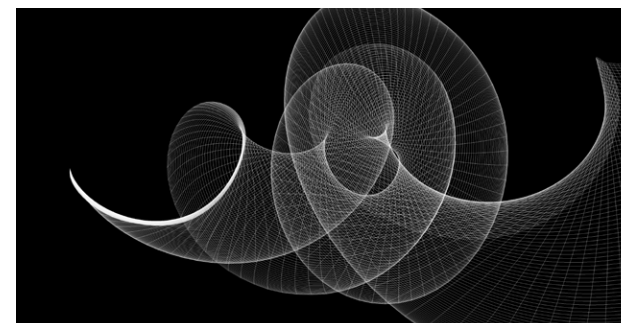
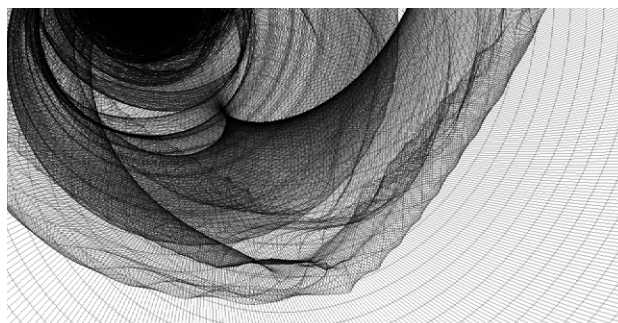
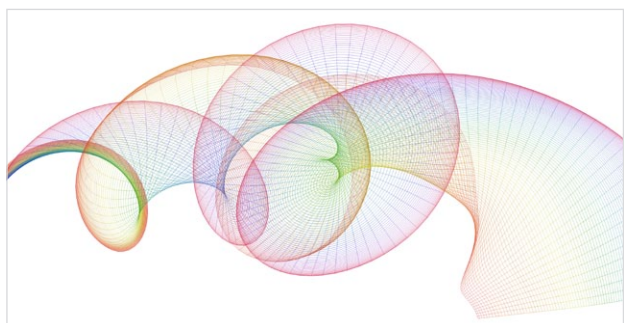
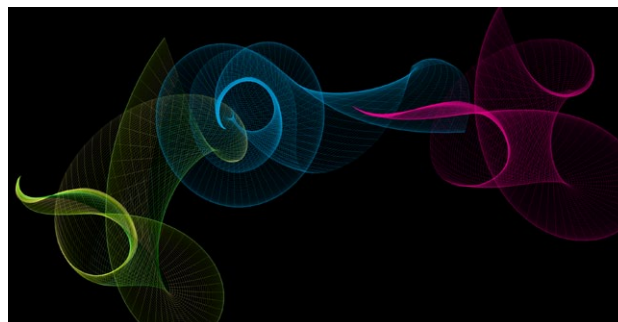
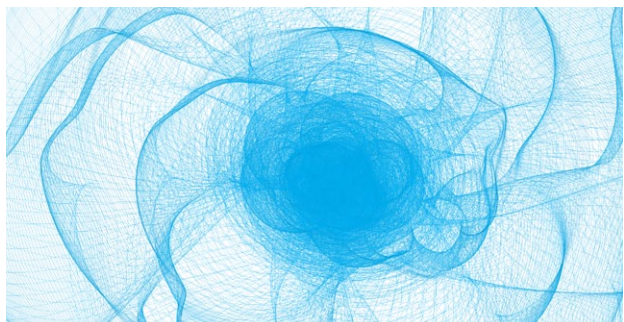
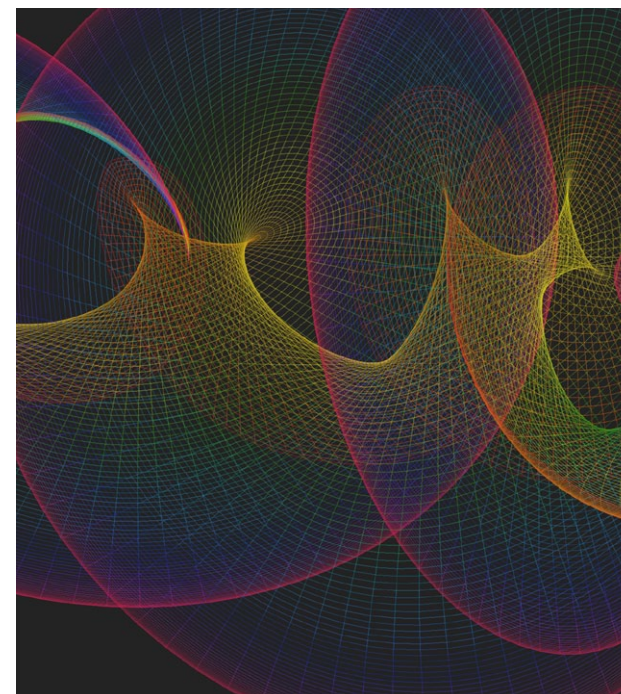
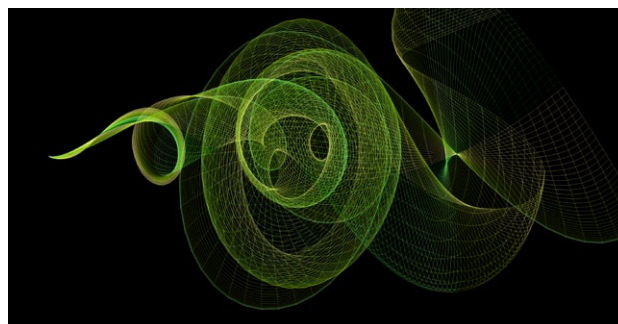
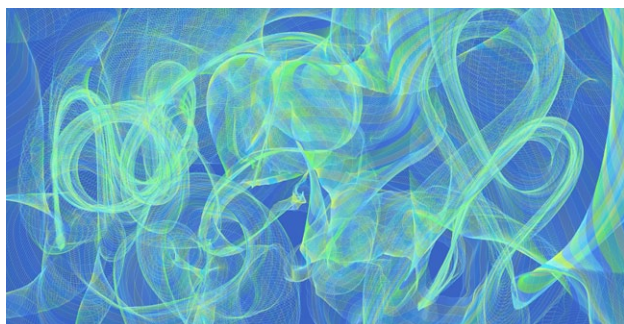


Fig. 43: *Concept explorations with Flowpaper App.* 118

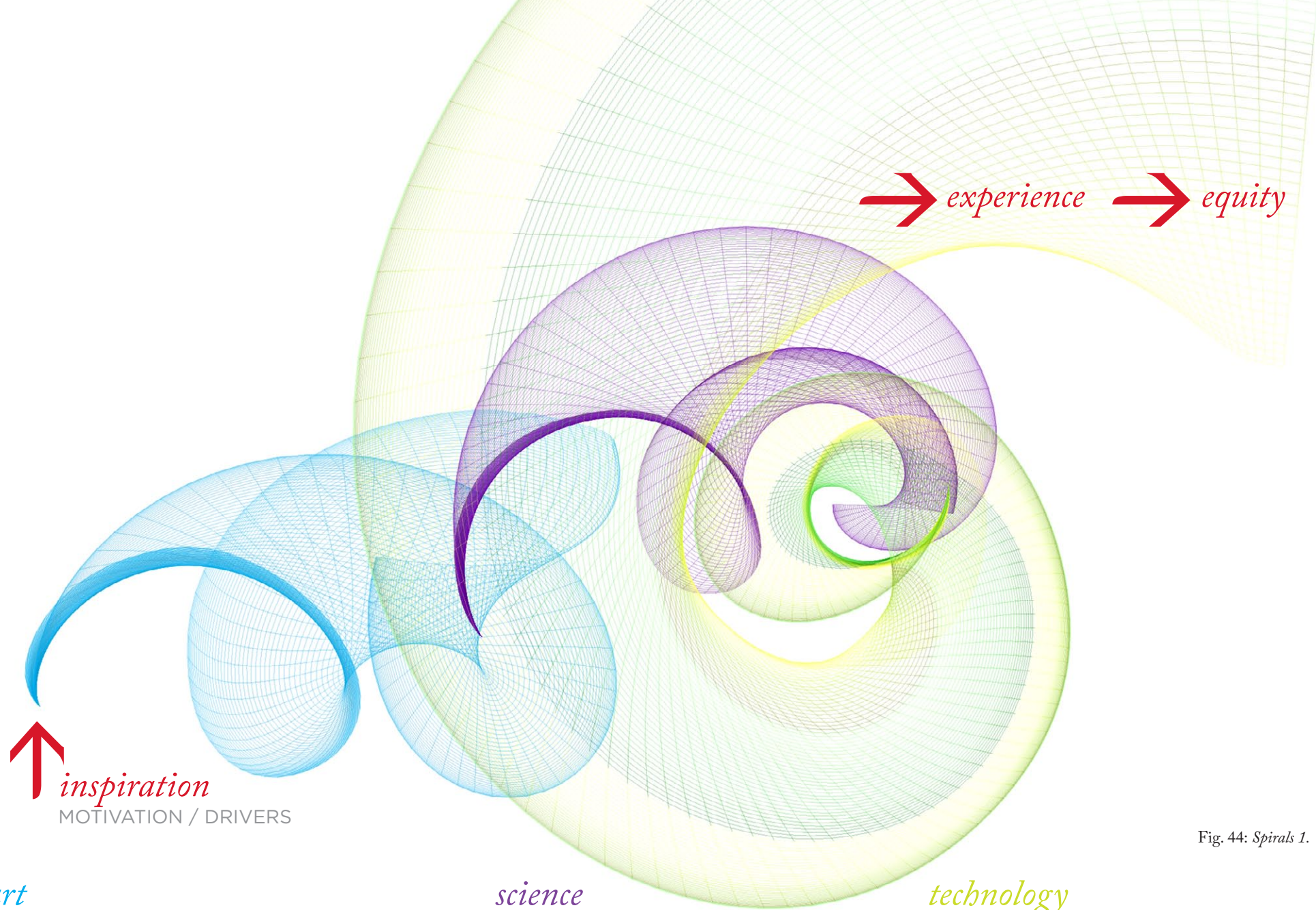


Fig. 44: *Spirals 1.*

art
DESIGN THINKING
what is the possibility / what is the opportunity?

science
EMPIRICAL THINKING
why do customers respond in that way?

technology
HUMAN-USER CENTRED THINKING
how can the brand be experienced?

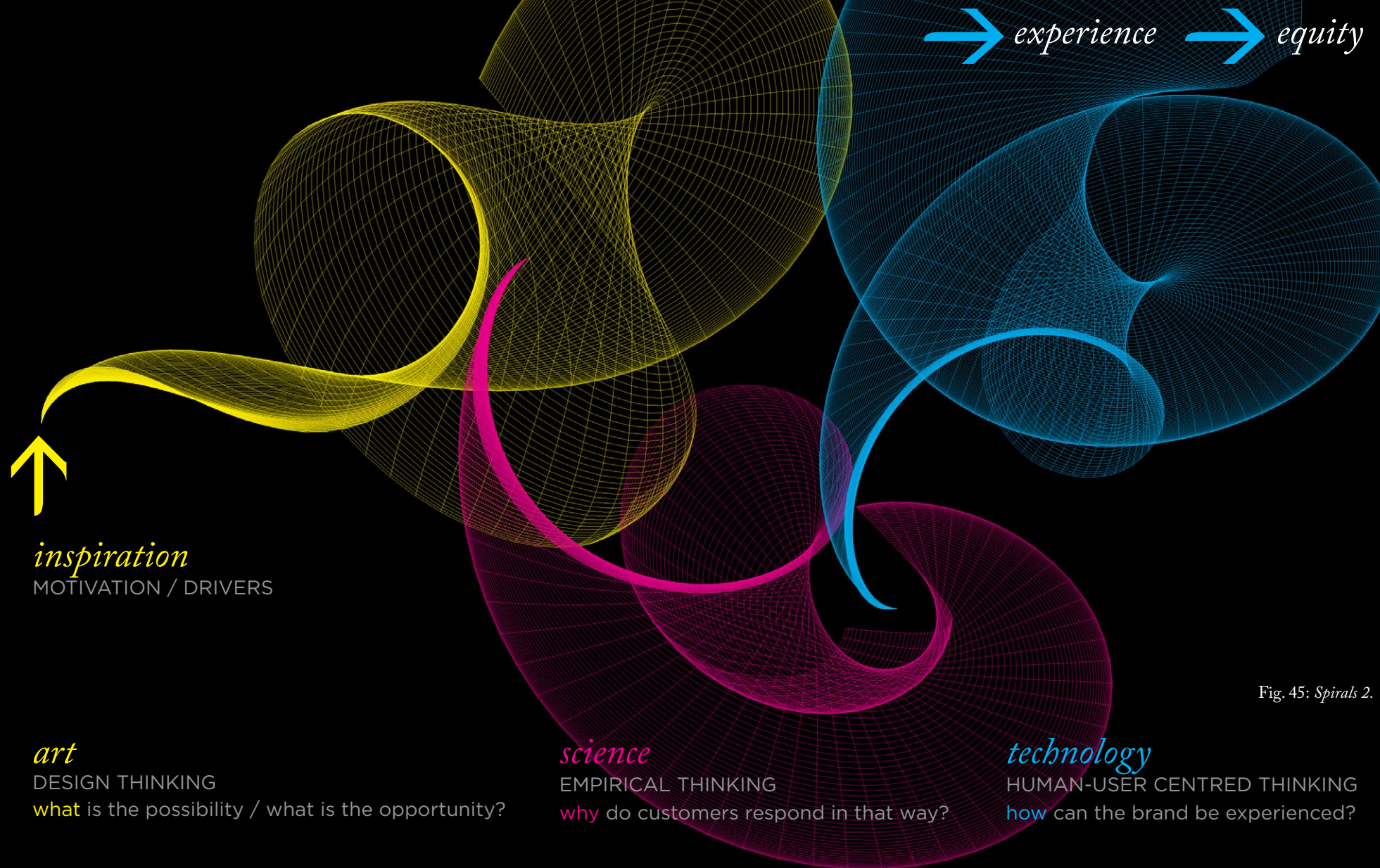


Fig. 45: *Spirals 2.*

Although these experiments are interesting and I believe could be perceived as different and beautiful, there are weaknesses with this approach. The abstraction makes reading difficult as there is no direct correlation to a metaphorical concept as such. The AST continuum requires a connection to concept for it to be useful. As was discussed at the beginning of this section, the ideal of a good graphic is to present information that is relevant and may be perceived without mental effort (Myatt & Johnson, 2011, p.103).

4.3

A visual identity for Senses and Sensibility

This section outlines why and how a visual identity was conceived for *Senses and Sensibility*. The intention was that the logo act as a signpost or reference point (Lipe, 2006, p.153), for other researchers in the field; the visual identity to contribute components to the information graphics. Finding a groove (Schön, 1985, p.54), the logo for *Senses and Sensibility* was subjected to peer review. An expert Auckland based brand designer approved the final design within a 30 minute discussion. This time frame may appear rapid, but it is normal in my experience. It is either right or wrong, and no amount of justification can make the design right, if it is wrong.

The visual identity explored a mix of serif and sans-serif fonts to create a hybrid word-mark and an arrow device. The arrow device was included, as I perceived it would be useful for helping the viewer or user to navigate around the information graphics.

The reason for mixing fonts is to suggest old and new which is inherent in this research. The design contains the occasional inverted serif curve for proprietary purposes and for clarity a descriptor (art-science-technology-continuum) is incorporated in the design. The design connects the design elements (individual typographic letters) into an overall cohesive oneness (Klanten et al., 2011, p.31). Typography is an effective vehicle to communicate this concept because it uses easily identifiable letter forms, which have become an acronym. AST has been expressed in lowercase as it is friendly and I consider this to be less modernist and more resonant of the emotions. This is also a subjective selection of what the research is suggesting. Fig. 46: *Concept explorations for the AST continuum logo* outlines idea progression of typographic connections with the three letter forms.

In order to complete the visual identity for the research (see Fig. 47: *A visual identity for Senses and Sensibility*) a colour palette was developed. The colours are intended to offer scope for coolness and warmth. The logo utilises colour from the cooler spectrum, to ensure that the treatment does not over-ride the communication of the visualisations. Basic colour theory dictates that cooler colours recede, and warmer colours move to the forefront of a picture plane.



Fig. 46: Concept explorations for the AST continuum logo. 122



Fig. 47: A visual identity for Senses and Sensibility.

4.4 Conclusions

This concludes the conceptual stages of ideation and conceptual development, which occurred during the early stages of the research. Of the two goals of this early design ideation, both have been partially reached. The first goal was to help define the opportunity for an expression of data collected from the questionnaires. Collection of data was discussed (see 3.3.3 Gathering data, pg.77.) This early work has proved useful with the final outcome (data visualisation, see pg.137) as it drew on some of the ideas discussed here. The second goal – visualising the AST continuum to aid understanding of this strategy for business application, is less resolved. Visualising this strategic process is just one aspect of the broader overall study, and testing the usefulness of this approach is one of the aims of the research. However, there are parts that are missing. Connections between brand loyalty and technology (social media) are not referenced, and more importantly, sense experience is conspicuous by its absence.

The next section discusses the collection of the data from the questionnaires in order to outline how this data was translated for the final data visualisation.

4.5

Analysis and synthesis: the questionnaire

Measuring how sense experience affects brand loyalty in social media.

A discovery was made through the process of analysing the data from the questionnaire. Analysis and synthesis go hand in hand; as the analysis progresses, conceptual thought demands interpretation. In order to construct a data visualisation, data were required, as discussed in the last section. Throughout the collection process two key directions emerged.

The first direction focussed on how the AST continuum may be interpreted utilising a graphic device. Early iterations were explored as discussed in 4.2 Ideation of interpretations and metaphor, with the emergence of a natural metaphor proving the most likely scenario for design exploration. Water was considered, as it may be interpreted as continuum in its fluidity. When an object is dropped into water, ripples expand outwards in concentric circles. If more than one object is dropped in close proximity to another, the ripples intermingle and they flow into each other forming a continuous pattern. Fig. 48: *Graphic interpretation of concentric ripple pattern* demonstrates this effect.

This led to the second key direction which emerged during the analysis stage. The concentric ripples created when objects are dropped into water also create small waves. Sound is transmitted through sound waves.

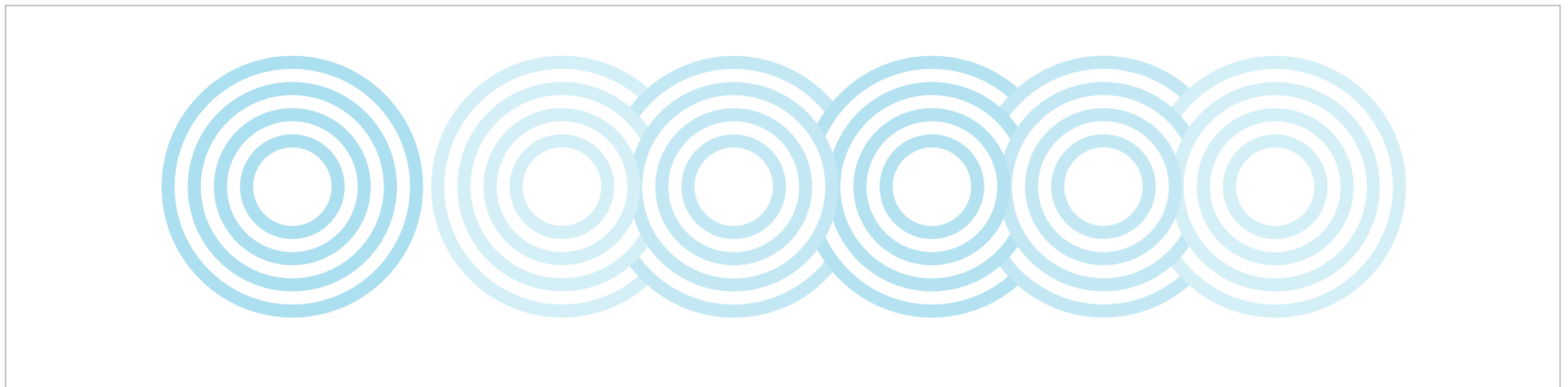


Fig. 48: *Graphic interpretation of concentric ripple pattern.* 124

Touch, sight, taste and smell sensations could also be conceived as being transmitted through waves. This conceptual thought jumped to the notion of adopting the term sensewaves as being a way to express sense experience or sensations. A search on Google revealed that this is a term not used in this context, but rather relates to radio waves or music websites. A graphic interpretation of a sensewave was roughly sketched. It combines the five senses with the four questions, and utilises thin keylines radiating outwards in order to capture responses from the Likert scale for one of the objects (see Fig. 49: *Concept drawing for sensewave concept.*) This rough sketch was drawn on the back of one of the completed questionnaires, which demonstrates the processes of analysis and synthesis combining at the time of the focus groups. See Appendix C: *Completed questionnaires: process of analysis* for completed questionnaires.

The sensewave device has been utilised extensively through the analysis since I also discovered that Microsoft Excel (Excel) has limitations when it comes to trying to get the data to make sense. Many of the chart options offer singular analysis of one particular aspect, and when all aspects are combined the result is confusing. Comparisons between the objects became problematic as there was no clear pattern which emerged from which to make any kind of observation. However, Excel was useful for the context questions which formed the second part of the questionnaire design (refer pg.83.) Since these questions sit apart from part one of the questionnaire, they may be viewed as singular entities.

The analysis and synthesis for the context questions follows the discussion about part one of the questionnaire, testing brand loyalty through sensewaves.

The study *Senses and Sensibility* was designed to test connections between brand loyalty and positive or negative effects of social media on sense experience. There may be changes in customer loyalty, which may compromise the AST continuum. For the strategy to be useful the requirement is for these compromises to be understood.

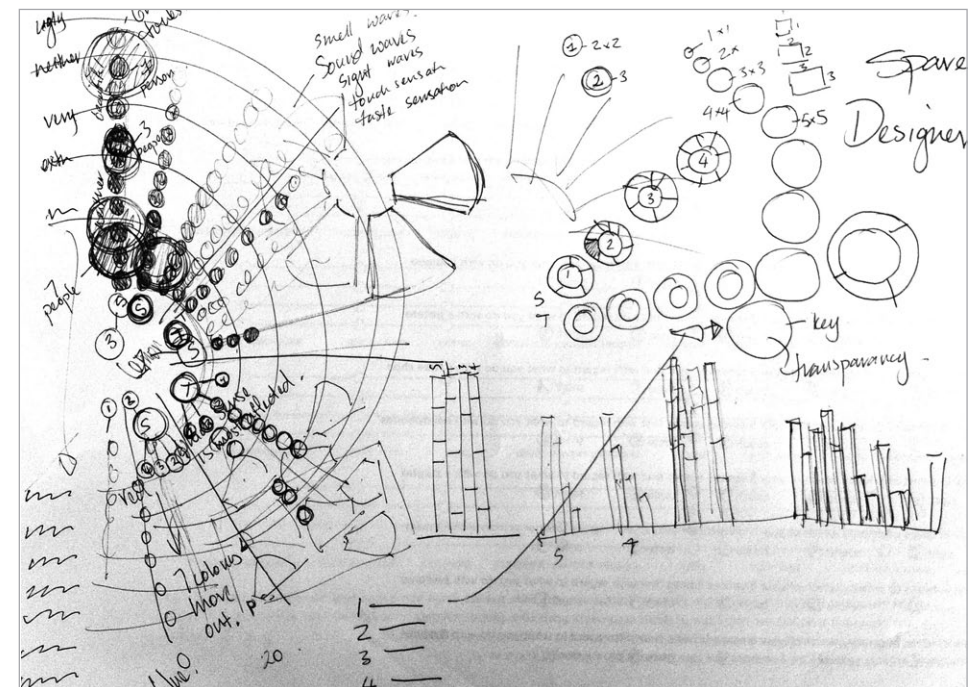


Fig. 49: *Concept drawing for sensewave concept.* 125

4.5.1 Evaluating brand loyalty through sensewaves

The patterns which emerged for analysis and synthesis from part 1 of the questionnaire design revealed that the student group appeared to be trending quite differently from the wider combined group. Fig. 50: *Sensewave No. 1* demonstrates student trends. It appeared overall that the group were responding more overtly when presented with either positive or negative information. This suggested that peer pressure is an added factor for the findings with this group, and that brand loyalty is placed at greater risk when personal subjectivity is challenged.

Comparison results shown in Fig. 51: *Sensewave No. 2* compare the student focus group with a combined group formed from all three focus groups (including the student group again) for the lemon. The areas highlighted with a ring and the letter 'S' indicate the student group. These highlighted areas reveal that for the student group, sense experience is most influenced by others' subjectivity, because in the lemon "all groups" sensewave, the numbers have not been added to, or only marginally added to by the other groups. This suggests that the designer and customer groups are less influenced by the subjectivity of others, and more inclined to believe in their own experience or opinions. Thus it would appear that when the designer and customer group are added to the student group it

may be more likely that the object in question is less affected by subjectivity and therefore brand loyalty is less compromised.

The overall assumption is that the subjectivity of others on students may impact on their brand loyalty, and that students (or younger participants in the focus groups) are more likely to be engaged with social media. This raises an additional question for the research. Why are the senses compromised by subjectivity? Perhaps age and lack of experience has something to do with this result. Most students were aged between 18 and 25. The customer and designer groups' age range appeared to be between 28 - 55. At this point a more indepth analysis took place, (see Appendix D: *Further raw statistical analysis*.) As the results appeared to be trending quite differently for the student group after analysing the potato/lemon comparison there was a need to understand more deeply how students were able or not able to influence the wider group. They have tended towards being outliers, more extreme in views, less moderated by experience. I also wished to discover from the designer and customer group, which senses were implicit when positive or negative information did not influence a change in response.

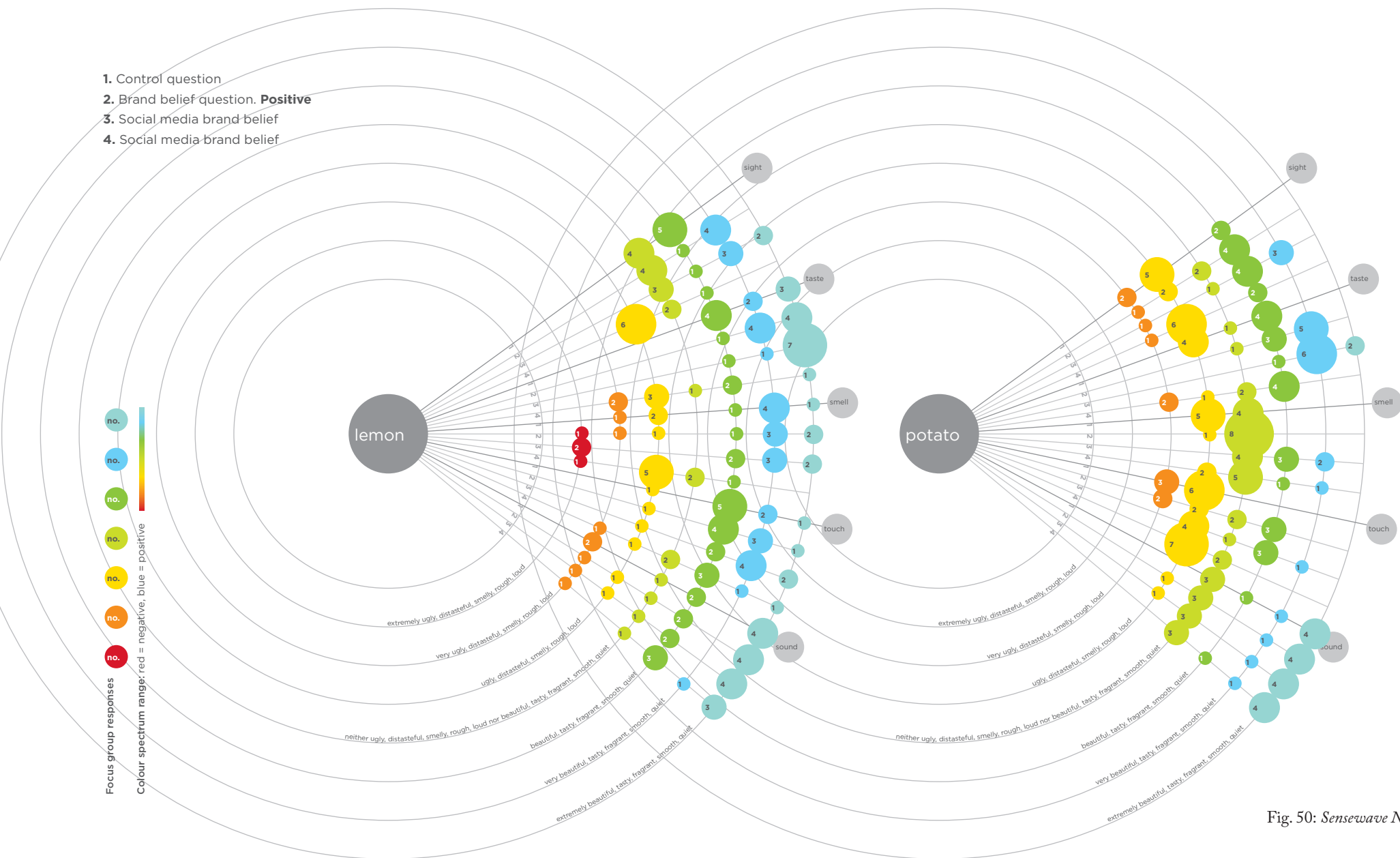


Fig. 50: Sensewave No. 1. 127

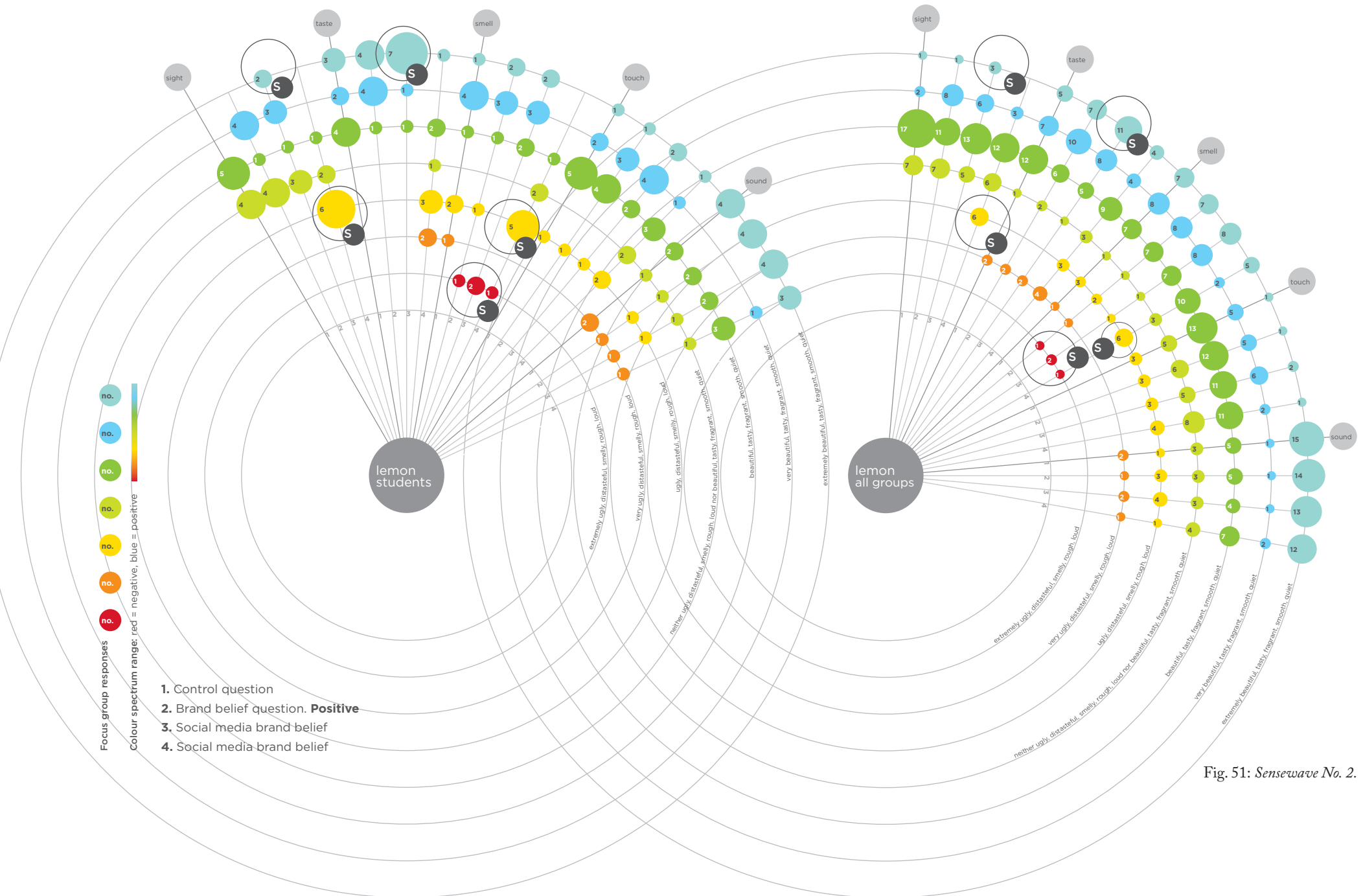


Fig. 51: Sensewave No. 2. 128

lemon	potato	Nike sports	headphones	flyspray	fragrance	stapler	eraser
/ sight	/ sight	/ sight	/ sight	/ sight	/ sight	/ sight	/ sight
Q2. F. sni.	Q2. T. si.	Q2. T. sni.	Q2. T. si.	Q2. T&F. sni.	Q2. T. si.	Q2. F. si.	Q2. T. si.
Q3. F. sni.	Q3. T. si.	Q3. T. sni.	Q3. T. si.	Q3. F. sni.	Q3. T. si.	Q3. F. sni.	Q3. F. si.
Q4. p1: F. p2: T. sni.	Q4. p1: T. p2: F. sni.	Q4. p1: T. p2: F. si.	Q4. p1: T. p2: F. si.	Q4. p1: F. p2: T. si.	Q4. p1: T. p2: F. si.	Q4. p1: F. p2: T. si.	Q4. p1: T. p2: F. sni.
/ sound	/ sound	/ sound	/ sound	/ sound	/ sound	/ sound	/ sound
Q2. F. si.	Q2. F. si.	Q2. F. sni.	Q2. F. sni.	Q2. T. si&sni.	Q2. F. si.	Q2. F. sni.	Q2. F. si.
Q3. F. si.	Q3. F. si.	Q3. F. sni.	Q3. F. sni.	Q3. T. si&sni.	Q3. F. si.	Q3. F. sni.	Q3. F. si.
Q4. p1: F. p2: T. sni.	Q4. p1: F. p2: T. si.	Q4. p1: F. p2: T. si.	Q4. p1: F. p2: T.	Q4. p1: T. p2: F. i&ni.	Q4. p1: F. p2: T. si.	Q4. p1: F. p2: T. si.	Q4. p1: F. p2: T. si.
/ touch	/ touch	/ touch	/ touch	/ touch	/ touch	/ touch	/ touch
Q2. F. si.	Q2. T. sni.	Q2. T. si.	Q2. F. sni.	Q2. F. si.	Q2. F. si.	Q2. F. sni.	Q2. F. sni.
Q3. F. sni.	Q3. T. sni.	Q3. T. sni.	Q3. F. sni.	Q3. F. si.	Q3. F. sni.	Q3. F. si.	Q3. F. sni.
Q4. p1: F. p2: T. si.	Q3. p1: T. p2: F. si.	Q4. p1: T. p2: F. si.	Q4. p1: F. p2: T. si.	Q4. p1: F. p2: T. si.	Q3. p1: F. p2: T. sni.	Q4. p1: F. p2: T. si.	Q4. p1: F. p2: T. sni.
/ taste	/ taste	/ taste	/ taste	/ taste	/ taste	/ taste	/ taste
Q2. T. si.	Q2. T. si.	Q2. F. si.	Q2. F. si.	Q2. F. si.	Q2. F. si.	Q2. F. si.	Q2. F. si.
Q3. T. si.	Q3. T. si.	Q3. F. si.	Q3. F. si.	Q3. F. si.	Q3. F. si.	Q3. F. si.	Q3. F. si.
Q4. p1: T. p2: F. sni.	Q4. p1: T. p2: F. si.	Q4. p1: F. p2: T. si.	Q4. p1: F. p2: T. si.	Q4. p1: T. p2: F. sni.	Q4. p1: F. p2: T. si.	Q4. p1: F. p2: T. si.	Q4. p1: F. p2: T. si.
/ smell	/ smell	/ smell	/ smell	/ smell	/ smell	/ smell	/ smell
Q2. F. si.	Q2. F. si.	Q2. F. si.	Q2. F. si.	Q2. T. sni.	Q2. T. sni.	Q2. F. si.	Q2. F. sni.
Q3. T & F. si.	Q3. F. si.	Q3. F. si.	Q3. F. si.	Q3. T. sni.	Q3. T. si.	Q3. F. si.	Q3. F. sni.
Q4. p1: T. p2: F. sni.	Q4. p1: F. p2: T. si.	Q4. p1: T. p2: F. si.	Q4. p1: F. p2: T. si.	Q4. p1: T. p2: F. sni.	Q4. p1: T. p2: F. sni.	Q4. p1: F. p2: T. si.	Q4. p1: F. p2: T. si.
* 4 senses	* smell, sound	* sound, taste, smell	* 4 senses	* sight, touch, smell	* sound, touch, taste	* all 5 senses	* 4 senses
Predictions for imposed positive brand belief. Q2. Scale moves more positive from Question 1. Q3. Scale will moves even more positive Q4. Prediction 1 (p1): Scale will move negative if value is placed on others subjectivity. Prediction 2 (p2): Scale will stay the same as Q3, therefore participants unaffected by subjectivity of others & may not engage with social media.				Predictions for imposed negative brand belief. Q2. Scale moves more negative from Question 1. Q3. Scale will moves even more negative Q4. Prediction 1 (p1): Scale will move positive if value is placed on others subjectivity. Prediction 2 (p2): Scale will stay the same as Q3, therefore participants unaffected by subjectivity of others or may not engage with social media.			
False (F): Unexpected result True (T): Expected result (sni) Students not included in total group (si) Students included in total group *Which senses are not implicated when neg. information is received Q4. and p1 is F, p2 is T? Suggests loyalty unaffected by social media, & indicates senses used to express negative .				False (F): Unexpected result True (T): Expected result (sni) Students not included in total group (si) Students included in total group *Which senses are not implicated when positive information is received Q4. and p1 is T, p2 is F? Suggests loyalty unaffected by social media, & indicates senses used to express positive .			

Table 1: Overall findings of majority of responses from all participants. 129

4.5.2

Overall results for sensewaves

For the following refer to Table 1: *Overall findings of majority of responses from all participants* and Fig. 52: *Analysis model for the results*.

The simple subjective assessment tested the first four objects (lemon, potato, Nike sports shoe and headphones) with positive (A2) Q2 & Q3 and negative (A3) Q4 social media response factors. The second four objects (flyspray, fragrance, stapler and eraser) were tested with negative (A3) Q2 & Q3 and positive (A2) Q4 social media response factors.

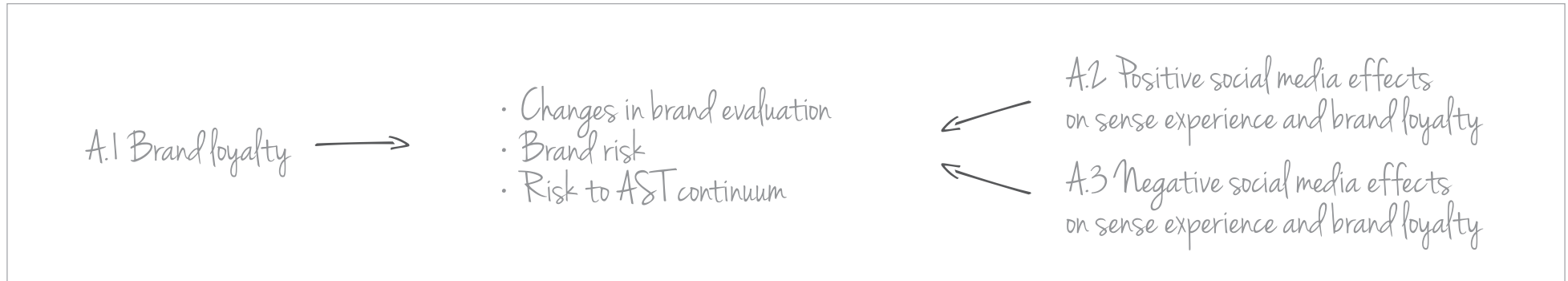
The data in Table 1 are compiled from further raw statistical analysis (see Appendix D: *Further raw statistical analysis*), and demonstrate predictions about where the majority of the overall group might go. The next discussion describes specifically what happened with regard to the predictions and consequential results of each particular object.

Potato

In Fig. 53: *Sensewave for a potato*, the majority of participants (10) described a potato in Q1 to be ugly (**sight**). Q2 observed that the majority moved to neither ugly nor beautiful (10) and beautiful (12.) Q3 observed that the majority stayed at beautiful (11) but a further group of nine participants moved to very beautiful. Q4 sees that a slim majority move back to beautiful, with the rest of the participants spread evenly back down to ugly when the negative belief was suggested. The majority of participants (14) described a potato to be tasty (**taste**). In Q2 the majority (14) moved to very tasty and Q3, the addition of two more participants moved the majority (16) to extremely tasty. Q4 saw the majority (11) move back to tasty when a negative belief was suggested. This same pattern was seen in regard to **touch**. As circled in Table 1, the predictions show that sight, taste and touch were influenced by subjectivity. With smell and sound there was little movement, and therefore these two senses were not influenced by subjectivity. The findings for touch observed that students were not included which was an interesting result, suggesting that older customers may be more discerning when purchasing potatoes.

Thus, sight, taste and touch were found to be influenced by subjectivity when positive (A2) Q2 & Q3 and negative (A3) Q4 social media response is factored. Smell and sound were found to be not influenced by subjectivity when positive (A2) Q2 & Q3 and negative (A3) Q4 social media response was factored. Students have influenced the Q4 result overall except for sight.

Fig. 52: Analysis model for the results.



Conclusion - Brand loyalty (A1) towards a potato was found to be placed at risk with **sight**, **taste** and **touch** and the two other senses were not implicated.

When positive or negative information did not influence a change in subjectivity (based on majority response), the smell of a potato was found to be neither fragrant nor smelly and sound of a potato extremely quiet.

Lemon

In Fig. 54: *Sensewave for a lemon*, the majority of participants (17) described a lemon in Q1 to be beautiful (**sight**). The majority (11) stayed at beautiful with Q2; 8 moved towards very beautiful. With Q3 the majority remained at beautiful, but with Q4 6 moved to ugly when the negative belief was imposed. However, these were the students, and this result was discounted because overall the majority of the group remained at beautiful. The majority of participants (12) described a lemon to be tasty (**taste**). In Q2 the majority (10) moved to very

tasty and in Q3, the majority (11) moved to extremely tasty. Q4 saw the majority (9) move back to tasty when a negative belief was suggested. As circled in Table 1 the predictions show that taste was influenced by subjectivity and there were similar results, although less conclusive, which were observed with smell. A slim majority (7-8) moved along the scale consistently at very fragrant with Q1, 2 and 3, then moved slightly negative (10) to fragrant with Q4.

Thus, taste was the only sense found (conclusively) to be influenced by subjectivity when positive (A2) Q2 & Q3 and negative (A3) Q4 social media response was factored. The other four senses were not found to be influenced by subjectivity when positive (A2) Q2 & Q3 and negative (A3) Q4 social media response was factored. Students have not contributed to the findings overall.

Conclusion - Brand loyalty (A1) towards a lemon has found to be placed at risk with **taste**, and the four other senses were not implicated. When positive or negative information did not influence a change in subjectivity (based on

majority response), the sight of a lemon was found to be beautiful, smell was found to be very fragrant, touch was found to be smooth and sound, extremely quiet.

Nike shoe

In Fig. 55: *Sensewave for a Nike shoe*, the majority of participants (10) described the shoe in Q1 to be beautiful (**sight**). A small majority (7) moved to very beautiful with Q2. Q3 observed that a small group stayed at beautiful (8) but the majority (11 participants) were located back at beautiful. This is observed as a shift because the increase of numbers has moved from ugly towards neither ugly nor beautiful. Q4 sees the majority move to ugly. A small majority of participants (10) described the shoe to be smooth (**touch**). With Q2 the small majority (10) moved to neither smooth nor rough and Q3 observed another slight move to smooth from the small majority (10.) Q4 saw the majority (11) move back to neither when a negative belief was suggested. These are two patterns observed with regard to sense experience with a Nike shoe. The other senses of taste, smell and sound were not implicated. As circled in Table 1, the predictions show that sight and touch were influenced by subjectivity.

Thus, sight and touch were found to be influenced by subjectivity when positive (A2) Q2 & Q3 and negative (A3) Q4 social media response is factored. Sound, taste and smell were found to be not influenced by subjectivity when positive (A2) Q2 & Q3 and negative (A3) Q4 social media response was factored.

Students have not influenced the Q4 result overall. **Conclusion** - Brand loyalty (A1) towards a Nike shoe was found to be placed at risk with **sight** and **touch**, and the three other senses were not implicated. When positive or negative information did not influence a change in subjectivity (based on majority response), the taste of a Nike shoe was found to be neither distasteful nor tasty, smell to be neither fragrant nor smelly and sound to be loud. This result (sound / loud) suggests participants responded to the experience of the shoe (running), rather than the shoe itself.

Headphones

In Fig. 56: *Sensewave for the headphones*, the majority of participants (11) described the headphones in Q1 to be ugly (**sight**). A majority (11) moved to beautiful with Q2. Q3 observed that this majority stayed at beautiful (11) but the majority (11) moved back towards ugly with Q4. All of the other results for the four other senses observed little movement. However, the result for sound was unclear, as the responses were evenly split within the group. As circled in Table 1, the predictions show sight to be the only sense influenced by subjectivity. Students have contributed with the Q4 result with sight but not with sound, which suggests they are more concerned with looks than quality of sound.

Thus, sight was found to be influenced by subjectivity when positive (A2) Q2 & Q3 and negative (A3) Q4 social media response was factored. Sound, touch, taste and smell were found to be not influenced by subjectivity when positive

(A3) Q2 & Q3 and negative (A2) Q4 social media response was factored. Students have influenced the Q4 result. **Conclusion** - Brand loyalty (A1) towards the headphones was found to be placed at risk with **sight** and the four other senses were not implicated. When positive or negative information did not influence a change in subjectivity (based on majority response), the headphones were found to be neither distasteful nor tasty, the smell to be neither fragrant nor smelly, the touch to be smooth and sound to be loud.

Fragrance

In Fig. 57: *Sensewave for the fragrance*, the participants described it in Q1 to be extremely fragrant (**smell**). A split majority (8+6+6) moved to smelly, very smelly and smelly with Q2. Q3 observed that this majority hovered (6+6+9) around similar responses. The majority moved back in a fairly even spread towards the positive when positive response was received via social media. **Sight** also witnesses moves similar in pattern to smell. The results for the three other senses observed incremental movements. As circled in table 1, the predictions show that smell and sight were influenced by subjectivity. Students have not contributed the Q4 results for smell but have contributed with sight overall, suggesting that although they may aspire to being a customers of fragrances, as indicated through focus group discussions, they are not purchasers.

Thus, smell and sight were found to be influenced by subjectivity when negative (A3) Q2 & Q3 and positive (A2) Q4 social media response was factored. The

other three senses were not found to be influenced by subjectivity when negative (A2) Q2 & Q3 and positive (A3) Q4 social media response was factored.

Conclusion - Loyalty (A1) towards the fragrance was found to be placed at risk with **smell** and **sight** and the three other senses were not implicated. When positive or negative information did not influence a change in subjectivity (based on majority response), fragrance was found to be neither distasteful nor tasty, touch to be smooth and sound to be neither loud not quiet.

Flyspray

In Fig. 58: *Sensewave for the flyspray*, participants (14) described the flyspray in Q1 to be smelly (**smell**). A majority (9+12) moved to very smelly and smelly with Q2. Q3 observed that this majority (10 + 11) hovered around similar responses. One could say the majority (10) moved back to very smelly with Q4, with another group (6) supporting a moved result. The results relating to sound observe movements, eight participants remained at loud with Q2 and Q3, with five of that group moving back to loud when the positive was suggested. The results for the three other senses observed incremental movements. As circled in Table 1, the predictions show that smell and sound were influenced by subjectivity. Focus group discussions around this object revealed that the taste experience associated with flyspray is the taste, which is left in the back of the throat when spraying.

Thus, smell was the only sense found (conclusively), and sound (less

conclusively), to be influenced by subjectivity when negative (A3) Q2 & Q3 and positive (A2) Q4 social media response was factored. The other 3 senses were not found to be influenced by subjectivity when negative (A3) Q2 & Q3 and positive (A2) Q4 social media response was factored. Students were not implicated with this result. **Conclusion** – Brand loyalty (A1) towards the flyspray was found to be placed conclusively at risk with **smell** and the four other senses were less implicated. When positive or negative information did not influence a change (based on majority response), the sight of flyspray was found to be neither ugly nor beautiful, taste to be very distasteful, touch to be smooth and sound to be loud.

Stapler

Fig. 59: *Sensewave for a stapler*, demonstrates a fairly inconclusive result with incremental movements. Most of the assumptions made about the object in question 1 are observed to be similar to the results of all the other questions. Equally as indicated in Table 1, none of the predictions have shown to be correct. Therefore, sight, sound, touch, taste and smell sense experience was not found to be influenced by subjectivity when negative (A3) Q2 & Q3 and positive (A2) Q4 social media response was factored. Overall the stapler was eliminated as it posed no risk to loyalty. When positive or negative information did not influence a change (based on majority response) the stapler was found to look neither ugly nor beautiful and ugly, the taste to be neither distasteful nor tasty, the smell to be neither fragrant nor smelly, the touch to be smooth, and the sound to be loud.

Eraser

Similarly to the stapler, Fig. 60: *Sensewave for an eraser* demonstrates a fairly inconclusive result for all four senses, except for sight. This small scruffy object generated quite a lot of conversation because it was a Staedtler branded eraser, which might suggest why there is a result showing movement for sight. As circled in Table 1, the prediction for sight has shown to be partially correct. Designers identified with this being a good brand of eraser, which had produced excellent results for them when it was used. Therefore, for them sight experience was found to be influenced by subjectivity when negative (A3) Q2 & Q3 and positive (A2) Q4 social media response was factored. The other 4 senses were found to be not influenced by subjectivity when negative (A3) Q2 & Q3 and positive (A2) Q4 social media response was factored. **Conclusion** – Loyalty (A1) towards the eraser was found to be placed at risk with **sight** and the four other senses were not implicated. When positive or negative information did not influence a change (based on majority response), the taste of an eraser was found to be neither distasteful nor tasty, the smell to be neither fragrant nor smelly and smelly, the touch to be smooth and sound to be extremely quiet.

Students have not contributed the Q4 results of the focus groups overall, indicating their smaller numbers have resulted in less impact on overall numbers.

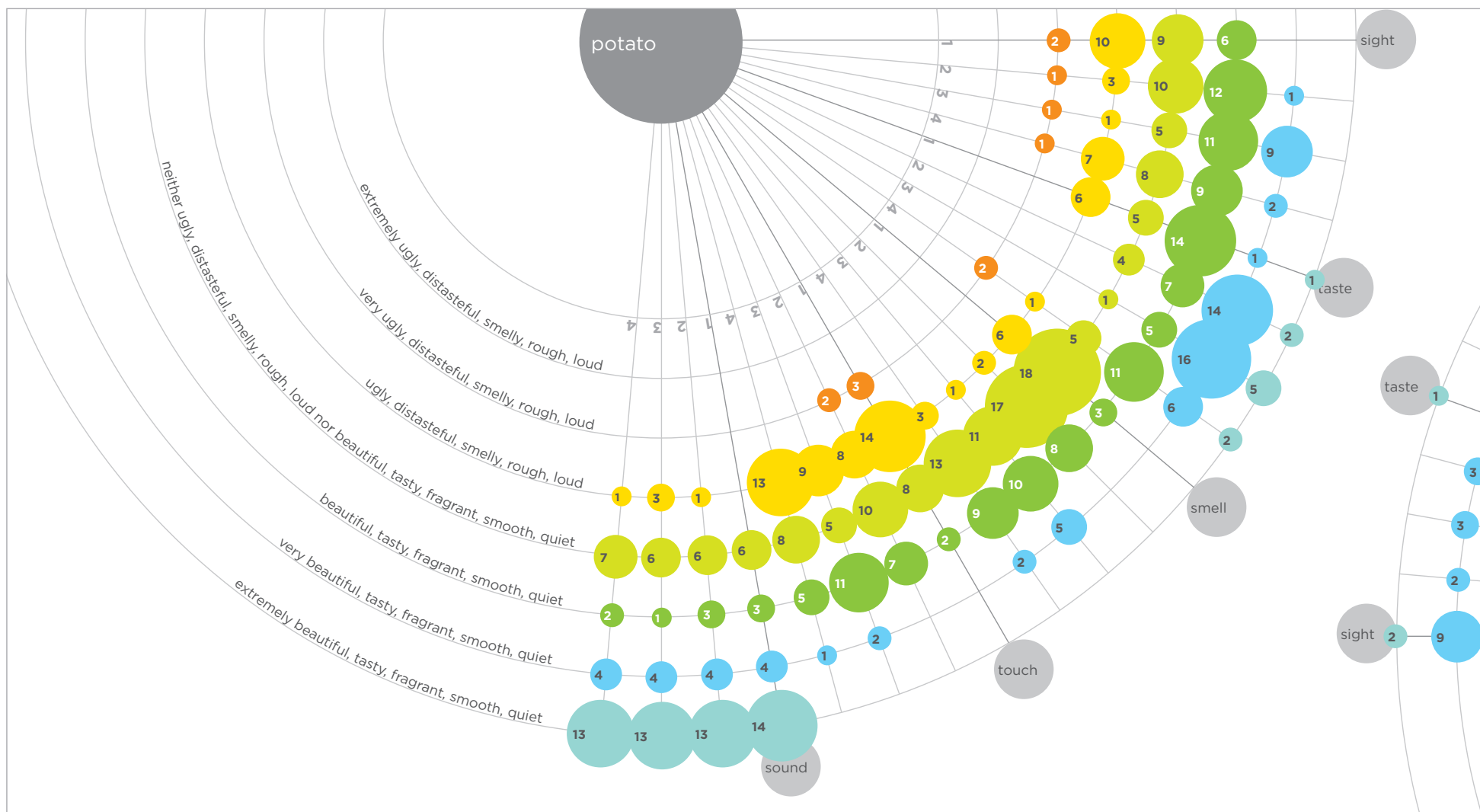


Fig. 53: Sensewave for a potato. 135

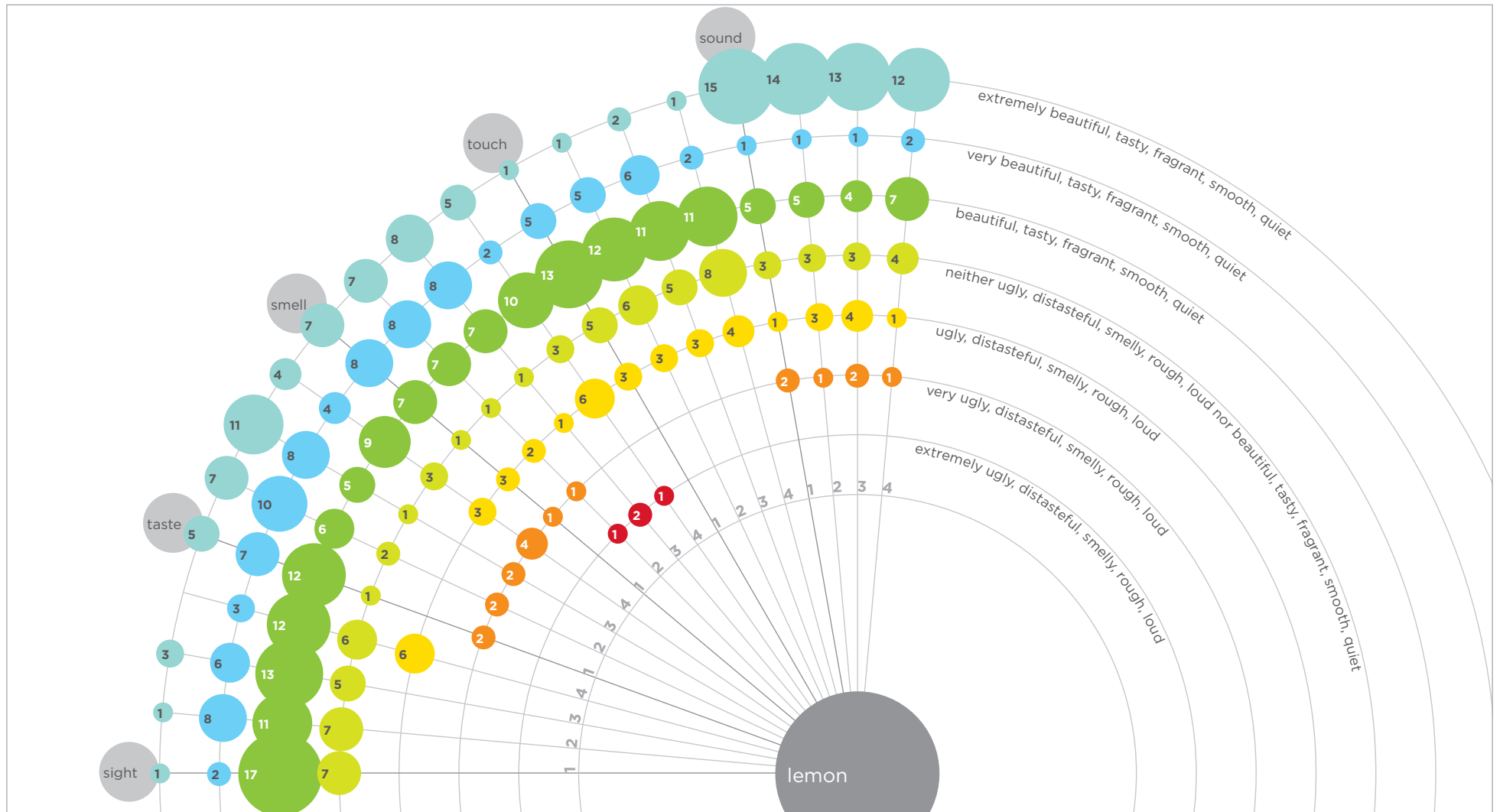


Fig. 54: Sensewave for a lemon. 136

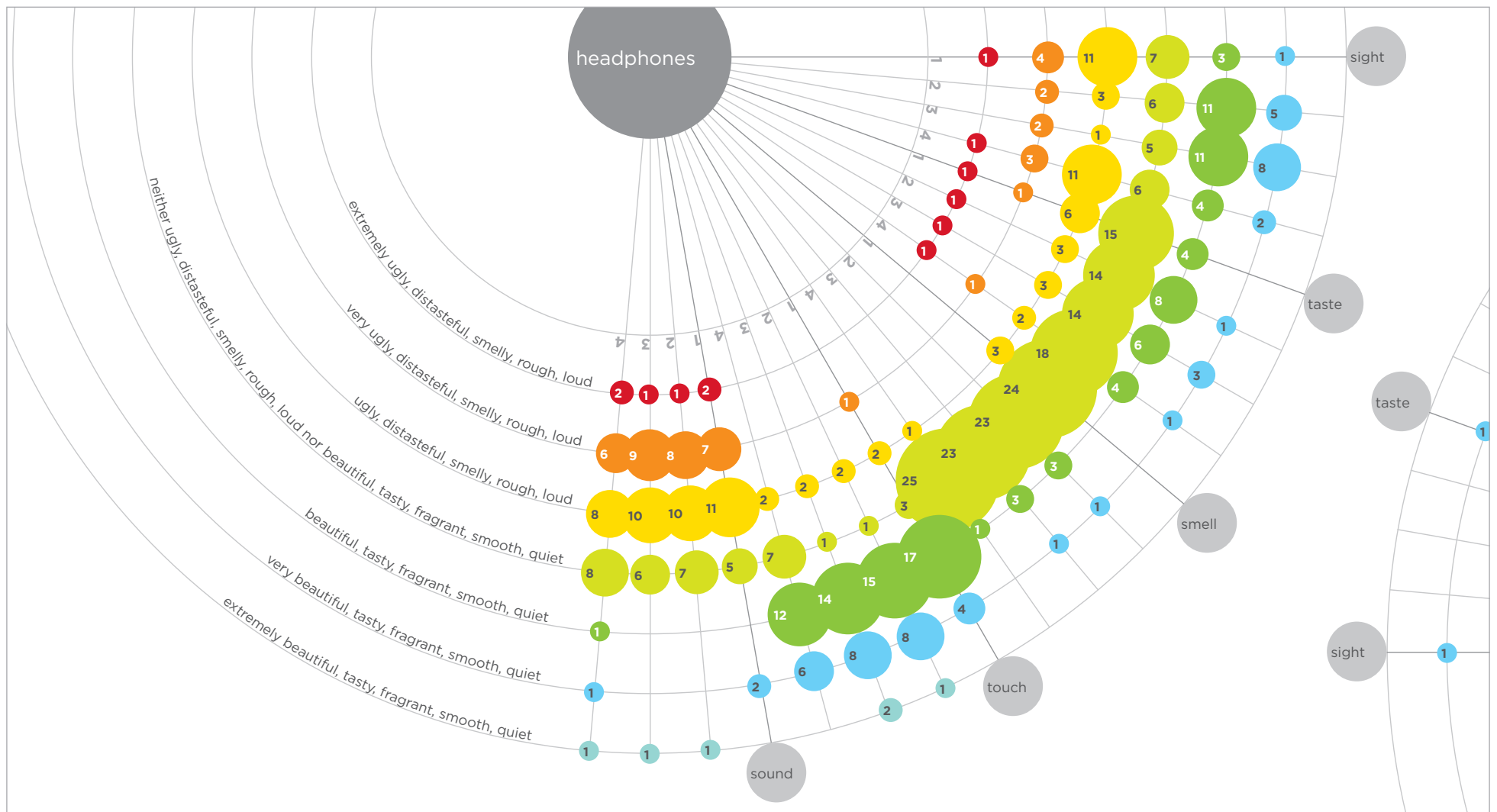


Fig. 56: Sensewave for the headphones. 138

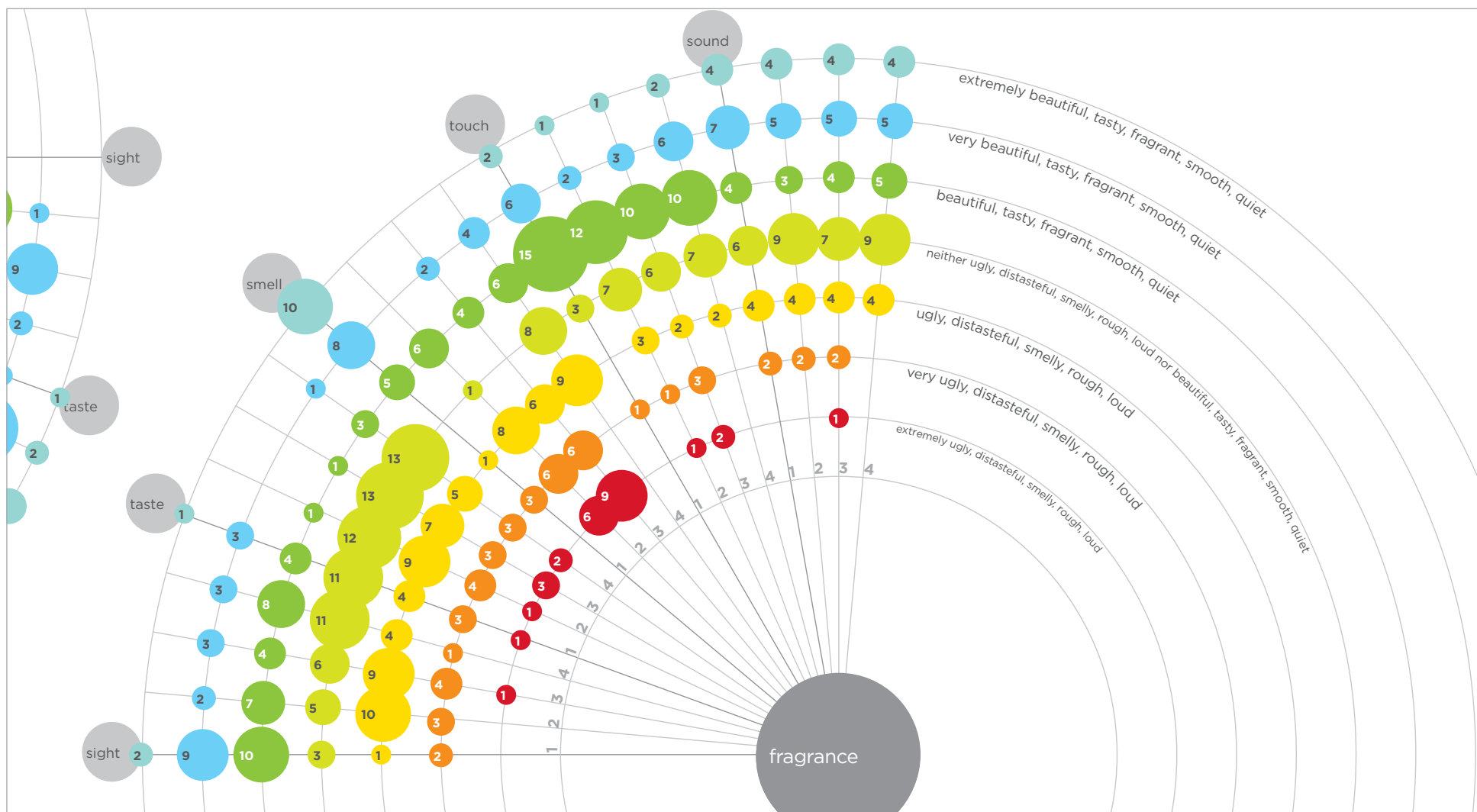


Fig. 57: Sensewave for the fragrance. 139

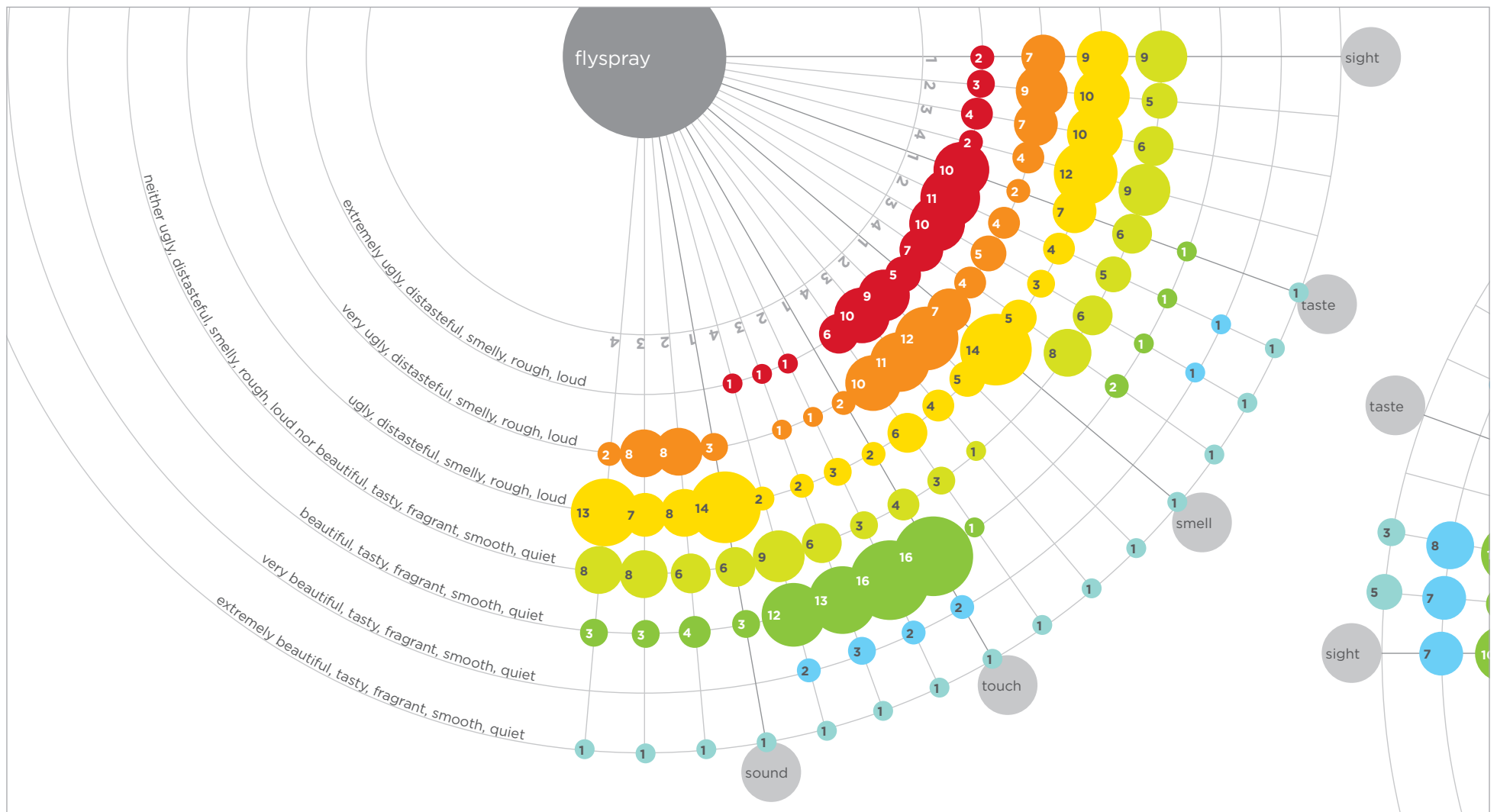


Fig. 58: Sensewave for the flyspray. 140

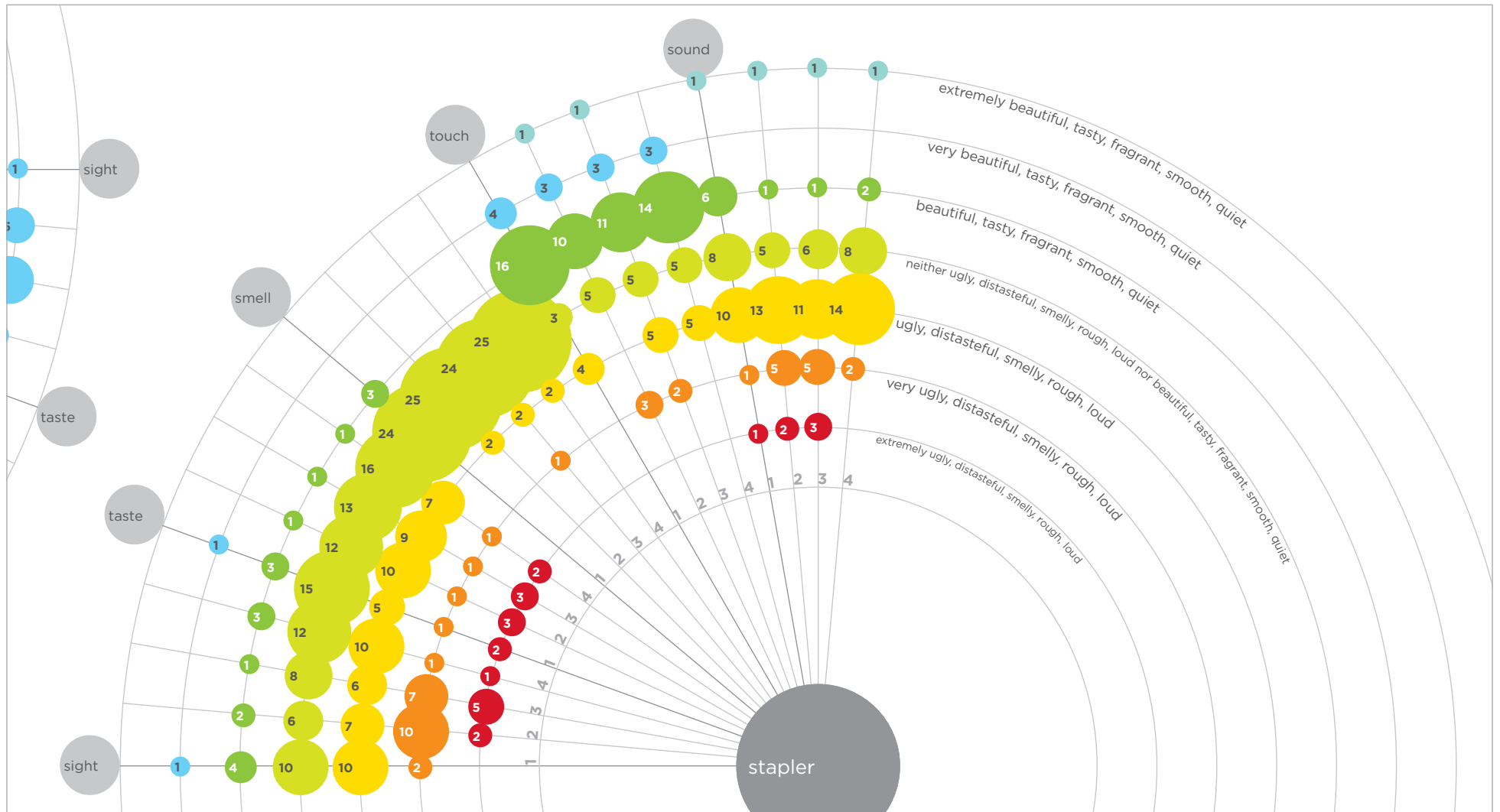


Fig. 59: Sensewave for a stapler. 141

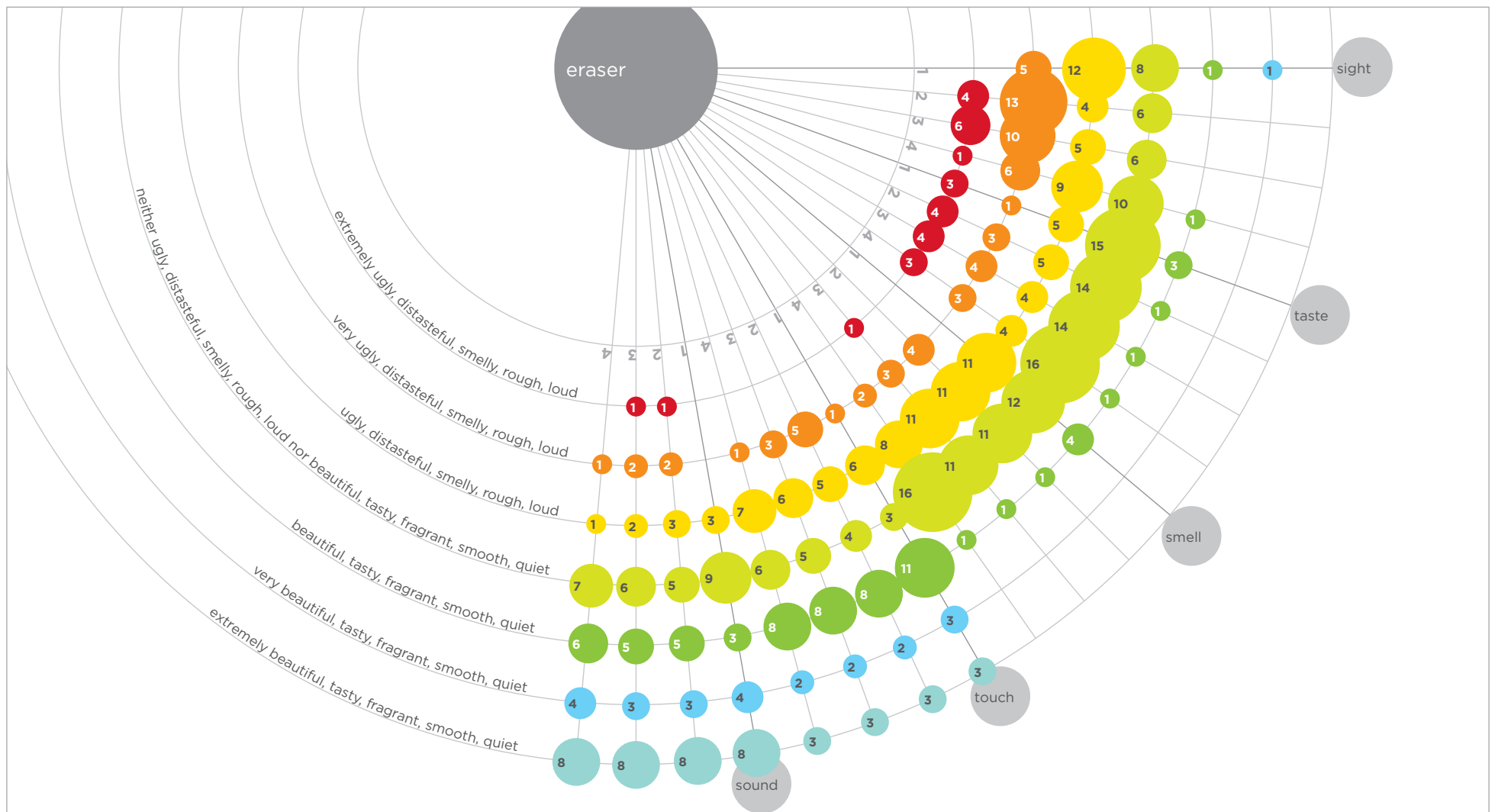


Fig. 60: Sensewave for an eraser. 142

4.5.3

Overall results for the context questions

Lindstrom (2005) reports that after participants evaluated their environment for the BRAND sense study, smell was found to be the second most important sense after sight, and touch ranked lowest on the scale (p. 69).

Analysing the context questions in part 2 of the questionnaire presented a rather different view when the aggregated data of all senses by object were placed in order, and the ordinal numbers were viewed. Participants were asked to rank their senses in order of priority with regards to what they do with the object (use it in an environmental context: cook it, wear it, listen to it). (Fig. 22: *Context questions, questionnaire design part 2.*) None of the objects ranked sight the highest, smell was second highest and touch the lowest. The expectation was that the lemon and potato may have potentially yielded similarities to this previous study as there is an environmental (cooking) context which factored in this question. Instead, touch was ranked highest for potato, sight second, smell third and taste fourth. Previous analysis revealed that most participants found the potato ugly. Perhaps if people think a potato looks ugly, they are suspicious that it might be rotten, and therefore always touch and look at it to be sure that it is not before using it.

The mean for sight, sound, touch, taste and smell was found across the entire participant group (27) for the all objects. The table below Table 2: *Set of ordinal numbers for sight, sound, touch, taste and smell – all objects*, presents the final set of ordinal numbers. (See Appendix E: *Supporting Excel spreadsheet data for Table 2.*)

Potato	/ touch = 2.78	sight = 3.19	smell = 3.63	taste = 4.48	sound = 4.81
Lemon	/ taste = 1.48	smell = 1.74	sight = 3.0	touch = 3.85	sound = 4.93
Nike shoe	/ sight = 1.33	touch = 1.85	smell = 3.63	sound = 3.70	taste = 4.48
Headphones	/ sound = 1.41	sight = 1.89	touch = 2.93	smell = 4.19	taste = 4.59
Fragrance	/ smell = 1.07	sight = 2.37	touch = 3.30	taste = 3.96	sound = 4.22
Flyspray	/ smell = 1.30	sight = 2.70	sound = 3.41	taste = 3.63	touch = 3.96
Stapler	/ touch = 1.70	sight = 1.81	sound = 2.74	taste = 4.37	smell = 4.37
Eraser	/ touch = 1.37	sight = 2.07	smell = 3.41	sound = 3.63	taste = 4.52

Table 2: *Set of ordinal numbers for sight, sound, touch, taste and smell – all objects.* 143

The final part of this stage was to translate the Excel charts into a graphic for use within senseswaves. Excel translated the data into useful donut charts which were then manipulated in Adobe illustrator 6 for colour and type corrections. These questions were designed specifically to gauge overall sense experience, rather than directly feeding into the question of brand loyalty and compromise to the AST continuum. They have been useful in achieving this, and offer insight into variations on Lindstrom's study. Sight and smell have proven to be the least predictable senses with results not co-operating with Lindstrom's 2005 study. (See Fig. 61: *Graphic interpretations for context questions.*)

4.5.4 Overall conclusion of the questionnaire data

The sense/senses which ranked highest in context questions were found to be placed at greatest compromise when the belief was imposed in part 1 of the questionnaire (see Table 3: *Similarities and differences between the objects.*) Since in all object relationships the same senses were implicated (except the stapler, which was eliminated), there is potentially risk to brand loyalty with regard to the senses found to be most implicit with the experience of that object. As was noted in Lindstrom's (2005) BRAND sense study, smell was found to be the second most important sense after sight, and touch ranked lowest on the scale (p. 69). However, this research has found sight and smell to be the least predictable senses, the participants from the focus groups failing to make context evaluations about a brand based firstly on sight, then smell with touch ranking last.

All data have been translated into an information graphic, for a final design to describe *Sensewaves*. The continuum device sits behind anchoring the individual sensewaves. Layers in the synthesis are completed. As the final design for this poster has been reduced for inclusion in the thesis it will be difficult to view adequately. (See Fig. 62: *Sensewaves.*) Therefore, please find an accompanying CD which contains a pdf file, for enhanced viewing.

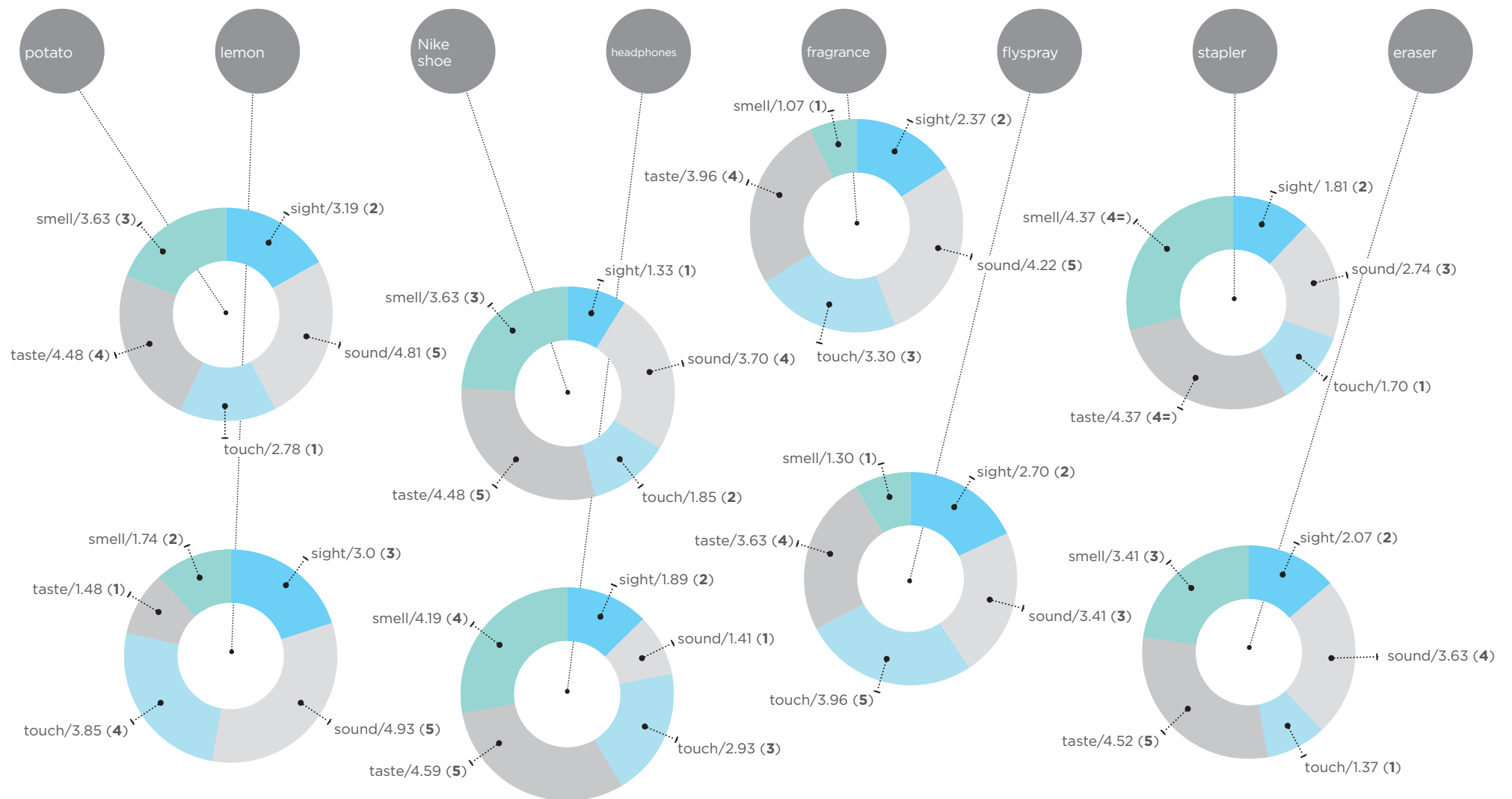


Fig. 61: Graphic interpretations for context questions. 145

Potato

Sensewave result, risk to loyalty (A1) – *sight, taste and touch*.

This finding combined with the context question concludes that the senses most implicit with the experience of a potato are: *touch* (2.78), *sight* (3.19), *smell* (3.63).

Lemon

Sensewave result, risk to loyalty (A1) – *taste*.

This finding in combination with the context question concludes the senses most implicit with the experience of a lemon are: *taste* (1.48) and *smell* (1.74).

Summary *lemon/potato relationships* (similarities and differences).

Similarities. Implicit risk to brand loyalty: *taste and smell*.

Differences. Implicit risk to brand loyalty: *touch and sight (potato)*.

Nike sports shoe

Sensewave result, risk to loyalty (A1) – *sight and touch*.

This finding combined with the context question concludes that the senses most implicit with the experience of a Nike shoe are: *sight* (1.33) and *touch* (1.85).

Headphones

Sensewave result, risk to loyalty (A1) – *sight*.

This finding combined with the context question concludes that the senses most implicit with the experience of headphones are: *sound* (1.41) and *sight* (1.89).

Summary *Nike/headphones relationships* (similarities and differences).

Similarities. Implicit risk to brand loyalty: *sight*.

Differences. Implicit risk to brand loyalty: *touch (Nike), sound (headphones)*.

Fragrance

Sensewave result, risk to loyalty (A1) – *smell and sight*.

This finding combined with the context question concludes that the senses most implicit with the experience of fragrance is: *smell* (1.07) and *sight* (2.37).

Flyspray

Sensewave result, risk to loyalty (A1) – *smell*.

This finding combined with the context question concludes that the senses most implicit with the experience of flyspray is: *smell* (1.30).

Summary *flyspray/fragrance relationships* (similarities and differences).

Similarities. Implicit risk to brand loyalty: *smell*.

Differences. Implicit risk to brand loyalty: *sight (fragrance)*.

Stapler

Sensewave result, risk to loyalty (A1) – none of the 5 senses.

Therefore the context question concludes that the senses most implicit with the experience of a stapler are: *touch* (1.70) and *sight* (1.81).

Eraser

Sensewave result, risk to loyalty (A1) – *sight*.

This finding combined with the context question concludes that the senses most implicit with the experience of an eraser are: *touch* (1.37) and *sight* (2.07).

Summary *stapler/eraser relationships* (similarities and differences).

Similarities. Implicit risk to brand loyalty: none.

Differences. Implicit risk to brand loyalty: *touch and sight (eraser)*.

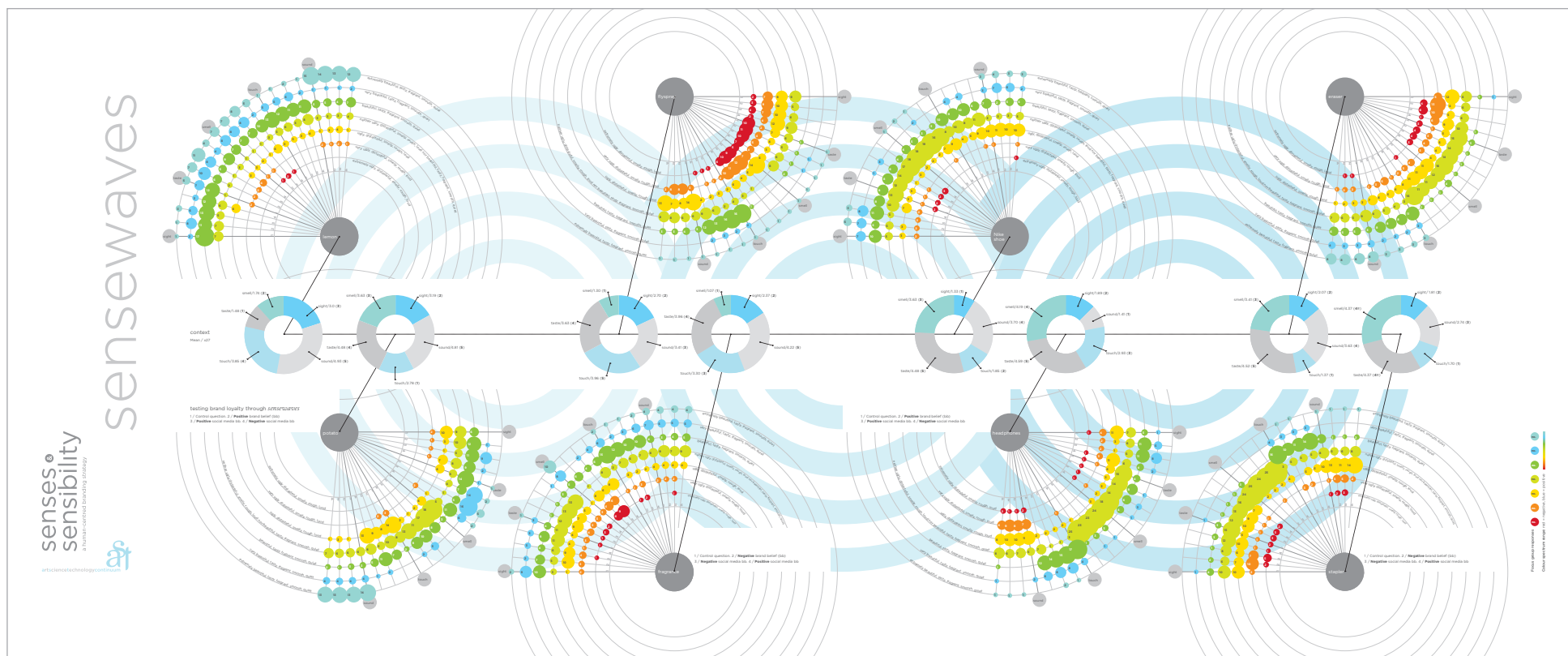


Fig. 62: Sensewaves. 147

The tree metaphor was chosen as a final solution to accompany sensewaves (also on the CD) because stylistically there are similarities in the graphic design approach, in the way the elements have been depicted. The notion of the tree as a metaphor for business growth was simplified in this final execution, and the inclusion of the questions, suggests how NZ SME's might apply the AST continuum for branding. (See p.111, Fig. 38: *Final tree metaphor concept. The AST continuum: A tool for NZ SME's to use as a model for their own application.*)

Relationships between brand loyalty and positive or negative effects of social media and sense experience have been discussed in this section. The focus groups are discussed in the next section as many of the open-ended questions combined with the analysis of this section have contributed to the final conclusions for *Senses and Sensibility*.

4.6 Open-ended questions and observations: the focus groups

Participants were guided towards open-ended questions in the focus groups. The focus was on gaining understandings and insights into the descriptions. Some of the insights pertaining to specific objects have been discussed in the analysis in the last section. Concepts of abstraction, metaphor and analogies were more difficult to explore, because of time constraints. The duration of the focus groups was one hour each. However, as I had established a design direction sensewaves during the focus groups for visualisation of the findings, there was less need to spend time on this aspect.

As we age, is there a point that we should believe in our beliefs? Have we had enough experiences to understand the implications of engaging with a particular brand? Observations and findings of some of the participants of the focus group suggest that an older age group believe that they should believe; however the number of comments that suggested otherwise was difficult to ignore (Slade, 2014). Many in the customer and designer groups felt the questionnaire was more of a personality test, because they quickly recognised that their personal frames of reference were being challenged. Comments such as "I'm learning a lot about myself" and "I can't believe I'm answering this as if I were a teenager" were recorded. This suggests brand experience is a factor that may eventually over-ride

sense experience, or rather there is an expectation that it should. Participants with high brand loyalty (attachment), and high levels of brand experience, tended to adhere to personal persuasions, and were not influenced by social media response. They stayed firm on their beliefs about a brand. On the other hand, participants with low brand loyalty and low levels of brand experience were less likely to adhere to personal persuasions and more likely to follow the subjectivity of others. These participants tended to be younger and more ready to believe in the opinions of friends in social media. This raised an additional question for the research as previously discussed. (see pg.116.) Why are the senses compromised by subjectivity?

Finn (1997) provided one answer to this puzzle (see pg.66.) Truism may be likely to influence social reality in a way which matters little whether those beliefs are true or not (p.16). Stroud (2005) contends that “with aging come[s] experience and self-confidence in relation to marketing outside the magical 18-35 age group” (p.84). The findings of the literature also suggested that aging is possibly not a problem (in 2.2.4 Customers.) Prosumers may be digital immigrants or digital natives (Jaffe, 2008, p.38). If in doubt, credibility of opinion is first sought from friends who know about these things (prosumers), and secondly from online reviews (focus group participants, 2014). Opinions of friends are valued more highly than a review. This result reflects a similarity with a recent study conducted in Taiwan, which focussed on online reviews or news sources being the only source for obtaining information. “Negative ratings become significantly weaker as the source of the information moves from more credible to less credible” (Chiou et al, 2013).

The Taiwan study is found to be similar to this research, in that it tested for brand attachment (loyalty) in an online environment. It states that its value is due to its being the first study to explore the moderating effects of brand attachment, and online source credibility, on the relationship between negative online information, and perceived negative change, in brand evaluation and perceived brand risk (Chiou et al, 2013). *Senses and Sensibility* differed from this research in that it has explored the effects of both positive and negative information (subjective responses) and the effects on behaviour expressed through sense experience when people interact with social media. It has found that since brand evaluations are affected by subjectivity in some cases, brand loyalty is placed at risk.

A final conclusion completes *Senses and Sensibility*, see the next Chapter.



5.1 Conclusion

"Much of modern technology is really the technology of social interaction: it is the technology of trust and emotional bonds." Norman, 2004, p. 157

Much of the literature about brand loyalty in relation to brand building is well articulated for business. This has been discussed in the literature review. For example, in defining equity, Aaker and Joachimsthaler (2000) use brand awareness, perceived quality, brand associations and brand loyalty, and Blackett (2003) said that the repetition of leveraging underlying (emotional) appeals is the bedrock of brand equity (p.18). With this in mind, and as noted in the literature, the five senses form part of the value chain for a customer. Creating value for customers is about creating multisensory, multidimensional and ethical value for people, to which they will respond with trust and loyalty. Subjectivity, sensation and emotion play a large role in loyalty, but defining subjectivity in relation to sensation has proved to be more difficult, as exemplified by Nagel's theories. However, neuroscience is enabling us to see some of the early philosophical theories made by the early philosophers (Auriol) about divisions in the brain, and perhaps more importantly for branding, there have been insights

about the reward event (Morillo, 1990, p.173) in relation to emotion, desire and consumption.

The general theoretical literature on brands and branding in the context of measuring sense experience and brand loyalty within social media appeared inconclusive. I discovered quite late in the research, Guzman and Iglesias's (2012) request that future studies might consider associations between developing consistent multisensory brand experiences across all touch-points, and the role of social media in current branding; similarly from Hong-Youl (2004) and Chiou et al., (2013) that brand loyalty, the internet and factors affecting brand loyalty particularly within an e-commerce context, has limited coverage in the literature. This presented difficulties because although one could draw conclusions based on Lindstrom's (2005) assertions that powerful branding (and loyalty) is built on all five senses, designing for them in a social media context appears problematic. This is because theorists dispute how effective or ineffective this may be when the customer engages with a brand online. Yohn (2013) maintains that the web does not allow users to taste or smell objects (p.128), and Murray (2003) said people lose intangible aspects of customer experience such as atmosphere (p.7); whereas Clark (2004) asserts that designers might access deeply imbedded first impressions when designing a brand for this environment (p.67). Lindstrom (2005) supports this view, particularly with regard to smell evoking memory (p.24). Here the argument falls over, I believe, because if an evocative image appears online which works hard (is photographed beautifully) in trying to elicit smell, the customer cannot

actually smell that particular cake per se, but will rather project their own subjective assessment on the image. Therefore the image becomes a reflection of the designers/photographers' subjective assessment and intent, which means it might work for a target audience or it might not. Adding to this complexity is the Nielson study which revealed that 92% of customers trust word of mouth, and 70% trust user generated-content, more than any other form of advertising, social media or email marketing (Guzman & Iglesias, 2012, p.388). The results of the research have gone some way in adding another layer of knowledge to these complex issues, which may be of value for NZ SME's, with the aim of *Senses and Sensibility* being to test connections between brand loyalty and positive or negative effects of social media on the five human senses (sense experience).

The study answered a main research question, and additional questions.

- How does sense experience affect brand loyalty in social media?
- How are the five senses relevant to a purpose or belief about a brand within the social media context?
- Why are the senses compromised by subjectivity?
- How could the practice of branding benefit from the proposed AST continuum?

This section synthesises findings to answer the study's research questions. The study provided insights into the responses of the five human senses and brand loyalty within a social media context.

With respect to:

Brand loyalty in social media - Of the eight objects tested, all revealed a minimum of one sense (lemon, headphones, flyspray and eraser), and maximum of three (potato) which were implicit in brand loyalty when subjective assessments were made in the focus groups about positive and negative beliefs received through social media. Of these objects, similarities were found in the relationships between the lemon/potato *taste*, Nike/headphones *sight* and flyspray/fragrance *smell*. The differences as would be expected, related more specifically to the object; for example, Nike sports shoe/*touch* and headphones/*sound*. Thus compromise to brand loyalty in social media is evident. The main empirical findings are summarised in Table 3, p.136.

Relevance of the five senses in establishing a purpose or belief about a brand in social media - Not all five senses were found to be relevant in response to a purpose or belief within social media. As described above there was a minimum of one sense or a maximum of three, which were found to be implicit in brand loyalty with the eight objects. Therefore depending on the object, there may be a minimum of one sense that requires careful consideration. This may be useful for SMEs to understand when they are designing sense experience into brand strategy, and also identifies that designing for all the senses is important, and should not be forgotten for customers who seek multisensory experience. The study has revealed that when outside influences (friends in social media) add their subjective response to a purpose or belief about the brand, some customers change

how they respond to it. The described experience may manifest as a response correction through the five senses. These corrections are influenced by subjectivity, especially in cases of limited brand experience. Without experience it is more difficult for a customer to form a view, and in this instance they may seek the opinion of others.

Senses being compromised by subjectivity – Some senses were compromised by subjectivity in the focus groups, which affected a change in loyalty. Why did this happen? As discussed on page 68, subjectivity is an issue for phenomenology because of truism. Truism may be likely to influence social reality in a way which matters little to whether those beliefs are true or not. However, with aging comes experience and self-confidence (Finn, 1997, p.16; Stroud, 2005, p.84). This was born out in the research, students being more likely to be influenced by positive and negative suggestions, and older participants being compromised less so. Negative and positive suggestions manifested themselves through the senses; for example an object might move from tasty to distasteful.

How the practice of branding may benefit from the proposed AST continuum

- It was my assumption that there may be changes in customer loyalty influenced by responses people receive within social media, and these influences may compromise the notion of the AST continuum. For the strategy to be useful the requirement was for these dynamics to be understood. Brand strategy requires the dexterity to change and adapt for different target audiences. If “my” individual brand meets new people it is very difficult for a company to control what happens. Subtle nuances may be added to help a brand adapt to the situation (see pg. 59

global), but still there will always be a certain percentage that do not connect with the brand. This is inevitable. It was the notion of the technology aspect of the AST continuum which posed the most concern. The practicality of utilising neuroscience technologies was questioned: perhaps small business will have to wait until tomorrow’s future technologies to enable some sort of accessible interface, which yields information about customer behavior patterns in order to design their brand strategies. Yet, through the development of the methodology, Smith (2013) introduced an additional approach for phenomenological study, the experimental paradigm of cognitive neuroscience. Neuroscience was discussed in the literature as a way of observing subjective experiences of thinking and knowing. The caveat to this, is that the literature on this subject is located within a western world view and doesn’t take into account the differing perspectives of NZ’s diverse multi-cultural population. Although I advocate NZ SME’s access this technology for the purpose of branding, there are also practical difficulties. This is a technology more likely to be accessed for medical reasons. Despite this, some of the literature suggested techniques through examples for branding which apply insights from neuroscience observations (Dooley, 2011, p.185). In this regard the AST continuum becomes less compromised.

Therefore the practice of branding may potentially benefit from the proposed AST continuum because of two key reasons:

Branding through the AST continuum considers human emotional and subjective capabilities, which align with contemporary postmodern cultural values and post structural thinking rather than modernist thinking.

Art is one of the key creative processes for people (customers) to create their own content, or designers to create brand experience, which potentially stimulates further customer connections. In current branding, knowledge of neuroscience techniques may be employed to understand human behaviour; utilising the internet as a channel for branding has never been easier as customers access technology in terms of social media in a globalised world. Secondly, as the AST continuum aligns with the notion of the Foyer model as an overall business approach, the former may become characterised by authenticity, shared identity and a personal relationship between all stakeholders, business and customers alike (Jansen et al., 2007, p.99).

Two key practice-based models were developed for *Senses and Sensibility*. See Fig. 63: *Two key models for Senses and sensibility the study*.

The first model drew together, through information graphics and data visualisation a design for NZ SME's. The notion of the tree as a metaphor for business growth and the AST continuum being *one* continuous system includes a series of questions, designed to encapsulate the parallel terms used to express and implement the strategy (see pp.110-111). Multisensory, multi-experiential experience touch-points are key drivers which deliver virtualisation, build customer loyalty and deliver total experience of a brand to global customers which may result in brand equity for business.

The second model synthesised the research findings into one overall design (sensewaves), in order to turn the observational and empirical data examined

in the research into something useful. The sensewaves depict results from the participants from the focus groups so that NZ SME's might view how designing for all the senses within brand strategy may be measured to determine which of the 5 senses are most implicated in brand loyalty within social media.

5.2 Theoretical implications

The theory of subjectivity requires a revisit in order to further understand better the dynamics of subjective influence with regard to establishing brand loyalty. The established framework for brand loyalty suggests that loyalty is achieved through designing brand experience (Peters, 2003; Neumeier, 2007; Jung & Soo, 2012). It is also noted from this study that such a benefit is not likely for some customers with an apparent disbelief in their own beliefs, eroding trust in self belief (identity). This pattern is consistent with the problem of consciousness and complex thinking (Garvey & Stangroom, 2012; De Bono, 2000) but contradicts that of adherence to brand tribes (Neumeier, 2007).

The theories for identity also require a revisit, to further understand implications of unconscious and conscious behaviour with regard to subjectivity, desire and motivation. The framework for identity suggests that desire enables the achievement of motivation (Morrillo, 1990). It is also noted from this study that such a benefit is not likely for some customers who have little regard for

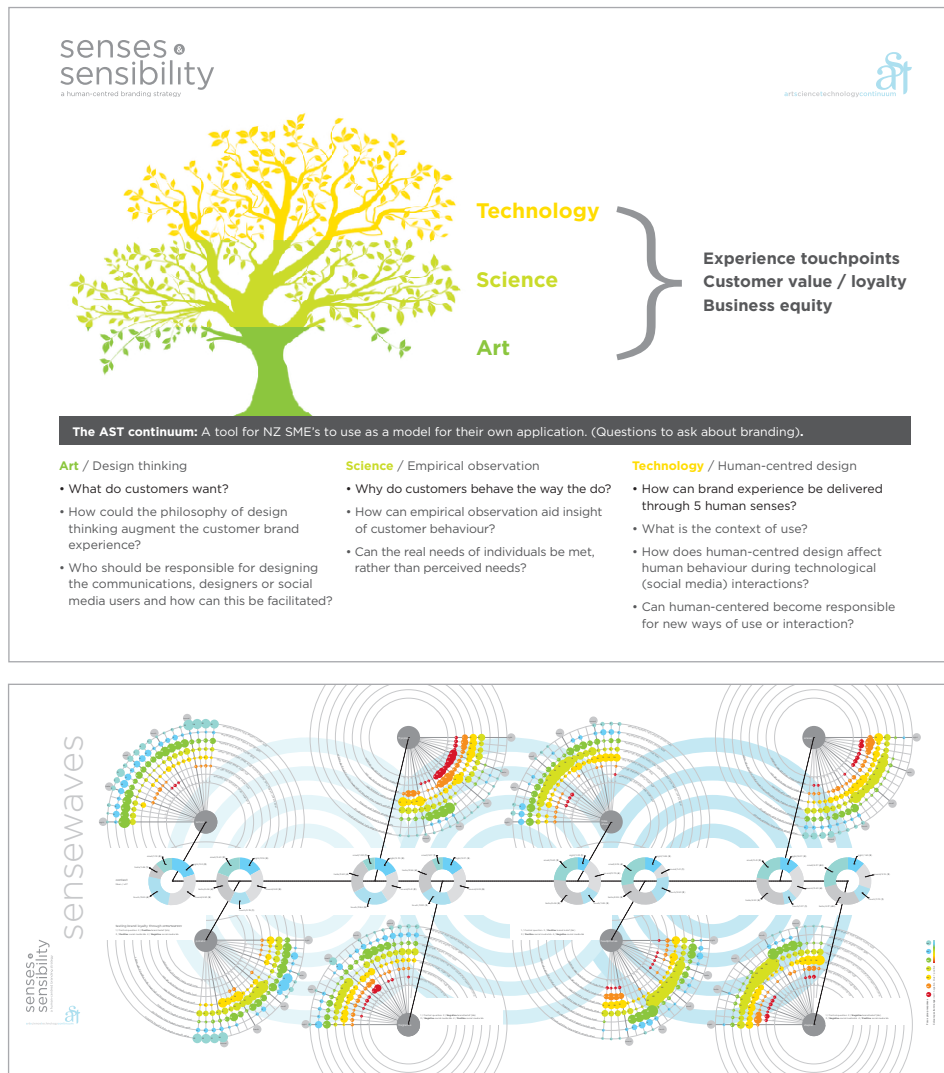


Fig. 63: Two key models for Senses and sensibility the study.

brands and branding, and therefore have little or no motivation. This pattern is consistent with the study undertaken in New Zealand (Chapman-Smith, 2013), but contradicts that of many theorists (Veblen, 1898; Sterns, 1994; Laurence, 2012 & Julier, 2000).

5.3 Limitations and future study

As discussed in 4.5.1 Evaluating brand loyalty through sensewaves (pg. 116), further analysis of the data was required to understand the specific differences between students and the older age group participants in the other focus groups. Younger participants were influenced more by negative response received through social media. This raises questions with regard to subjectivity and social media. Who owns identity? Who owns their own identities? Findings suggest that because the greater collective group (friends on social media) shape identity and influence decisions of students, the senses are less implicated and identity more implicated with regard to building brand loyalty.

This highlights one of several limitations of the research. Future studies may consider how age may influence identity.

Some of the results were unclear because the participants were evenly spread across opposite responses. In particular, sound experience with the headphones

was surprising, given sound was found to rank second after sight with the what context question. This is the only result that corroborates with Lindstrom's (2005) study findings. (See Fig. 59: *Graphic interpretations for context questions*.) Across the total group when the negative belief was imposed in question 4, (You comment that you are wearing the headphones which you love, comments from your friends make you doubt your opinion), eight participants responded that sound was loud, and eight participants responded that sound was neither loud nor quiet. One possible explanation for this (eliminated) result was that the headphones in question were not state of the art headphones, but rather quite ordinary. Future studies could remedy this by testing with stronger experiment stimuli (Chiou, Hsu & Hsieh, 2013).

It should be noted that the data was not statistically valid as there were 27 participants in total. Statistics requires around 665 responses to achieve a +/- 5% statistical validity (Neuendorf, 2002, p.89). This smaller group is therefore indicative only in the search for qualitative data rather than quantitative statistical proof. In generalising the results there should be caution. Future studies could involve larger participant groups, which may be achieved through social media. Accessing people through social media has the potential to allow for snowballing. "Researchers might use a snowballing method to recruit more participants once the parameters of the sample have been established" (Frost, 2011, p.129).

In conclusion, the study *Senses and Sensibility* realised that there are relationships

and connections between brand loyalty and the positive or negative effects of social media on sense experience. There was evidence that some senses were compromised by subjectivity in the focus groups, affecting a change in brand loyalty (manifested through the five human senses), but not all five senses were found to be relevant in response to a purpose or belief within social media. The relevance was dependent on the object in question.

The AST continuum is considered to be useful as this human-centered strategy considers emotional and subjective capabilities of the customer and as a business approach is characterised by authenticity, shared identity and a personal relationship between all stakeholders, business and customers alike, in keeping with contemporary values. This befits the (emotional, subjective, magical) age (Jansen et al., 2007, p.99).



Appendices

The appendices contain material referred to in the thesis text to support the thesis with further documentation (*A & B*), or to support the thesis discussion with further raw statistical analysis (*C, D & E*).

Appendix A: *Documentation for focus group participants.*

Appendix B: *Questionnaire design.*

Appendix C: *Completed questionnaires: process of analysis.*

Appendix D: *Further raw statistical analysis.*

Appendix E: *Supporting Excel spreadsheet data for Table 2.*

2. What is this object? How would you describe this potato by: (please fill in line no. 1)

2. In your opinion this is the **best** potato brand/variety. How would you describe this potato by:

3. You post a pic of dinner (a baked potato), comments from your friends **validate** your opinion. Describe this potato by:

4. You post a pic of dinner (a baked potato), comments from your friends make you **doubt** your opinion. Describe this potato by:

A. Sight

	extremely ugly	very ugly	ugly	neither ugly nor beautiful	beautiful	very beautiful	extremely beautiful
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B. Sound

	extremely loud	very loud	loud	neither loud nor quiet	quiet	very quiet	extremely quiet
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C. Touch

	extremely smooth	very smooth	smooth	neither smooth nor rough	rough	very rough	extremely rough
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D. Taste

	extremely tasty	very tasty	tasty	neither tasty nor distasteful	distasteful	very distasteful	extremely distasteful
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E. Smell

	extremely smelly	very smelly	smelly	neither smelly nor fragrant	fragrant	very fragrant	extremely fragrant
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

1. What is this object? How would you describe this lemon by: (please fill in line no. 1)

2. In your opinion this is the **best** lemon brand/variety. How would you describe this lemon by:

3. You post a pic of a lemon cake, comments from your friends **validate** your opinion. How would you describe this lemon by:

4. You post a pic of a lemon cake, comments from your friends make you **doubt** your opinion. Describe this lemon by:

A. Sight

	extremely ugly	very ugly	ugly	neither ugly nor beautiful	beautiful	very beautiful	extremely beautiful
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B. Sound

	extremely loud	very loud	loud	neither loud nor quiet	quiet	very quiet	extremely quiet
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C. Touch

	extremely smooth	very smooth	smooth	neither smooth nor rough	rough	very rough	extremely rough
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D. Taste

	extremely tasty	very tasty	tasty	neither tasty nor distasteful	distasteful	very distasteful	extremely distasteful
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E. Smell

	extremely smelly	very smelly	smelly	neither smelly nor fragrant	fragrant	very fragrant	extremely fragrant
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Nike shoe

3. What is this object? How would you describe this running shoe by: (please fill in line no. 1)

2. In your opinion this is the **best** running shoe brand. How would you describe this shoe by:

3. You comment that you are 'just doing it', comments from your friends **validate** your opinion. How would you describe this shoe by:

4. You comment that you are 'just doing it', comments from your friends make you **doubt** your opinion. Describe this shoe by:

A. Sight

	extremely ugly	very ugly	ugly	neither ugly nor beautiful	beautiful	very beautiful	extremely beautiful
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B. Sound

	extremely loud	very loud	loud	neither loud nor quiet	quiet	very quiet	extremely quiet
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C. Touch

	extremely smooth	very smooth	smooth	neither smooth nor rough	rough	very rough	extremely rough
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D. Taste

	extremely tasty	very tasty	tasty	neither tasty nor distasteful	distasteful	very distasteful	extremely distasteful
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E. Smell

	extremely smelly	very smelly	smelly	neither smelly nor fragrant	fragrant	very fragrant	extremely fragrant
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

headphones

4. What is this object? How would you describe these headphones by: (please fill in line no. 1)

2. In your opinion this is the **best** headphone brand. How would you describe these headphones by:

3. You comment that you are wearing the headphones, comments from your friends **validate** your opinion. Describe these headphones by:

4. You comment that you are wearing the headphones, comments from your friends make you **doubt** your opinion. Describe these headphones by:

A. Sight

extremely ugly very ugly ugly neither ugly nor beautiful beautiful very beautiful extremely beautiful

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B. Sound

extremely loud very loud loud neither loud nor quiet quiet very quiet extremely quiet

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C. Touch

extremely smooth very smooth smooth neither smooth nor rough rough very rough extremely rough

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D. Taste

extremely tasty very tasty tasty neither tasty nor distasteful distasteful very distasteful extremely distasteful

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E. Smell

extremely smelly very smelly smelly neither smelly nor fragrant fragrant very fragrant extremely fragrant

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. What is this object? How would you describe this perfume/aftershave by: (please fill in line no. 1)

2. In your opinion this is the **worst** perfume/aftershave brand. How would you describe this perfume by:

3. You comment that you are wearing it at a party, comments from your friends **validate** your opinion. Describe this perfume/aftershave by:

4. You comment that you are wearing it at a party, comments from your friends make you **doubt** your opinion. Describe this . . . by:

A. Sight

	extremely ugly	very ugly	ugly	neither ugly nor beautiful	beautiful	very beautiful	extremely beautiful
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B. Sound

	extremely loud	very loud	loud	neither loud nor quiet	quiet	very quiet	extremely quiet
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C. Touch

	extremely smooth	very smooth	smooth	neither smooth nor rough	rough	very rough	extremely rough
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D. Taste

	extremely tasty	very tasty	tasty	neither tasty nor distasteful	distasteful	very distasteful	extremely distasteful
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E. Smell

	extremely smelly	very smelly	smelly	neither smelly nor fragrant	fragrant	very fragrant	extremely fragrant
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. What is this object? How would you describe this flyspray by: (please fill in line no. 1)

2. In your opinion this is the **worst** flyspray brand. How would you describe this flyspray by:

3. You comment that you are using the flyspray, comments from your friends **validate** your opinion. How would you describe this flyspray by:

4. You comment that you are using the flyspray, comments from your friends make you **doubt** your opinion. Describe this flyspray by:

A. Sight

extremely ugly very ugly ugly neither ugly nor beautiful beautiful very beautiful extremely beautiful

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B. Sound

extremely loud very loud loud neither loud nor quiet quiet very quiet extremely quiet

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C. Touch

extremely smooth very smooth smooth neither smooth nor rough rough very rough extremely rough

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D. Taste

extremely tasty very tasty tasty neither tasty nor distasteful distasteful very distasteful extremely distasteful

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E. Smell

extremely smelly very smelly smelly neither smelly nor fragrant fragrant very fragrant extremely fragrant

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. What is this object? How would you describe this stapler by: (please fill in line no. 1)

2. In your opinion this is the **worst** stapler brand. How would you describe this stapler by:

3. You post a pic of you at work using it, comments from your friends **validate** your opinion. How would you describe this stapler by:

4. You post a pic of you at work using it, comments from your friends make you **doubt** your opinion. How would you describe this stapler by:

A. Sight

	extremely ugly	very ugly	ugly	neither ugly nor beautiful	beautiful	very beautiful	extremely beautiful
--	----------------	-----------	------	----------------------------	-----------	----------------	---------------------

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B. Sound

	extremely loud	very loud	loud	neither loud nor quiet	quiet	very quiet	extremely quiet
--	----------------	-----------	------	------------------------	-------	------------	-----------------

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C. Touch

	extremely smooth	very smooth	smooth	neither smooth nor rough	rough	very rough	extremely rough
--	------------------	-------------	--------	--------------------------	-------	------------	-----------------

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D. Taste

	extremely tasty	very tasty	tasty	neither tasty nor distasteful	distasteful	very distasteful	extremely distasteful
--	-----------------	------------	-------	-------------------------------	-------------	------------------	-----------------------

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E. Smell

	extremely smelly	very smelly	smelly	neither smelly nor fragrant	fragrant	very fragrant	extremely fragrant
--	------------------	-------------	--------	-----------------------------	----------	---------------	--------------------

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. What is this object? How would you describe this eraser by: (please fill in line no. 1)

eraser

2. In your opinion this is the **worst** eraser brand. How would you describe this eraser by:

3. You post a pic of you at work using it, comments from your friends **validate** your opinion. How would you describe this eraser by:

4. You post a pic of you at work using it, comments from your friends make you **doubt** your opinion. How would you describe this eraser by:

A. Sight

extremely ugly very ugly ugly neither ugly nor beautiful beautiful very beautiful extremely beautiful

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B. Sound

extremely loud very loud loud neither loud nor quiet quiet very quiet extremely quiet

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C. Touch

extremely smooth very smooth smooth neither smooth nor rough rough very rough extremely rough

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D. Taste

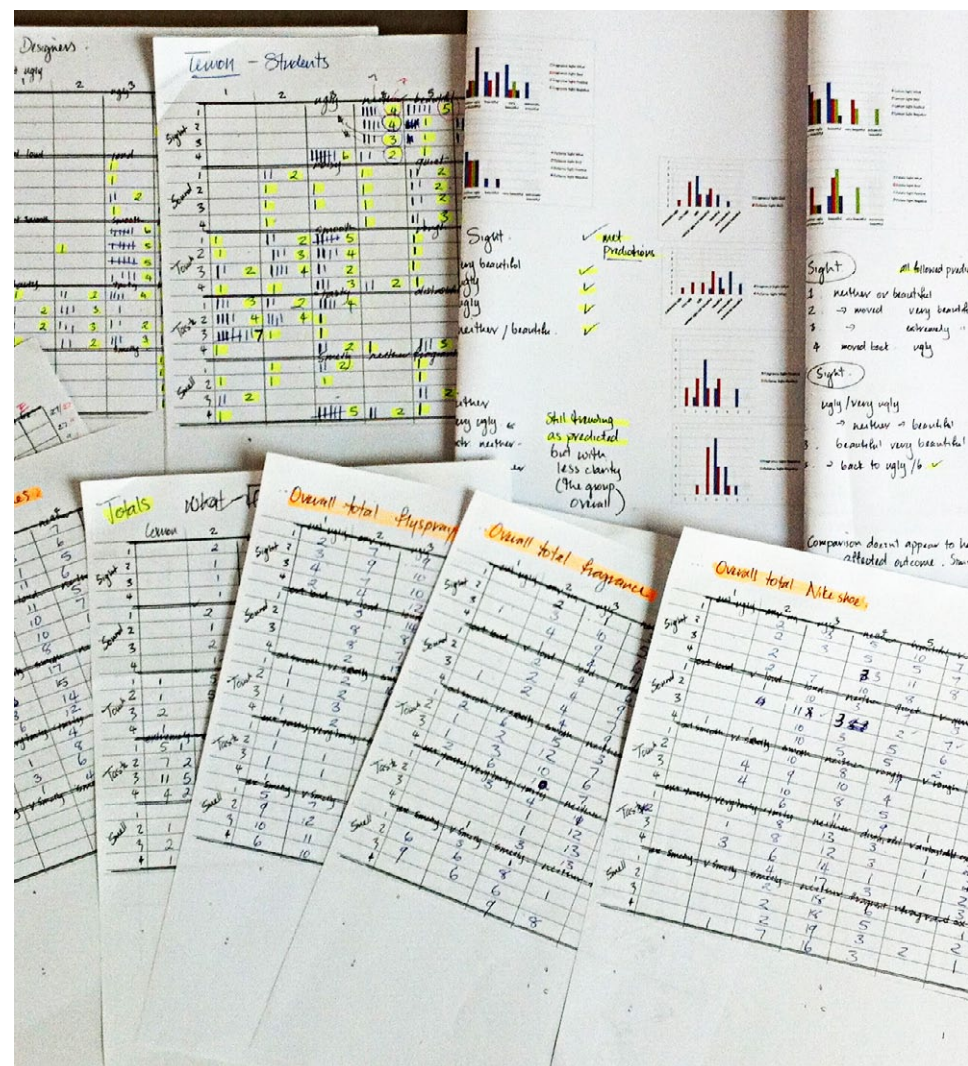
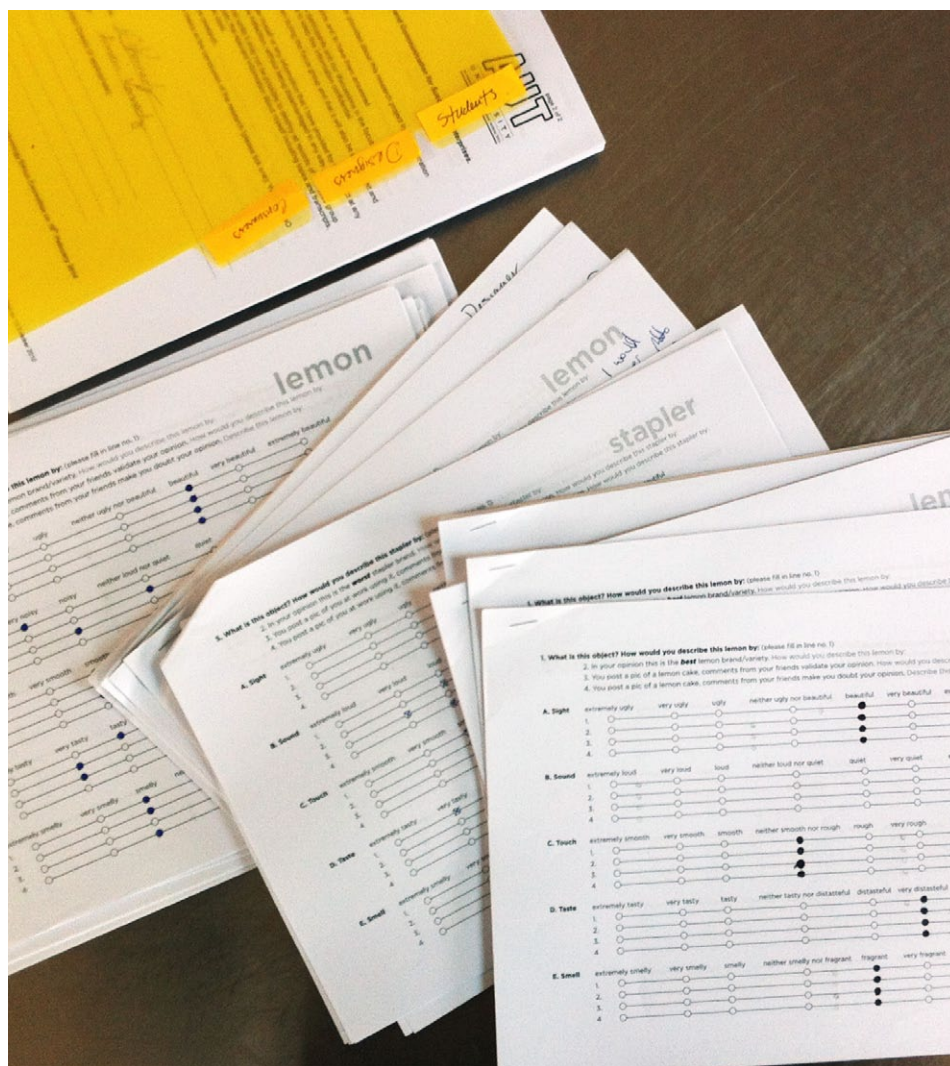
extremely tasty very tasty tasty neither tasty nor distasteful distasteful very distasteful extremely distasteful

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E. Smell

extremely smelly very smelly smelly neither smelly nor fragrant fragrant very fragrant extremely fragrant

1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



lemon		A	B	C	D	E	F	G	H
students	sight	1 2 3 4				4 4 3 2	5 1 1 1	4 3	
	sound	1 2 3 4		2 1 1 1	1 1 1 1	1 1 1 3	2 2 2 3		4 4 4 3
	touch	1 2 3 4			1 1 1 1		5 4 2 3	2 3 4 1	1 1 2 1
	taste	1 2 3 4					4 1 1 2	2 4 1 1	3 4 7 1
	smell	1 2 3 4	1 2 1	1 1	2 1 5	1 2	1 1 2	4 3 3	1 2 2

all groups		A	B	C	D	E	F	G	H
	sight	1 2 3 4			6	7 7 5 6	17 11 13 12	2 8 6 3	1 1 3
	sound	1 2 3 4		2 1 2 1	1 3 4 1	3 3 3 4	5 5 4 7	1 1 1 2	15 14 13 12
	touch	1 2 3 4			3 3 3 4	5 6 5 8	13 12 11 11	5 5 6 2	1 1 2 1
	taste	1 2 3 4		2 2 2 4		1 2 1 3	12 6 5 9	7 10 8 4	5 7 11 4
	smell	1 2 3 4	1 2 1	1 1	3 2 1 6	1 1 1 3	7 7 7 10	8 8 8 2	7 7 8 5

potato		A	B	C	D	E	F	G	H
students	sight	1 2 3 4		2 1 1 1	5 2 1 6	2 1	2 4 4 2		
	sound	1 2 3 4			1 1	3 3 3 3	1 1 1 1	1 1 1 1	4 4 4 4
	touch	1 2 3 4		3 2	6 2 4 7	2 1 2	3 3	1	
	taste	1 2 3 4			4 1	1 1 2	4 3 1 4	5 6	2
	smell	1 2 3 4			5 1 2	4 8 4 5	3	2 1	

all groups		A	B	C	D	E	F	G	H
	sight	1 2 3 4		2 1 1 1	10 3 1 7	9 10 5 8	6 12 11 9	1 9 2	
	sound	1 2 3 4			1 3 1	6 6 6 7	3 3 1 2	4 4 4 4	14 13 13 13
	touch	1 2 3 4		3 2	14 8 9 13	8 10 5 8	2 7 11 5	2 1	
	taste	1 2 3 4			6 1	5 4 1 5	14 7 5 11	1 14 16 6	1 2 5 2
	smell	1 2 3 4			6 2 1 3	18 17 11 13	3 8 10 9	5 2	

Students and/or includes students (majority) ■
 Designers & customers only (majority) ■

A = 4 questions: 1. controlled, 2. brand **positive**, 3. technical positive, 4. technical negative
 B = extremely ugly, distasteful, smelly, rough, loud
 C = very ugly, distasteful, smelly, rough, loud
 D = ugly, distasteful, smelly, rough, loud
 E = neither ugly, distasteful, smelly, rough, loud nor beautiful, tasty, fragrant, smooth, quiet
 F = beautiful, tasty, fragrant, smooth, quiet
 G = very beautiful, tasty, fragrant, smooth, quiet
 H = extremely beautiful, tasty, fragrant, smooth, quiet

flyspray		A	B	C	D	E	F	G	H
students	sight	1	1	2	2	4			
		2	1	4	2	2			
		3	2	3	2	2			
		4		1	5	3			
	sound	1			6		2		1
		2		3	2		3		1
		3		4	1	1	2		1
		4			5	1	2		1
	touch	1				2	7		
		2			1	1	7		
		3			1	3	5		
		4				4	5		
	taste	1			2	5	1		1
		2	1	1		4	1	1	1
		3	1	1		4	1	1	1
		4			1	5	2		1
	smell	1	1	2	6				
		2	5	4					
		3	5	4					
		4	3	2	2	1	1		
all groups	sight	1	2	7	9	9			
		2	3	9	10	5			
		3	4	7	10	6			
		4	2	4	12	9			
	sound	1		3	14	6	3		1
		2		8	8	6	4		1
		3		8	7	3	3		1
		4		2	13	8	3		1
	touch	1		2	2	4	16	2	1
		2	1	1	3	3	16	2	1
		3	1	1	2	6	13	3	1
		4	1		2	9	12	2	1
	taste	1	10	2	7	6	1		1
		2	11	4	4	5	1	1	1
		3	10	5	3	6	1	1	1
		4	7	4	5	8	2		1
	smell	1	5	7	14				1
		2	9	12	5				1
		3	10	11	4	1			1
		4	6	10	6	3	1		1

fragrance		A	B	C	D	E	F	G	H
students	sight	1				1	2	4	2
		2			5	1	2	1	
		3		1	4	2	2	2	
		4				6		1	
	sound	1		1	1	2	1	3	1
		2		1	1	3	1	2	1
		3		1	1	3	1	2	1
		4			1	4	1	2	1
	touch	1				1	5	1	2
		2	1			3	3	1	1
		3	1		2	2	2	1	1
		4				3	2	2	2
	taste	1		1		6	1		1
		2		1	2	6			
		3	1		2	6			
		4		1	1	6			
	smell	1					1	1	
		2	4	2	2		1		7
		3	6	2	1				
		4			3	3	3		
all groups	sight	1		2	1	3	10	9	2
		2		3	10	5	7	2	
		3	1	4	9	6	4	3	
		4		1	4	11	8	3	
	sound	1		2	4	6	4	7	4
		2		2	4	9	3	5	4
		3	1	2	4	7	4	5	4
		4			4	9	5	5	4
	touch	1		1		3	15	6	2
		2	1	1	3	7	12	2	1
		3	2	3	2	6	10	3	1
		4			2	7	10	6	2
	taste	1	1	3	4	11	4	3	1
		2	1	4	9	12	1		
		3	3	3	7	13	1		
		4	2	3	5	13	3	1	
	smell	1		3	1		5	8	10
		2	6	6	8	1	6		
		3	9	6	6		4	2	
		4			9	8	6	4	

Students and/or includes students (majority) ■
 Designers & customers only (majority) ■

A = 4 questions: 1. controlled, 2. brand **negative**, 3. technical positive, 4. technical negative
 B = extremely ugly, distasteful, smelly, rough, loud
 C = very ugly, distasteful, smelly, rough, loud
 D = ugly, distasteful, smelly, rough, loud
 E = neither ugly, distasteful, smelly, rough, loud nor beautiful, tasty, fragrant, smooth, quiet
 F = beautiful, tasty, fragrant, smooth, quiet
 G = very beautiful, tasty, fragrant, smooth, quiet
 H = extremely beautiful, tasty, fragrant, smooth, quiet

Nike sports		A	B	C	D	E	F	G	H
students	sight	1 2 3 4				1 4	2 2 2 2	6 3 4 4	4 3
	sound	1 2 3 4		1	1 2 1 2	1 1 2 2	3 2 2	1 4 3 3	2 2 2 2
	touch	1 2 3 4			4 1 4	2 4 3 4	3 2 2 2	3 3 3	
	taste	1 2 3 4	1	1 1 1		5 5 7	2 2 2		
all groups	smell	1 2 3 4				7 7 7 3	1 1	1 1 1	
	sight	1 2 3 4		2 2 2 2	3 3 7	5 5 3 10	10 5 8	7 7 8	5 3
	sound	1 2 3 4		1	10 11 10 10	3 3 3 5	7 2 5 5	3 7 6 2	3 4 3 3
	touch	1 2 3 4			9 4 5 9	8 10 8 11	10 9 10 6	4 4	
all groups	taste	1 2 3 4	2 2 2 3	1 1 1	3 3 1 3	13 12 14 17	8 8 6 4	1 3	
	smell	1 2 3 4			2 2 2 7	18 18 19 6	6 5 3 3	2	1 2 1

head phones		A	B	C	D	E	F	G	H
students	sight	1 2 3 4			8 8	1 1 1	6 6	2 3	
	sound	1 2 3 4	1	2 5 5 2	5 3 3 3	1 1 1		1	
	touch	1 2 3 4					6 3 2 3	3 5 5 3	1 2
	taste	1 2 3 4			1	8 8 8 9	1 1		
all groups	smell	1 2 3 4				9 8 8 8		1 1	
	sight	1 2 3 4	1	4 2 2 3	11 3 1 11	7 6 5 6	3 11 11 4	1 5 8 2	
	sound	1 2 3 4	2 1 1 2	7 8 9 6	11 10 10 8	5 7 6 8		2	1 1 1
	touch	1 2 3 4		1	2 2 2 2	3 1 1 7	17 15 14 12	4 8 8 6	1 2
all groups	taste	1 2 3 4	1 1 1 1	1	6 3 3 2	15 14 14 18	4 8 6 4	1 3 1	
	smell	1 2 3 4			3 1	24 23 23 25	3 3 1	1 1	

Students and/or includes students (majority) ■
 Designers & customers only (majority) ■

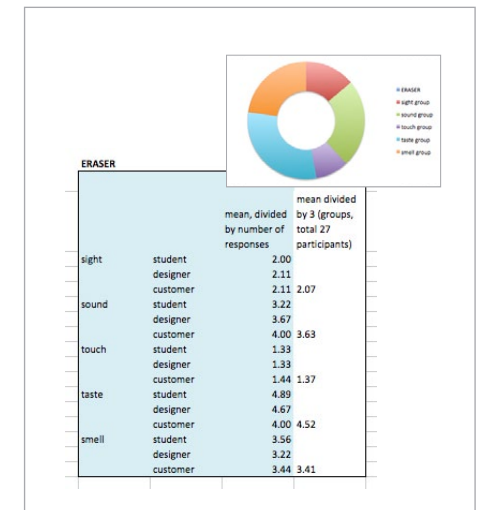
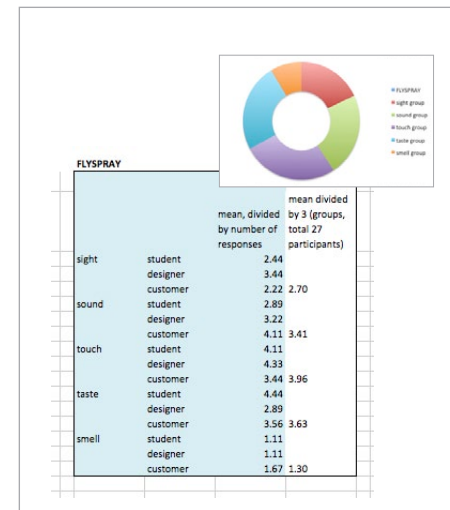
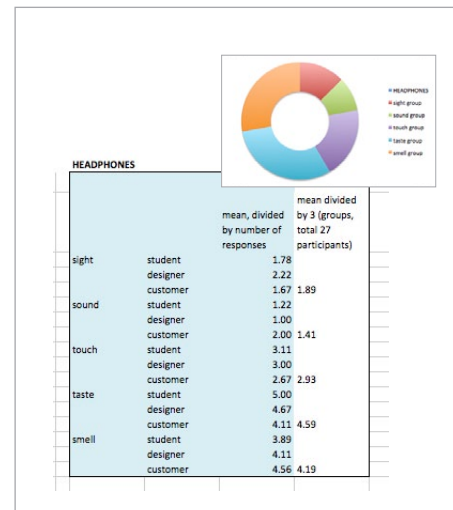
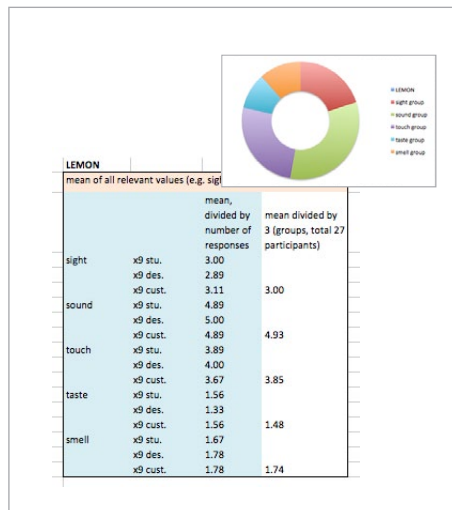
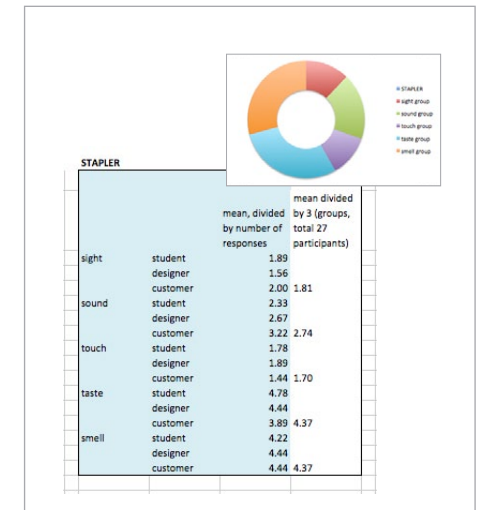
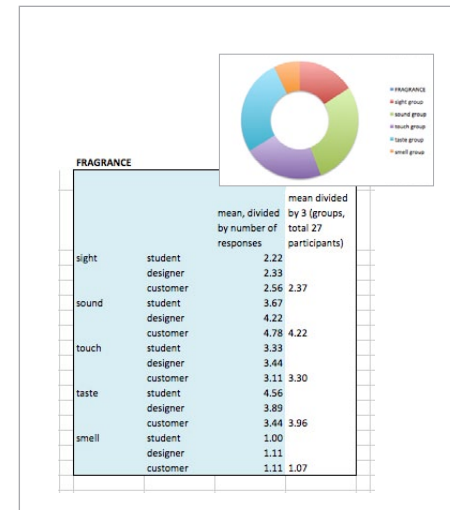
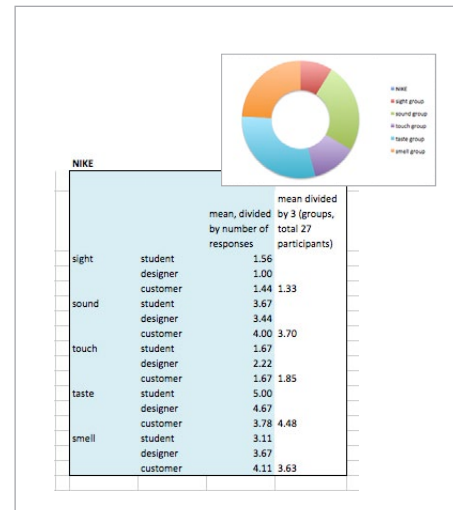
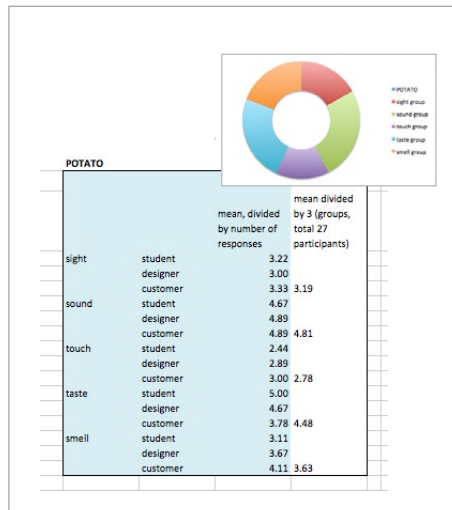
A = 4 questions: 1. controlled, 2. brand **positive**, 3. technical positive, 4. technical negative
 B = extremely ugly, distasteful, smelly, rough, loud
 C = very ugly, distasteful, smelly, rough, loud
 D = ugly, distasteful, smelly, rough, loud
 E = neither ugly, distasteful, smelly, rough, loud nor beautiful, tasty, fragrant, smooth, quiet
 F = beautiful, tasty, fragrant, smooth, quiet
 G = very beautiful, tasty, fragrant, smooth, quiet
 H = extremely beautiful, tasty, fragrant, smooth, quiet

stapler		A	B	C	D	E	F	G	H
students	sight	1 2 3 4	1 4	4 2	2 2 4	5 2 3 4	2 1		
	sound	1 2 3 4	1 3	3 2 1	5 3 3 6		2 1		1 1 1 1
	touch	1 2 3 4		1 1	1 1 1	3 2 1	6 2 3 6	2 1 1 1	1 1
	taste	1 2 3 4	1 1		2 2 2 2	6 6 6 6	1		
	smell	1 2 3 4		1		8 9 8 9	1		
all groups		A	B	C	D	E	F	G	H
	sight	1 2 3 4	2 5 1	2 10 7 1	10 7 6 10	10 6 8 12	4 2 1 3	1	
	sound	1 2 3 4	1 2 3	1 5 5 2	10 13 11 14	8 5 6 8	6 1 1 2		1 1 1 1
	touch	1 2 3 4		3 2	4 5 5 5	3 5 5 5	16 10 11 14	4 3 3 3	1 1
	taste	1 2 3 4	2 3 3 2	1 1 1 1	5 10 9 7	15 12 13 16	3 1 1 1	1	
	smell	1 2 3 4		1	2 2 2	24 25 24 25	3		

Students and/or includes students (majority) ■
 Designers & customers only (majority) ■

A = 4 questions: 1. controlled, 2. brand **negative**, 3. technical positive, 4. technical negative
 B = extremely ugly, distasteful, smelly, rough, loud
 C = very ugly, distasteful, smelly, rough, loud
 D = ugly, distasteful, smelly, rough, loud
 E = neither ugly, distasteful, smelly, rough, loud nor beautiful, tasty, fragrant, smooth, quiet
 F = beautiful, tasty, fragrant, smooth, quiet
 G = very beautiful, tasty, fragrant, smooth, quiet
 H = extremely beautiful, tasty, fragrant, smooth, quiet

eraser		A	B	C	D	E	F	G	H
students	sight	1 2 3 4	2 4	1 6 4 1	7 1 5	1 2 1	1 1		
	sound	1 2 3 4	1 1	1 1 1	2 2 2 1	3 1 3	1 1 1 3	1 1 1 1	3 3 3 3
	touch	1 2 3 4		2 2	3 3 3 4		4 2 2 2		2 2 2 2
	taste	1 2 3 4	1 1 1	1 2	1 1 2	5 6 6 6	2		
	smell	1 2 3 4	1	2 1 1	5 4 4 2	4 3 3 6			
all groups		A	B	C	D	E	F	G	H
	sight	1 2 3 4	4 6 1	5 13 10 6	12 4 5 9	8 6 6 10	1 1	1	
	sound	1 2 3 4	1 1	2 2 1	3 3 2 1	9 5 6 7	3 5 5 6	4 3 3 4	8 8 8 8
	touch	1 2 3 4		1 5 3 1	6 5 6 7	3 4 5 6	11 8 8 8	3 2 2 2	3 3 3 3
	taste	1 2 3 4	3 4 4 3	1 3 4 3	5 5 4 4	15 14 14 16	3 1 1 1		
	smell	1 2 3 4	1	4 3 2	11 11 11 8	12 11 11 16	4 1 1 1		



References

- Aaker, D. A. (2010). *Brand relevance: Making competitors irrelevant*. Hoboken, NJ: Jossey-Bass. Retrieved from <http://www.ebrary.com>
- Aaker, D. A., & Joachimsthaler, E. (2000). *Brand leadership*. New York, NY: Free Press.
- Agresta, S., & Bonin Bough, B. (2010). *Perspectives on social media marketing*. Boston, MA: Course Technology / Cengage learning. Retrieved from <http://www.ebrary.com>
- Albertazzi, L., Libardi, M., & Poli, R. (1996) *The school of Franz Brentano*. In M. Libardi, (Ed.). Franz Brentano (1838 - 1917). The Netherlands: Kluwer Academic Publishers.
- Alexenberg, M. (2008). *Educating artists in a digital age: Learning at the intersections of art, science, technology and culture*. Bristol, GBR: Intellect Books. Retrieved from <http://www.ebrary.com>
- Armstrong, H. (2009). *Graphic design theory: Readings from the field*. New York, NY: Princeton Architectural Press. Retrieved from <http://www.ebrary.com>
- Arnold, C. R. (2010). *Ethical marketing and the new consumer*. Hoboken, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Ashmore, R. D., & Jussim, L. (Ed.). *Self and identity: Fundamental issues*. Cary, NC: Oxford University Press, Incorporated. Retrieved from <http://www.ebrary.com>
- Au, I., Suri, J., Horowitz., B., & Jack, T. (2013). *Cultivating Empathic Design in an Analytical World* [Video file]. Retrieved October, 18, 2013 from <http://www.youtube.com/watch?v=L512sQVeoI4>
- Baltzly, D. (2013). Stoicism. In E. N. Zalta (Ed.). *The Stanford encyclopedia of philosophy* (Winter 2013 ed.). Retrieved from <http://plato.stanford.edu/archives/win2013/entries/stoicism/>
- Barrett, L. (2008, May 14) A brand for all seasons? *Marketing*, 25. Retrieved from <http://www.haymarket.com/home.aspx>
- Becker, G. S., & Murphy, K. M (2009). *Social economics: Market behavior in a social environment*. Cambridge, MA: Harvard University Press. Retrieved from <http://www.ebrary.com>
- Belk, R. W. (2011). *Research in consumer behavior, Volume 13: Research in consumer behavior*. Bradford, GBR: Emerald Insight. Retrieved from <http://www.ebrary.com>
- Bennett, R., & Rundle-Thiele, S. (2005). The brand loyalty life cycle: Implications for marketers. *Journal of Brand Management*, 12(4), 250-263. Retrieved from <http://www.palgrave-journals.com/bm/index.html>
- Bicchieri, C., & Muldoon, R. (2011). Social Norms. In E. N. Zalta (Ed.). *The Stanford encyclopedia of philosophy* (Spring 2014 ed.). Retrieved from <http://plato.stanford.edu/entries/social-norms/>
- Blackett, T. (2003). What is a brand?. In Clifton, R., Simmons, J., Ahmed, S., Allen, T., Anholt, S., Bahr Thompson, A., Barwise, P., Blackett, T., Bowker, D., Brymer, C., Doane, D., Faulkner, K., Feldwick, P., Hilton, S., Lindemann, J., Poulter, A., & Smith, S. *Brands and branding: Economist books* (pp13-26). London, GBR: Profile books. Retrieved from <http://www.ebrary.com>
- Blake, A. M. (2006). *How New York became American: Business, tourism and the urban landscape, 1890-1924*. Baltimore, MD: John Hopkins University Press. Retrieved from <http://www.ebrary.com>
- Bowman, C. (2004). *The lasting presence of Gerard's herbball*. Retrieved from <http://staff.washington.edu/bowmac/portfolio/GERARD-port2.pdf>
- Breisach, E. (2003). *On the future of history: The postmodernist challenge and its aftermath*. Chicago, IL: The University of Chicago Press. Retrieved from <http://www.ebrary.com>

- Brown, T. (2014). *Our approach: Design thinking*. Retrieved June 7, 2014 from <http://www.ideo.com/about>
- Brynjolfsson, E., & Hitt, L. M. (2000). Beyond computation: Information technology, organizational transformation and business performance. *Journal of Economic Perspectives*, 14(4), 23-48. Retrieved from <http://www.ingentaconnect.com/content/aeal/jep>
- Burkus, D. (2013). *Myths of creativity: The truth about how innovative companies and people generate great ideas*. San Francisco, CA: John Wiley & Sons, incorporated. Retrieved from <http://www.ebrary.com>
- Bush, D. J. (1978). Thorstein Veblen's Economic Aesthetic. *Leonardo*, 11(4), 281-285. Retrieved from <http://www.jstor.org/>
- Camerinelli, E. (2009). *Measuring the value of the supply chain*. Farnham, GBR: Gower Publishing Limited. Retrieved from <http://www.ebrary.com>
- Carlson, R. (n.d). *The evolution of web design: 1990-present*. Retrieved August 10, 2013 from <http://www.designjuices.co.uk/2011/09/web-design-evolution/>
- Chan Kim, W., & Mauborgne, R. (2005). *Blue ocean strategy: How to create uncontested market space and make competition irrelevant*. Boston, MA: Harvard Business School Publishing.
- Chan Kim, W., & Mauborgne, R. (2014). *Blue ocean leadership*. Retrieved June 22, 2014 from <http://hbr.org/2014/05/blue-ocean-leadership/ar/1>
- Chapman-Smith, B. (2013). *Brands matter little to kiwi shoppers*. Retrieved July 5, 2013 from http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=10894722
- Chevalier, M., & Lu, P. (2011). *Luxury China: Market opportunities and potential*. Hoboken, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Chevalier, M., & Mazzalovo, G. (2012). *Luxury brand management: A world of privilege* (2nd ed). Somerset, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Chiou, J., Hsu, A., & Hsieh, C. (2013). How negative online information affects customers' brand evaluation: The moderating effects of brand attachment and source credibility. *Online information review*, 37(6) 910-926. doi: 10.1108/OIR-02-2012-0014
- Clark, K. A. (2004). *Brandscendence: Three essential elements of enduring brands*. Chicago, IL: Dearborn Trade, A Kaplan Professional Company. Retrieved from <http://www.ebrary.com>
- Cobley, P., & Jansz, L. (2010). *Introducing semiotics: A graphic guide* (6th ed). London, England: Icon books.
- Coleman, R., Clarkson, J., Dong, H., & Cassim, J. (2008). *Design for inclusivity: A practical guide to accessible, innovative and user-centred design*. Aldershot, England: Gower Publishing Limited. Retrieved from <http://www.ebrary.com>
- Committee on DNA technology in forensic science (1992). *DNA technology in forensic science*. Washington, DC: National Academy Press. Retrieved from <http://www.ebrary.com>
- Committee on the internet in the evolving information structure (2001). *Internet's coming of age*. Washington, DC: National Academies Press. Retrieved from <http://www.ebrary.com>
- Conley, J. G., Berry, J. D., Dewitt, L., & Dzersk, M. (2008). Inventing brands: Opportunities at the nexus of semiotics and intellectual property. *Design Management Review*, 19(2), 58-66, 82-83. Retrieved from http://www.periodicals.com/html/ihp_e.html?ed63964
- Creswell, J. (1994). Research design: *Qualitative & quantitative approaches*. London, England: Sage.
- Crouch, C., & Pearce, J. (2012). *Doing research in design* (English ed.). London, England: Berg.
- Crow, D. (2003). *Visible signs: An introduction to semiotics*. Lausanne, Switzerland: AVA Academia.
- Crow, D. (2006). *Left to right: The cultural shift from words to pictures*. Lausanne, Switzerland: AVA Academia.

- Crowell, S. (2011). Interpreting Heidegger. *The review of metaphysics*. 65(2), 416-418.
Retrieved from <http://www.reviewofmetaphysics.org/index.php>
- Delio, M. (2002). *A word for brainy people: Plastic*. Retrieved Oct 15, 2013 from <http://archive.wired.com/medtech/health/news/2002/10/55779>
- De Bono, E. (2000). *Six thinking hats* (Rev. and updated. ed.). London, England: Penguin.
- De Bono, E. (2004). *How to have beautiful mind*. London, England: Vermilion.
- De Rosa, R. (2010). *Descartes and the puzzle of sensory representation*. Oxford, GBR: Oxford University Press. Retrieved from <http://www.ebrary.com>
- de Sousa, R. (2013). Emotion. In E. N. Zalta (Ed.). *The Stanford encyclopedia of philosophy* (Spring 2014 ed.). Retrieved from <http://plato.stanford.edu/entries/emotion/>
- Diatom studio. (n.d.). *About us*. Retrieved July 16, 2013 from <http://diatom.cc/about>
- Dixon, G. (2014). *Gen Z: Child of our times*. Retrieved 8 June 2014 from http://www.nzherald.co.nz/technology/news/article.cfm?c_id=5&objectid=11247694
- Doane, D. (2003). An alternative perspective on brands: markets and morals. In Clifton, R., Simmons, J., Ahmed, S., Allen, T., Anholt, S., Bahr Thompson, A., Barwise, P., Blackett, T., Bowker, D., Brymer, C., Doane, D., Faulkner, K., Feldwick, P., Hilton, S., Lindemann, J., Poulter, A., & Smith, S. *Brands and branding: Economist books* (pp185-198). London, GBR: Profile books. Retrieved from <http://www.ebrary.com>
- Donà, C. (1988). Invisible design. In Thackara, J. (Ed.). *Design after modernism* (pp152-159). New York, NY: Thames and Hudson Inc.
- Dooley, R. (2011). *Brainfluence: 100 ways to persuade and convince consumers with neuromarketing*. Hoboken, NJ: John Wiley & Sons.
Retrieved from <http://www.ebrary.com>
- Edwards, H & Day, D. (2005). *Creating passion brands: Getting to the heart of branding*. London, England: Kogan Page. Retrieved from <http://www.ebrary.com>
- Elliott, R., & Wattanasuwan, K. (1998). Brands as symbolic resources for the construction of identity. *International journal of advertising*, 17(2), 131-144. Retrieved from <http://sspa.boisestate.edu/communication/files/2010/05/Elliott-Brands-as-Symbolic-Resources.pdf>
- Evans, D & Bratton, S. (2008). *Social media marketing: An hour a day*. Hoboken, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Faccioli, P., & Gibbons, J. A. (2007). *Framing globalization: Visual perspectives*. Newcastle upon Tyne, GBR: Cambridge Scholars Publishing. Retrieved from <http://www.ebrary.com>
- Feldwick, P. (2003). Brand communications. In Clifton, R., Simmons, J., Ahmed, S., Allen, T., Anholt, S., Bahr Thompson, A., Barwise, P., Blackett, T., Bowker, D., Brymer, C., Doane, D., Faulkner, K., Feldwick, P., Hilton, S., Lindemann, J., Poulter, A., & Smith, S. *Brands and branding: Economist books* (pp127-142). London, England: Profile books. Retrieved from <http://www.ebrary.com>
- Finn, C. (1997). *Social reality*. London, GBR: Routledge. Retrieved from <http://www.ebrary.com>
- Forbes. (n.d.). *The world's most valuable brands*. Retrieved May 3, 2014 from <http://www.forbes.com/powerful-brands/list/>
- Forceville, C. (1998). *Pictorial metaphor in advertising*. London, England: Routledge. Retrieved from <http://www.ebrary.com>
- Friedman, R. L. (2014). Peter Auriol. In E. N. Zalta (Ed.). *The Stanford encyclopedia of philosophy* (Spring 2014 ed.). Retrieved from <http://plato.stanford.edu/archives/spr2014/entries/auriol/>
- Frost, N. (2011). *Qualitative research methods in psychology*. Berkshire, GBR: McGraw-Hill Education. Retrieved from <http://www.ebrary.com>

- Fuggetta, R. (2012). *Brand advocates: Turning enthusiastic customers into a powerful marketing force*. Sommerset, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Gardner, D. L. (2004). *Supply chain vector: Methods for linking the execution of global business models with financial performance*. Florida: J. Ross Publishing, Incorporated. Retrieved from <http://www.ebrary.com>
- Garvey, J., & Stangroom, J. (2012). *The story of philosophy: A history of western thought*. London, England: Quercus
- Geertz, C. (1973). *The interpretation of cultures*. New York, NY: Basic Books
- Geertz, C. (2000). *Available light: Anthropological reflections on philosophical topics*. Princeton, NJ: Princeton University Press. Retrieved from <http://www.ebrary.com>
- Gerbaudo, P. (2012). *Tweets and the streets: Social media and contemporary activism*. London, England: Pluto Press. Retrieved from <http://www.ebrary.com>
- Gerson, L. (2013). Plotinus. In E. N. Zalta (Ed.). *The Stanford encyclopedia of philosophy* (Summer 2014 ed.). Retrieved from <http://plato.stanford.edu/archives/sum2014/entries/plotinus/>
- Gerson, R. (1998). *Beyond customer service: Keeping customers for life*. Boston, MA: Course Technology Crisp. Retrieved from <http://www.ebrary.com>
- Gobé, M. (2009). *Emotional branding: The new paradigm for connecting brands to people*. (Rev. and updated. ed.) New York, NY: Allworth Press.
- Godin, S. (2010). *Linchpin: Are you indispensable?* New York, NY: Portfolio, Penguin.
- Godin, S. (2010, August 13). Foundation elements for modern businesses [Web log message]. Retrieved from http://sethgodin.typepad.com/seths_blog/2010/08/foundation-elements-for-modern-businesses.html
- Godin, S. (2011, September 29). The forever recession (and the coming revolution) [Web log message]. Retrieved from http://sethgodin.typepad.com/seths_blog/2011/09/the-forever-recession.html
- Goody, J. (2002). The anthropology of the senses and sensations. *La Ricerca Folklorica*, 45(0), 17-28. Retrieved from <http://www.jstor.org>
- Gownder, J. P. (2011). *Why large-scale product customization is finally viable for business*. Retrieved June 29, 2013 from <http://mashable.com/2011/04/13/mass-customization/>
- Graham, G. (1999). *Internet: Philosophical inquiry*. London, GBR: Routledge. Retrieved from <http://www.ebrary.com>
- Graham, K. (2002). *Practical reasoning in a social world*. Port Chester, NY: Cambridge University Press. Retrieved from <http://www.ebrary.com>
- Guion, L. A., Diehl, D. C., & McDonald, D. (n.d.). *Triangulation: Establishing the validity of qualitative studies*. Retrieved from <http://edis.ifas.ufl.edu/pdffiles/FY/FY39400.pdf>
- Guzman, F., & Iglesias, O. (2012). The multi-sensory and multi-experiential brand challenge. In Guzman, F., & Iglesias, O. (Ed.). *Challenges facing brand managers today* (pp 388-390). UK: Emerald Insight. Retrieved from <http://www.ebrary.com>
- Haddon, L. (2002). Information and communication technologies and the role of consumers in innovation. In McMeekin, A., Green, K., Tomlinson, A., & Walsh, V. (2002). *Innovation by demand: An interdisciplinary approach to the study of demand and its role in innovation* (pp151-167). Manchester, GBR: Manchester University Press. Retrieved from <http://www.ebrary.com>
- Hakala, U., Svensson, J., & Vincze, Z. (2012). Consumer-based brand equity and top-of-mind awareness: A cross-country analysis. In Guzman, F., & Iglesias, O. (Ed.). *Challenges facing brand managers today* (pp 439-451). UK: Emerald Insight. Retrieved from <http://www.ebrary.com>
- Hansen, M. (2004). Why media aesthetics. *Critical Inquiry*, 30(2), 391-395. Retrieved from <http://www.jstor.org/>
- Harden, L., & Heyman, B. (2009). *Digital engagement: Internet marketing that captures customers and builds intense brand loyalty*. Saranac Lake, NY: Amacom. Retrieved from <http://www.ebrary.com>

- Harford, T. (2013-14). Data Visualization: Numbers game. *Monocle: A briefing on global affairs, business, culture & design*, 7(69), 126.
- Harkins, M. (2010). *Basics typography 02: Using type*. Lausanne, SW: AVA Publishing.
- Harter, S. (1997). The personal self in social context: Barriers to authenticity. In Ashmore, R. D., & Jussim, L. (Ed.). *Self and identity: Fundamental issues* (81-105). Cary, NC: Oxford University Press, Incorporated. Retrieved from <http://www.ebrary.com>
- Haub, C. (2012). *World population data sheet 2012*. Retrieved August 1, 2013 from <http://www.prb.org/Publications/Datasheets/2012/world-population-data-sheet/fact-sheet-world-population.aspx>
- Heller, S. (2008). *Paul Rand*. (7th ed.). London, England: Phaidon.
- Hills, D. (2012). Metaphor. In E. N. Zalta (Ed.). *The Stanford encyclopedia of philosophy* (Winter 2012 ed.). Retrieved from <http://plato.stanford.edu/entries/metaphor/>
- Holtzclaw, E. V. (2013). *Laddering: Unlocking potential of consumer behaviour*. Somerset, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Hong-Youl, Ha. (2004). Factors influencing consumer perceptions of brand trust online. *The Journal of Product and Brand Management*, 13(4), 329-342. Retrieved from <http://www.emeraldinsight.com/journals.htm?issn=1061-0421>
- Hughes, R. (1980). *The shock of the new: Art and the century of change*. London, GBR: British Broadcasting Corporation.
- Ikhe, D. (2010). *Heidegger's Technologies: Postphenomenological perspectives*. New York, NY: Fordham University Press. Retrieved from <http://www.ebrary.com>
- Ind, N. (2003). *Beyond branding: How the new values of transparency and integrity are changing the world of brands*. London, England: Kogan Page.
- Interbrand. (2012). *Best global brands 2012: The definitive guide to the 100 best global brands*. Retrieved 20 August 2013 from <http://www.interbrand.com/en/best-global-brands/previous-years/2012/downloads.aspx>
- Interbrand. (2013). *Best global brands 2013: Lead*. Retrieved 3 May 2014 from <http://www.interbrand.com/en/best-global-brands/2013/downloads.aspx>
- Introna, L. (2011). Phenomenological Approaches to Ethics and Information. In E. N. Zalta (Ed.). *The Stanford encyclopedia of philosophy* (Summer 2011 ed.). Retrieved from <http://plato.stanford.edu/archives/sum2011/entries/ethics-it-phenomenology/>
- Isaacson, W. (2011). *Steve Jobs*. New York, NY: Simon & Schuster.
- Jaffe, J. (2008). *Join the conversation: How to engage marketing-weary consumers with the power of community, dialogue and partnership*. Hoboken, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Jansen, W., Steenbakkers, W., & Jagers, H. (2007). *New business models for the knowledge economy*. Abingdon, Oxen, GBR: Ashgate Publishing Ltd. Retrieved from <http://www.ebrary.com>
- Jensen, R. (1999). *The dream society: How the coming shift from information to imagination will transform your business*. New York, NY: McGraw-Hill.
- Jha, N. K. (2008). *Research methodology*. Chandigarh, IND: Global Media. Retrieved from <http://www.ebrary.com>
- Jones, T. (1990). *Wink: Instant design, a manual of graphic techniques*. London, England: Architecture Design and Technology Press.
- Julier, G. (2000). *The culture of design*. (2nd ed.). London, England: Sage.
- Jung, L. H., & Soo, K. M. (2012). The effect of brand experience on brand relationship quality. *Academy of Marketing Studies Journal*. 16(1), 87-98. Retrieved from <http://www.alliedacademies.org/public/journals/JournalDetails.aspx?jid=12>

- Kagan, K. (1994). Art, science, technology in the past, present and future. *Leonardo*, 27(5), 409-411. Retrieved from <http://www.jstor.org/>
- Kahney, L. (2002). *Apple: It's all about the brand*. Retrieved March 10, 2014 from <http://archive.wired.com/gadgets/mac/commentary/cultofmac/2002/12/56677>
- Kapferer, J. (1992) *The new strategic brand management: Creating and sustaining brand equity long term*. (6th ed.). London, England: Kogan Page.
- Kaplan, S. (2012). *Business model innovation factory: How to stay relevant when the world is changing*. Hoboken, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Kavanaugh, L. (2007). *Architectonic of philosophy: Plato, Aristotle, Leibniz*. Amsterdam, NLD: Amsterdam University Press. Retrieved from <http://www.ebrary.com>
- Kellerman, L. (2013). *Gamification: Evoking actual user interaction with playful design*. Retrieved September 23, 2013 from <http://www.designassembly.org.nz/articles/gamification-evoking-actual-user-interaction-with-playful-design>
- Kelly, D. (2002, February). *David Kelly: Human-centred design*. [Video file]. Retrieved June 8, 2014 from http://www.ted.com/talks/david_kelley_on_human_centered_design
- Kidder, R., & Bloom, S. (2001). Ethical fitness in today's business environment. In Moon, C., & Bonny, C. (Ed.). *Business ethics: Facing up to the issues* (pp57-73). Princeton, NJ: Bloomberg Press. Retrieved from <http://www.ebrary.com>
- Klanten, R., Ehmann, S., Bourquin, N., & Tissot, T. (2010). *Data flow 2: Visualizing information in graphic design*. Berlin, DE: Gestalten.
- Klanten, R., Mischler, M., & Bilz, S. (2011). *The little know-it-all: Common sense for designers* (Expanded and rev. ed.). Berlin, DE: Gestalten.
- Klein, N. (2010). *No logo: No space, no choice, no jobs* (10th anniversary ed., 3rd ed.). London, England: Fourth Estate.
- Knight, P. T. (2008). *Small-scale research*. London, GBR: Sage Publications. Retrieved from <http://www.ebrary.com>
- Kovecses, Z. (2002). *Metaphor: A practical introduction*. New York, NY: Oxford University Press. Retrieved from <http://www.ebrary.com>
- Lackey, J., & Sosa, E. (2006). *Epistemology of testimony*. Oxford, GBR: Clarendon Press. Retrieved from <http://www.ebrary.com>
- Larkin, M. (2013). *Interpretative phenomenological analysis – introduction*. Retrieved August 20, 2013 from http://prezi.com/dnprvc2nohjt/interpretative-phenomenological-analysis-introduction/?auth_key=3d2c098e0db0a31ea05f2d9f60148ed5144e6d06
- Leder, H. (2011, July). Thinking by design: The science of everyday beauty reveals what people really like- and why. *Scientific American Mind*. 42-47.
- Legorburu, G., & McColl, D. (2014). *Storyscaping: Stop creating ads, start creating worlds*. Somerset, NJ: John Wiley & Sons, Inc. Retrieved from <http://www.ebrary.com>
- Lehrer, J. (2009). *The decisive moment: How the brain makes up its mind* (2nd ed.). Melbourne, AU: The Text Publishing Company.
- Lindstrom, M. (2005). *Brand sense: Build powerful brands through touch, taste, smell, sight and sound*. London, England: Kogan Page.
- Linotype (n.d.). *Font designer – Max Miedinger*. Retrieved November 19, 2013 from <http://www.linotype.com/522/maxmiedinger.html>
- Lipe, J. (2006). *Stand out from the crowd: Secrets to crafting a winning company identity*. Chicago, IL: Dearborn Trade, A Kaplan Professional Company. Retrieved from <http://www.ebrary.com>
- Lloyd, D. R. (2010). *Symmetry and beauty in Plato*. Retrieved June 4, 2013 from <http://www.mdpi.com/2073-8994/2/2/455>

- Longhurst, B. (2007). *Cultural change and ordinary life*. Buckingham, GBR: McGraw-Hill Education. Retrieved from <http://www.ebrary.com>
- Love, S. (2005). *Understanding mobile human-computer interaction*. Jordan Hill, GBR: Butterworth-Heinemann. Retrieved from <http://www.ebrary.com>
- MacKillop, S. (2011). Surrendering to social media. In Healey, J. (Ed.). *Issues in society, Volume 324: Social impacts of digital media*. (pp20-21). Thirroul, NSW, AUS: Spinney Press. Retrieved from <http://www.ebrary.com>
- Malina, R. F. (1990). Digital image: Digital cinema: The work of art in the age of post-mechanical reproduction. *Leonardo. Supplemental Issue*. 3, 33-38. Retrieved from <http://www.jstor.org/>
- Maranda, P. (2010). Semiotics and computers: The advent of semiotronics? In Sebeok, T. A., Posner, R., & Rey, A. (Ed.). *Approaches to semiotics [AS]: The semiotic web 1987*. (pp507-533). Berlin, DE: Mouton de Gruyter. Retrieved from <http://www.ebrary.com>
- Marken, G. A. (2005). Brand sense - building powerful brands through touch, taste, smell, sign and sound. *Public Relations Quarterly*, 50(2), 6-7. Retrieved from <http://www.abepublicrelations.com/en/journal/3389/public-relations-quarterly>
- Markides, C. C. (2008). *Game-changing strategies: How to create new market space in established industries by breaking the rules*. Hoboken, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Mattimore, B. (2012). *Idea stormers: How to lead and inspire creative breakthroughs*. San Francisco, CA: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Maund, B. (2003). *Perception*. Durham, GBR: Acumen. Retrieved from <http://www.ebrary.com>
- May, T. (2006). *Philosophy of Foucault*. Durham, GBR: Acumen. Retrieved from <http://www.ebrary.com>
- McCandless, D. (2009). *Information is beautiful*. London, England: Collins.
- McEvelley, T. (1991). *Art and discontent: Theory at the millennium*. Kingston, NY: McPherson.
- McLeod, S. (2008). *Likert scale*. Retrieved November 3, 2013 from <http://www.simplypsychology.org/likert-scale.html>
- Mercer, J. (2010). A mark of distinction: Branding and trade mark law in the UK from the 1860s. *Business History*. 52(1), 17-42. doi.org/10.1080/00076790903281033
- Micklethwait, J & Wooldridge, A. (2005). *The company: A short history of a revolutionary idea*. (2nd ed.). New York, NY: Modern Library, Random House.
- Miller, J., & Muir, D. (2005). *Business of brands*. Hoboken, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Ministry of Business, Innovation and Employment. (2013). *Small business in New Zealand: How do they compare with larger firms?* Retrieved from <http://www.med.govt.nz/business/business-growth-internationalisation/pdf-docs-library/small-and-medium-sized-enterprises/2013-stats-factsheet.pdf>
- Mohsin, M. (2009). *Encyclopedia of brand equity management, volume II*. Mumbai, IN: Global Media. Retrieved from <http://www.ebrary.com>
- Mollerup, P. (1997). *Marks of excellence: The history and taxonomy of trademarks*. (6th ed.). London, England: Phaidon Press.
- Moon, C., & Bonny, C. (2001). *Business ethics: Facing up to the issues*. Princeton, NJ: Bloomberg Press. Retrieved from <http://www.ebrary.com>
- Mootee, I. (2013). *Design thinking for strategic innovation: What they can't teach you at business or design school*. Somerset, NJ: John Wiley & Sons, Inc. Retrieved from <http://www.ebrary.com>
- Moran, D. (1999). *Introduction to phenomenology*. Florence, KY: Routledge. Retrieved from <http://www.ebrary.com>
- Moravec, H. (1998). When will computer hardware match the human brain? *Journal of*

- Evolution and Technology* (1). Retrieved March, 11, 2014 from <http://www.transhumanist.com/volume1/moravec.htm>
- Morillo, C. (1990). The Reward Event and Motivation. *Journal of Philosophy* 87:169–86. Retrieved from <http://www.jstor.org/>
- Murray, B. H. (2003). *Defending the brand: Aggressive strategies for protecting your brand in the online arena*. New York, NY: Amacom Books. Retrieved from <http://www.ebrary.com>
- Myatt, G. J., & Johnson, W. P. (2011). *Making sense of data III: A practical guide to designing interactive data visualizations*. Hoboken, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Nagel, T. (1995). *Other minds: Critical essays, 1969–1994*. New York, NY: Oxford University Press. Retrieved from <http://www.ebrary.com>
- Nande, P. J., & Vali, S. A. (2010). *Fitness evaluation tests for competitive sports*. Mumbai, IN: Himalaya Publishing House. Retrieved from <http://www.ebrary.com>
- Newman, L. (2013). Descartes' Epistemology. In E. N. Zalta (Ed.). *The Stanford encyclopedia of philosophy* (Fall 2010 ed.). Retrieved from <http://plato.stanford.edu/entries/descartes-epistemology/#5.2>
- Neuendorf, K. A. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage.
- Neumeier, M. (2005). *The brand gap: How to bridge the distance between business strategy and design*. Berkeley, CA: New Riders.
- Neumeier, M. (2007). *Zag: The number-one strategy of high-performance brands*. Berkeley, CA: New Riders.
- Neumeier, M. (2009). *The designful company: How to build a culture of nonstop innovation*. Berkeley, CA: New Riders.
- Nikiel, C. (2007). *When the wheels fall off*. Retrieved 10 June, 2013 from http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=10463411
- Noble, I., & Bestley, R. (2005). *Visual research: An introduction to research methodologies in graphic design*. Lausanne, Switzerland: AVA Academia
- Norman, D. (2004). *Emotional design: Why we love (or hate) everyday things*. (6th ed.). New York, NY: Basic Books.
- Oatway, J. (2012). *Mastering story, community and influence: How to use social media to become a social leader*. Hoboken, NJ: John Wiley & Sons, Inc. Retrieved from <http://www.ebrary.com>
- Ogilvie, T., & Liedtka, J. (2011). *Designing for growth: A design thinking tool kit for managers*. New York, NY: Columbia University Press. Retrieved from <http://www.ebrary.com>
- Ogilvy, D. (1985). *Ogilvy on advertising*. New York, NY: Vintage Books.
- O'Guinn, T. C., & Muniz, A. M. (2009). Collective brand relationships. In Macinnes, D. J., Park, C., & Whan Priester, J. R. (Ed.). *Advertising and consumer psychology: Handbook of brand relationships*. Armonk, NY: M. E. Sharpe. Retrieved from <http://www.ebrary.com>
- Olins, W. (1989). *Corporate identity: Making business strategy visible through design*. London, England: Thames & Hudson.
- Olins, W. (2001). *Our approach: IQ + EQ = \$*. Retrieved May 10, 2014 from <http://saffron-consultants.com/approach/>
- Olins, W. (2003). *Wally Olins: On brand*. (2nd ed.) London, England: Thames & Hudson.
- Peters, T. (2003). *Re-imagine! Business excellence in a disruptive age*. London, England: Dorling Kindersley.
- Phelps, E. A. (2004). Human emotion and memory: Interactions of the amygdala and hippocampal complex. *Current Opinion in Neurobiology*. (14)198-202. doi 10.1016/j.conb.2004.03.015. Retrieved from <http://language.lds.upenn.edu/myl/llog/Brizendine/Phelps2004.pdf>
- Pierson, J., Mante-Meijer, E., & Loos, E. (2011). *Participation in broadband society, volume 6: New media technologies and user empowerment*. Frankfurt, DE: Peter Lang AG.

- Retrieved from <http://www.ebrary.com>
- Pitta, D., Franzak, F., & Fowler, D. (2006). A strategic approach to building online customer loyalty. In Leventhal, R.C. (Ed.). *Customer loyalty, retention, and customer relationship management*. 23(7), 421-429. Bradford, GBR: Emerald Group Publishing Ltd. Retrieved from <http://www.ebrary.com>
- Platts, M. D. (1991). *Moral realities: An essay in philosophical psychology*. Florence, KY: Routledge. Retrieved from <http://www.ebrary.com>
- Post, K. (2004). *Brain tattoos: Creating unique brands that stick in your customers' minds*. New York, NY: Amacom. Retrieved from <http://www.ebrary.com>
- Pradeep, A. K., & Meerman, D (2010). *Buying brain: Secrets for selling to the subconscious mind*. Hoboken, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Pringle, H., & Field, P. (2008). *Brand immortality: How brands can live long and prosper*. London, England: Kogan Page.
- Prinz, J. (2011). Culture and cognitive science. In E. N. Zalta (Ed.). *The Stanford encyclopedia of philosophy* (Winter 2011 ed.). Retrieved from <http://plato.stanford.edu/entries/culture-cogsci/>
- Quinn, M. (1994). *Swastika: Constructing the symbol*. Florence, KY: Routledge. Retrieved from <http://www.ebrary.com>
- Randall, R. (2006). *Creating value with customers*. Bradford, GBR: Emerald Group Publishing Ltd. Retrieved from <http://www.ebrary.com>
- Reisberg, D., & Hertel, P. (2003). *Memory and emotion*. Cary, NC: Oxford University Press. Retrieved from <http://www.ebrary.com>
- Research for International Tobacco Control (RITC), (2003). *At what cost? : The economic impact of tobacco use on national health systems, societies, and individuals*. Ottawa, ON, CAN: International Development Research Centre. Retrieved from <http://www.ebrary.com>
- Ricca, M. (2012). The consciousness of luxury. *Best global brands 2012: The definitive guide to the 100 best global brands*. Retrieved 20 August, 2013 from <http://www.interbrand.com/en/best-global-brands/2012/downloads.aspx>
- Roberts, K. (2004). *Lovemarks: The future beyond brands*. Auckland, NZ: Reed Publishing (NZ) Ltd.
- Russell, B. (1995). *The analysis of mind*. (3rd ed.). Florence, KY: Routledge. Retrieved from <http://www.ebrary.com>
- Sangiorgi, D, & Meroni, A. (2011). *Design for services*. Surrey, GBR: Ashgate Publishing Ltd. Retrieved from <http://www.ebrary.com>
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York, NY: Basic Books.
- Schroeder, T. (2004). *Three faces of desire*. Cary, NC: Oxford University Press. Retrieved from <http://www.ebrary.com>
- Schroeder, T. (2009). Desire. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Spring 2014 ed.). Retrieved from <http://plato.stanford.edu/cgi-bin/encyclopedia/archinfo.cgi?entry=desire>
- Schumpeter. (2013). *Back to the drawing-board. Design companies are applying their skills to the voluntary and public sectors*. Retrieved March 7, 2014 from <http://www.economist.com/news/business/21580444-design-companies-are-applying-their-skills-voluntary-and-public-sectors-back>
- Scoop Media. (1999). *Novel campaign sends precedents flying*. Retrieved 10 June 2013 from <http://www.scoop.co.nz/stories/BU9911/S00084.htm>
- Sebeok, T. A., Posner, R., & Rey, A. (2010). *Approaches to semiotics [AS]: The semiotic web 1987*

- (Ed.). Berlin, DE: Mouton de Gruyter. Retrieved from <http://www.ebrary.com>
- Sherlekar, S. A., Nirmala Prasad, K., & Salvatore Victor, S. J. (2010). *Principles of marketing*. Mumbai, IN: Himalaya Publishing House. Retrieved from <http://www.ebrary.com>
- Shields, R. (1998). *LeFebvre, love and struggle: Spatial dialectics*. Florence, KY: Routledge. Retrieved from <http://www.ebrary.com>
- Siegel, S. (2013). The contents of perception. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Fall 2013 ed.). Retrieved from <http://plato.stanford.edu/entries/perception-contents/>
- Silverman, K. (1983). *Subject of semiotics*. New York, NY: Oxford University Press. Retrieved from <http://www.ebrary.com>
- Simmons, J. (2006). *Invisible grail*. Singapore, SGP: Marshall Cavendish. Retrieved from <http://www.ebrary.com>
- Simon, P. (2014). *Wiley and SAS business series: Visual organization: Data visualization, big data, and the quest for better decisions*. Somerset, NJ: John Wiley & Sons, Incorporated. Retrieved from <http://www.ebrary.com>
- Sinek, S. (2009, September). How great leaders inspire action [Video file]. Retrieved 15 November 2013 from http://new.ted.com/talks/simon_sinek_how_great_leaders_inspire_action
- Sinek, S. (2011). *Start with why: How great leaders inspire everyone to take action*. London, England: Penguin.
- Slade, B. (2014). In conversation.
- Smith, D.W. (2013). Phenomenology. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Winter 2013 ed.). Retrieved from <http://plato.stanford.edu/entries/phenomenology/>
- Solis, B. (2010). *ROI Doesn't mean 'return on ignorance'*. Retrieved July 10, 2013 from <http://www.briansolis.com/2010/08/roi-doesnt-mean-return-on-ignorance/>
- Sorman-Nilsson, A. (2013). *Digilogue: How to win digital minds and analogue hearts of tomorrow's customer*. Somerset, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Stam, R; Burgoyne, R & Flitterman-Lewis. (1992). *New vocabularies in film semiotics: Structuralism, post-structuralism and beyond*. London, England: Routledge.
- Stanton, N. (1997). *Human factors in consumer products*. London, GBR: CRC Press. Retrieved from <http://www.ebrary.com>
- Stearns, P. (1994). *American cool: Constructing a twentieth-century emotional style*. New York, NY: New York University Press.
- Stoklosa, A. (2012). Chasing the bear: William James on sensation, emotions and instincts. *William James Studies*, (9) 72-93. Retrieved from <http://williamjamesstudies.org/9.1/stoklosa.pdf>
- Stroud, D. (2005). *50 Plus market: Why the future is age-neutral when it comes to marketing and branding strategies*. London, GBR: Kogan Page. Retrieved from <http://www.ebrary.com>
- Suri, J. (2008). *Informing our intuition: Design research for radical innovation*. Retrieved from http://www.ideo.com/images/uploads/news/pdfs/Informing_Our_Intuition.pdf
- Swastika. (n.d.). In *Encyclopedia Britannica*. Retrieved March 1, 2013 from <http://www.britannica.com/EBchecked/topic/576371/swastika>
- Tam, L., Wood, W., & Mindy, F. J (2009). Brand loyalty is not habitual. In Macinnes, D. J., Park, C., & Whan Priester, J. R. (Ed.). *Advertising and consumer psychology: Handbook of brand relationships*. Armonk, NY: M. E. Sharpe. Retrieved from <http://www.ebrary.com>
- Taylor, D. (2010). *Michel Foucault: Key concepts*. Durham, GBR: Acumen. Retrieved from <http://www.ebrary.com>

- Thackara, J. (Ed.). (1988). *Design after modernism*. New York, NY: Thames and Hudson Inc.
- Thoits, P. A., & Virshup, L. K. (1997). Me's and we's: Forms and functions of social identities. In Ashmore, R. D., & Jussim, L. (Ed.). *Self and identity: Fundamental issues* (106-133). Cary, NC: Oxford University Press, Incorporated. Retrieved from <http://www.ebrary.com>
- Tischler, L. (n.d). *Seven secrets to good brainstorming*. Retrieved October 17, 2013 from <http://www.fastcompany.com/63818/seven-secrets-good-brainstorming>
- Trade it. (2008). *History*. Retrieved May 17, 2014 from <http://www.tradeit.co.nz/hi.html>
- Tufte, E. R. (2007). *Beautiful evidence* (2nd ed.). Cheshire, CT: Graphics Press LLC.
- Tufte, E. R. (2008). *Envisioning information* (12th ed.). Cheshire, CT: Graphics Press LLC.
- Vallaster, C., & Fisher, C. (2010). *Connective branding: Building brand equity in a demanding world*. Hoboken, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>
- Van Gulick, R. (2014). Consciousness. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Spring 2014 ed.). Retrieved from <http://plato.stanford.edu/entries/consciousness/>
- Veblen, T. (1898). The beginnings of ownership. *American Journal of Sociology*, 4(3), 352-365. Retrieved from <http://www.jstor.org/>
- Vincent, L, (2012). *Brand real: How smart companies live their brand promise and inspire fierce customer loyalty*. New York, NY: Amacom.
- Virgin consumers. (2013). *Trendwatching.com's free monthly trend briefing. Virgin consumers: Consumers are now enjoying endless first times on a daily basis. With you?* Retrieved from <http://trendwatching.com/trends/pdf/2013-02%20VIRGIN%20CONSUMERS.pdf>
- Wade, D. (2006). *Symmetry: The ordering principle*. New York, NY: Walker.
- Waters, J. (n.d). *Phenomenological research guidelines*. Retrieved October 1, 2013 from <http://www.capilanou.ca/psychology/student-resources/research-guidelines/Phenomenological-Research-Guidelines/>
- Weber, S. (2004). *The success of open source*. Cambridge, MA: Harvard University Press. Retrieved from <http://www.ebrary.com>
- Witman, J. (2000). *Interpretation and allegory: Antiquity to the modern period*. Leiden, NLD: Brill. Retrieved from <http://www.ebrary.com>
- Wozencroft, J. (1994). *The graphic language of Neville Brody*2. London, England: Thames and Hudson.
- Wu, T. (2013). *China's industrial revolution is happening on a new planet*. Retrieved September 19, 2013 from <http://phys.org/news/2013-09-china-industrial-revolution-newplanet.html>
- Van Der Vorst, H. (2003). *Iterative methods for large linear systems*. New York, NY: Cambridge University Press. Retrieved from <http://www.ebrary.com>
- Yap, L. (2009). In conversation.
- Yohn, D. L. (2013). *What great brands do: The seven brand-building principles that separate the best from the rest*. Somerset, NJ: John Wiley & Sons, Incorporated. Retrieved from <http://www.ebrary.com>