

Food stylists' food image creation for print media and consumer interpretation: an exploratory investigation

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Dissertation

MConSc (Food Management)

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Co-supervisor: Prof AC Erasmus

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Food stylists' food image creation for print media and consumer interpretation: an exploratory investigation

by

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Dissertation submitted in fulfilment of the requirements for the degree

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Department of Consumer Science

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Supervisor: Dr GE du Rand

Co-Supervisor: Prof AC Erasmus

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Dedication/Acknowledgements

This dedication may lie ill at ease with academe, neither does it encourage fellow or prospective students to submit their research in due time. But when I set off to do my Master's degree, I made a promise to myself that I would not allow the volume of work entailed to let life pass me by - studies would have to fit in with me living my life. So, even though this dissertation has taken longer than what is desired, I was able to simultaneously work on my career in teaching and on other wonderful aspects that the world of food offers.

My deepest gratitude to my supervisors, Dr Gerrie du Rand and Professor Alet Erasmus for their patience and daily support, particularly with a student who sought to follow a less conformist way of working. Their dedication and guidance may well be the cornerstones for me becoming a researcher. And then, of course, the people in one's life who inevitably always have to bear the brunt when studying takes place after hours or on weekends, thank you.



Declaration

I, Hendrik Johannes Fisher,

hereby declare that the dissertation for the

Masters in Consumer Science degree at the University of Pretoria,
hereby submitted by me,

has not previously been submitted for a degree at this or any other university and that it is my own work in design and execution and that all reference material contained herein has been duly acknowledged.

HENDRIK JOHANNES FISHER

10 April 2012



Summary

Title: Food stylists' food image creation for printed media and

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This study explores food image creation as an integral aspect of food styling as a profession. Q-methodology, with its five steps, guided this study. At the outset, the qualitative part of the research, interviews with South African food stylists provided guidance to develop the concourse. Food magazine readers examined a set of six selected images and matched each of them against six aesthetic indicators, also indicating their subsequent behavioural intent. For this process the Q-sort method was applied in which a predetermined sample of the readership of two of South Africa's most eminent food magazines was involved. It is a reliable psychometric technique based on photographs that is often used in non-food related contexts such as architecture and the travel industry. Quantitatively, the data was factor analysed, from which seven factors emerged that corroborated the results. Findings confirm that Q-sort is a useful research approach for non-verbal communication in settings where, through food images, the technical and artistic messaging of food stylists comes from manipulating the assembly of food image content.

It is proposed that, through non-verbal communication, food stylists who are able to purposefully create food images for print media would be able to effectively influence



consumers in such a way as to bring about changed behavioural intent and eventual purchasing. Further investigation could consider expanding the theoretical base from which food stylists could pursue ways to alter consumers' behavioural intent. Put into practice, the findings could be a guide for food stylists when compiling food images that would successfully communicate intended messages.

Keywords

Food styling, food stylist, food image, aesthetics, Q-methodology



Table of Contents

Dedi	ication/Acknowledgements ii		
Decla	aration	iii	
Sum	mary	iv	
Chap	oter 1		
The	e study in perspective	1	
1.1	BACKGROUND TO THE RESEARCH	2	
1.2 1.2.1 1.2.2 1.2.3	, ,	5 6 6 8	
1.3	JUSTIFICATION FOR THE RESEARCH	8	
1.4	METHODOLOGY	12	
1.5	OUTLINE OF THIS REPORT	14	
1.6	DEFINITIONS	15	
1.7	DELIMITATIONS OF SCOPE AND KEY ASSUMPTIONS	16	
1.8	CONCLUSION	17	



Chapter 2

Lite	Literature supporting this study		
	CLARIFICATION OF THE LITERATURE OVERVIEW	19	
2.2	REVIEW OF RELEVANT CONCEPTS	20	
2.2.1	Food styling	20	
	2.2.1.1 Food styling defined	20	
	2.2.1.2 The food styling process	21	
	2.2.1.3 Trends in food styling	23	
2.2.2	The food stylist	24	
	2.2.2.1 Internal resources employed by the food stylist	24	
	2.2.2.2 External resources employed by die food stylist	25	
2.2.3	Food images	26	
	2.2.3.1 Food images defined	26	
	2.2.3.2 Application of aesthetics within food image content creation	26	
224	2.2.3.3 Food images used in marketing	30 32	
2.2.4	The food image consumer 2.2.4.1 Visual consumption explicated	32	
	2.2.4.1 Visual consumption explicated 2.2.4.2 Food image appraisal	32	
	2.2.4.2 Tood image appraisal	32	
	2.2.4.3 Central integration	33	
	2.2.4.4 Persuasion through food image consumption and		
	Behavioural intent	34	
2.3	CONCLUSION	37	
Chap	oter 3		
Sel	ected theoretical perspectives		
and	I conceptualisation	39	
 3 1 II	NTRODUCTION	40	
J.1 II	vinebociion	40	
3.2 R	ATIONALE FOR INTEGRATING A SYSTEMS THEORY APPROACH	41	
3.2.1	Core inferences of the systems theory	42	
	3.2.1.1 The system's totality	42	
	3.2.1.2 Interrelatedness and interdependence	43	
	3.2.1.3 Equilibrium within the system	44	
	3.2.1.4 Different ways to reach a goal	44	
	3.2.1.5 Processes and activities stem from feedback	45	
	3.2.1.6 Improving food styling tasks	45	



3.2.2	Applicability to the study			
3.3	RATIONALE FOR INTEGRATING COMMUNICATIONS THEORY	46		
3.4	RATIONALE FOR INTEGRATING THE THEORY OF AESTHETICS	47		
3.4.1	, 11	47		
3.4.2	S S	49		
	3.4.2.1 Pleasure	49		
	3.4.2.2 Arousal	50		
	3.4.2.3 Dominance	50		
3.4.3	Aesthetics and cognitive experiences	50		
	3.4.3.1 Reality	51		
	3.4.3.2 Fantasy	51		
	3.4.3.3 Entertainment	51		
3.5	COMMUNICATIONS THEORY EXPLICATED WITHIN THE SYSTEMS			
	APPROACH AND AESTHETICS THEORY	52		
3.5.1	Elements of the system (inputs)	52		
3.5.2	Transformation of stimuli within the aesthetics perspective	52		
3.5.3	Outputs	53		
3.6	THE CONCEPTUAL MODEL	53		
3.6.1	Discussion of the conceptual model	55		
3.7	RESEARCH OBJECTIVES	56		
Chap	ter 4			
Res	search Methodology	58		
4.1	INTRODUCTION	59		
4.2	RESEARCH STRATEGY	61		
4.3	RESEARCH DESIGN	62		
4.4	RESEARCH METHODOLOGY	62		
4.4.1	An overview of Q-methodology	63		
4.4.2	Q-methodology explicated	64		
	4.4.2.1 Step 1 – Concourse development	64		
	4.4.2.2 Step 2 – Discourse development: the Q-sample	68		
	4.4.2.3 Step 3 – P-set development: the Q-participants	77		
	4.4.2.4 Step 4 – Q-sorting: the procedure	78		
	4.4.2.5 Step 5 – Q-sorting: data preparation	82		



	4.4.2.6 Step 6 - Data analysis and interpretation	86
4.5	QUALITY OF DATA	88
4.5.1	Conceptualisation – Theoretical Validity	89
4.5.2	Operationalisation – Construct Validity	89
4.5.3	Sampling – Representativeness	90
4.5.4	Data Collection – Reliability	90
4.5.5	Data Analysis – Inferential Validity	91
4.6	ETHICAL CONSIDERATIONS	91
Chap	ter 5	
•	sults and Discussions	92
Kes	suits and Discussions	92
		
5.1	INTRODUCTION	92
5.2	THE FOOD STYLIST	94
5.2.1	Food Styling	94
5.2.2	Demographic profile of participating food stylists	95
5.2.3	Qualifications, training and experience	95
5.2.4	Food styling in South Africa at present	98
5.2.5	Food stylists' sources of inspiration	
	(Objective 1.1)	98
5.2.6	Food stylists' conceptualisation of their source of inspiration	100
E 2 7	(Objective 1.2)	100
5.2.7	Food stylists' work methodology (Objective 1.3)	103
5.2.8	Feedback from the consumer	100
3.2.0	(Objective 1.4)	105
5.2.9	Conclusion	105
5.3	THE FOOD IMAGE CONSUMER	106
5.3.1	Consumers' view of aesthetic indicator and visual image matches	100
	(Objective 2.1)	106
5.3.2	Extraction and specification of factors	109
5.3.3	Rationale for Q-participants' Most Agree card choices	
	(Objective 2.2)	114
5.3.4	The influence on consumers' behavioural intent	
	(Objective 2.3)	121
- 4	CONCLUCION	123
5 /1	CONCLUSION	100



Chapter 6

	Conclusions, implications and recommendations		
6.1	INTRODUCTION	125	
6.2	SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND IMPLICATIONS BASED ON THE MAIN FINDINGS (PRESENTED ALONG THE 5 STEPS OF		
6.2.1	Q-METHODOLOGY) Step 1: Development of the concourse – interviews	125	
0.2.1	with food stylists	126	
	6.2.1.1 The food stylists	126	
	6.2.1.2 Food stylists' work methodologies	127	
	6.2.1.3 Food stylists' sources of inspiration	128	
	6.2.1.4 Conceptualisation of food stylists' inspirations	129	
6.2.2	6.2.1.5 Consumer accountability during the food styling process Step 2: Development of the discourse – the Q-Sample	130 131	
6.2.3	Step 3: Development of the discourse – the Q-sample	133	
6.2.4		133	
6.2.5	Step 5: Data analysis, interpretation and discussion of results	133	
	6.2.5.1 Consumer's choices of food image and aesthetic dimension matches		
	6.2.5.2 Consumer's reasons for food image choices	134	
	6.2.5.3 Effect of selected food images on consumers' behavioural intent	137	
6.3	EVALUATION OF THE RESEARCH	138	
6.3.1	Quality of the results	138	
	6.3.1.1 Validity	138	
	6.3.1.2 Reliability	138	
	6.3.1.3 Generalisation	139	
	6.3.1.4 Ethics	139	
6.3.2	Q-methodology limitations	139	
6.4	PROPOSITION OUTCOMES	141	
6.5	CONCLUSIONS ABOUT RESEARCH PROBLEM	141	
6.6	IMPLICATIONS FOR THEORY	143	
6.7	IMPLICATIONS FOR POLICY AND PRACTICE	143	
6.8	IMPLICATIONS FOR METHODOLOGY	144	
6.9	RECOMMENDATIONS FOR FUTURE RESEARCH	144	
6.10	SUMMARY	145	



Reference List	147
Addenda 1 – 6	166 – 173



List of Figures

FIGURE 1.1	:	RESEARCH PLAN SHOWING THE FIVE STEPS OF Q-METHODOLOGY	13
 FIGURE 3.1	:	FOOD-RELATED BEHAVIOURS (CARDELLO 1994: 254)	54
FIGURE 3.2	:	CONCEPTUAL MODEL	54
 FIGURE 4.1	:	FIVE STEP Q-METHODOLOGY PROCESS FOR THIS STUDY	65
FIGURE 4.2	:	STEP 1 OF Q-METHODOLOGY	66
FIGURE 4.3	:	STEP 2 OF Q-METHODOLOGY	68
FIGURE 4.4	:	INITIALLY SELECTED FOOD IMAGES	72
FIGURE 4.5	:	FINAL FOOD IMAGES	75
FIGURE 4.6	:	FINAL DATA COLLECTION TOOL	77
FIGURE 4.7	:	STEP 3 OF Q-METHODOLOGY	78
FIGURE 4.8	:	STEP 4 OF Q-METHODOLOGY	78
FIGURE 4.9	:	STEP 5 OF Q-METHODOLOGY	87
 FIGURE 5.1	 :	FOOD STYLISTS' QUALIFICATION	97
FIGURE 5.2	:	FOOD STYLISTS' WORK EXPERIENCE	97
FIGURE 5.3	:	MAGAZINE AND PRODUCT BRANDS USING FOOD STYLISTS' SERVICES	98
FIGURE 5.4	:	FOOD STYLISTS' WORK CATEGORIES	100
FIGURE 5.5	:	FOOD STYLISTS' INSPIRATION: PEOPLE AND PUBLICATIONS	102



FIGURE 5.6	:	THE THREE 'CORRECT' CARDS REMOVED DURING THE RELIABILITY PROCESS	108
FIGURE 5.7	:	FACTOR 1: THREE CARDS (12, 18 AND 30)	109
FIGURE 5.8	:	FACTOR 2: THREE CARDS (17, 11 AND 29)	110
FIGURE 5.9	:	FACTOR 3: THREE CARDS (24, 23 AND 20)	111
FIGURE 5.10	:	FACTOR 4: TWO CARDS (14 AND 18)	112
FIGURE 5.11	:	FACTOR 5: TWO CARDS (25 AND 26)	112
FIGURE 5.12	:	FACTOR 6: THREE CARDS (13, 31 AND 7)	113
FIGURE 5.13	:	FACTOR 7: THREE CARDS (32, 36 AND 35)	114
FIGURE 5.14	:	FUN AS A REASON: FIVE CARDS	117
FIGURE 5.15	:	EXOTIC AS A REASON: NINE CARDS	118
FIGURE 5.16	:	ENTICING AS A REASON: NINE CARDS	118
FIGURE 5.17	:	CARDS REPRESENTING CONSUMERS' MAIN REASONS	119
FIGURE 5.18	:	THREE CARDS WITH PERCENTAGES OF 70% AND ABOVE TO CHANGE BEHAVIOURAL INTENT	122



List of Tables

TABLE 4.1	:	DATA ERRORS AND CORRECTIONS MADE	84
TABLE 4.2	:	EXAMPLE OF THE INVERTED DATA SET	84
TABLE 5.1	:	FACTORS IDENTIFIED DURING FACTOR ANALYSIS	107
TABLE 5.2	:	REASONS FOR Q-PARTICIPANTS' MOST AGREE CHOICES	115
TABLE 5.3	:	REASONS FOR MOST AGREE CARDS: ROW PERCENTAGES	116
TABLE 5.4	:	MOST AGREED CARD CHOICES: REASONS AS PERCENTAGES	120
TABLE 5.5	:	LIKELIHOOD THAT CONSUMERS' BEHAVIOURAL INTENT	
		COULD CHANGE (%)	121

xiv



List of Addenda

ADDENDUM 1:	
FOOD STYLISTS' INTERVIEW SCHEDULE	167
ADDENDUM 2:	
ADAPTED INTERVIEW SCHEDULE FOR USA FOOD STYLISTS	168
ADDENDUM 3:	
AESTHETIC INDICATOR AND FOOD IMAGE EXPLANATION CARD	170
ADDENDUM 4:	
Q-SORT INSTRUCTIONS	171
ADDENDUM 5:	
SCORE CARD	173
ADDENDUM 6:	
LANGUAGE EDITOR'S LETTER	175



Chapter 1 (contents)

The study in perspective

1.1	BACKGROUND TO THE RESEARCH	2
1.2 1.2.1 1.2.2 1.2.3	Theories, issues and propositions	5 6 6 8
1.3	JUSTIFICATION FOR THE RESEARCH	8
1.4	METHODOLOGY	12
1.5	OUTLINE OF THIS REPORT	14
1.6	DEFINITIONS	15
1.7	DELIMITATIONS OF SCOPE AND KEY ASSUMPTIONS	16
1.8	CONCLUSION	17



Chapter 1

The study in perspective

This chapter provides the background and rationale for the study and states the research problem as well as the concepts relevant to the study.

1.1 BACKGROUND TO THE RESEARCH

In today's world, consumers are persistently bombarded with an onslaught of advertising. Expenditure on food advertising by the food manufacturing industry runs into billions of dollars in the United States of America per annum (Gallo 1999: 173). Food marketing, the force behind food advertising, is the study of individuals or groups of consumers, within which market research can, on a micro-level, identify consumer behaviour that, in turn, can be related to product strategy, promotion and advertising, market-channel organisation and pricing strategy (Schaffner, Schroder and Earle 1998: 51).

In most societies where food supply, safety and nutrition are more than adequately provided for, other issues relating to consumers' food choices have grown in importance (Clark 1998: 639). Consumers have developed strong preferences for products with an appealing appearance, and in a food choice situation, products with the greatest appeal will be chosen first (Imram 1999: 227), much like chef turned cook book author Marken Jensen (2011: 15) writes that 'put bluntly, if it doesn't look good, we won't buy it'. In a compilation of Great writers at the Table, Eat, Memory (2009: 12), author Amanda Hesser states that 'the food doesn't matter, really. What it evokes does". Foods are evaluated by consumers not only in terms of their physical manifestation, but they are also drawn to, and find that they are ultimately attracted to food in print format. Food is mostly encountered through seeing it with our eyes (Dornenburg and Page 2005: 81; Cardello 1996: 11; Perriseau1995: 54). Food should look good enough to eat: an everyday layman's saying is clarified by Plimmer



(1988: 7) when he states that "we spend more time with our food – growing it, catching it, buying it, cooking it, eating it... [that gastronomy is] a multi-sensual and not merely a gustatory art, with food savoured almost as much for its visual appeal as for its flavour". Throughout its history Japanese cuisine has taken for granted that food has to be looked at with appreciation as well as being eaten with pleasure and that "in Japan the eyes are at least as large as the stomachs" (Richie 1992: 9). Food images in magazines are an excellent way to communicate an intended message, such as a persuasive message to make or buy such foods (McNutt 2008: 97).

Food images have, as their core intention, the goal of making food look its absolute best to entice consumers, and for every picture to tell and sell a story (Vivaldo 2010: 14). Research has shown that "images operate in a manner analogous to writing in more detail" (Scott and Vargas 2007: 353). Consumers react to images in many ways. By virtue of their very nature images illicit a variety of responses related to their content, overall aesthetic appeal, or a combination of both these facets (Fedorovskaya, Neustaedter and Hao 2008: 121). Food images are complex, carefully planned creations (Lee 1999: 1) and not just the product of a photographer clicking randomly. They are highly conceptualised ideas captured by experienced photographers (Custer 2010: 79). The content of the image is assembled by a team of people often headed by the food stylist.

The food stylist is an artist who uses food as the medium (Vivaldo 2010: 14). Specific food styling techniques are used by food stylists employed by restaurants, the media world, advertising agencies and similar organisations to create visually appealing food images. Food stylists use their talent for spatial design, design principles, colour techniques (to name but a few) to style individual items - including the food - in such a manner that the final product will draw attention and impress the viewer. To do this, the backdrop, crockery and cutlery that serve as props, as well as the food, are thematically and intentionally arranged to create a specific impression. The application of specialised techniques further enhances the picture, for example, to squirt fine mist on the outside of a drinking glass to simulate natural condensation so that the food looks fresh and more appetising.



Food stylists implements the wishes of the marketing teams through their knowledge and experience of food, fashion, style, trends, seasons and other aspects relevant to the theme. They collect the props or may use a separate props stylist (Custer 2010: 90), and, in most cases, they prepare, cook and present the food (Cox 2006: 144) with a magician's bag of tricks, to make the content of the images look appealing, appetising and natural (Carafoli 2007:9). The style or feel of the image is generally discussed or brainstormed during pre-production meetings that involve the media agency, the client, the photographer and the stylist, amongst others (Custer 2010: 51). These debates aim to conceptualise and summarise the overall creative aspects and final look of the image(s). The food stylist, with years of experience in different fields, such as cooking, art, marketing or even advertising, styles the images for the photographer to shoot. Such descriptive concepts, imparted by the stylistic properties of the image, are discerned by viewers (Peracchio and Meyer-Levy 2005: 39) and the style or appearance is the overriding criterion for success (Young, Ott and Feigin 1978: 406).

Consumers' experiences result from messages coming simultaneously from a number of senses. A consumer can see, smell, feel and taste food all at once (Bal 2005: 53). In the realm of food images, only the visual senses come into play. For example it is possible that the printing ink, the quality of the paper and other purposefully selected stimuli could affect a consumer's sensory experience. However, this researcher considered minor influences on consumer experience as negligible. Desmet and Hekkert (2007: 59) distinguish three components of product experience: aesthetic pleasure (sensory experience), attribution of meaning (the cognitive experience) and emotional response. Even though they can be conceptualised separately, they are very much intertwined and often difficult to distinguish. "We experience the unity of sensuous delight, meaningful interpretation, and emotional involvement, and only in this unity do we speak of an experience" (Desmet and Hekkert 2007: 61). Consumers can only imagine what the foods would taste like, what it may smell like and, if sound is involved, hear a noise, as would be the case with the breaking sound of pork crackling. The pleasurable aspects of food in image format then steer them into the neighbouring domains of aesthetics and involvement of the senses (Bal 2005: 53).



Empirical data regarding the relationship between the visual aspects of food and our liking of the product is limited (Zellner, Lankford, Ambrose and Lochner 2010: 575). Consumers appear to not have been involved in research initiatives on this topic. Marketers spend an enormous amount of money on consumer research to benefit their advertising campaigns, but hardly any literature could be found where mention is made of consumers being consulted about their aesthetic experiences when viewing food images. A whole chapter of the book *Food Marketing – an International Perspective* (Schaffner *et al.* 1998: 74) is devoted to consumers' concerns about food products in terms of nutrition, safety, shelf-life and other related themes, but nothing is reported on how the non-physical attributes affect consumers' consumption, choice intent or buying behaviour.

Food stylists therefore have limited feedback about how consumers see their styled food images and are persuaded by them. Even less data is available in terms of statistics that provide sales figures of products illustrated by images styled in a particularly and relevant way. It is common knowledge that we eat with our eyes first, but it is not clear whether the way in which food is portrayed using images, is directly related to how well it sells. Food stylists work predominantly on a gut feeling, and this intuition is guided and influenced by a multitude of factors. If consumers who view a food image, and subsequently have very pertinent aesthetic experiences, it would be of benefit for the food stylists to know this, and understand how people experience the aesthetics in the images. Marketers, of course, depend heavily on these assumed sensory experiences, and consequently pay food stylists handsomely to make their food products look their absolute very best. "Marketers need to focus on providing attractive pictures that evoke positive affects" (Jun and Holland 2012: 205). Marketers would almost certainly be able to use such information in streamlining their briefs to advertising agencies that, in turn, can ensure that the desired aesthetics are in accordance with consumers' experiences when they view those images. With this increased positive aesthetic experience consumers may well adapt their choice intent, an action that could ultimately influence their buying behaviour.

1.2 RESEARCH PROBLEM, RESEARCH ISSUES AND CONTRIBUTION

Most of what has been published on the topic of food styling to date revolves around techniques and processes used to ensure impressive-looking food for photographs



(Young 2012; Custer 2010; Vivaldo 2010; Bellingham and Bybee 2008; Carafoli 2007; Cox 2006). Little empirical evidence is available to disclose where food stylists derive their inspiration or whether consumers are actually considered in any way during the process of food styling. Only limited literature (and mostly in non-food fields) could be found to indicate how food images are construed by consumers, whether the aesthetics of an image could change the persuasive influence of an image; to convince someone to order an appealing item on the menu; to buy it in a store; to try out a recipe; or to pay more attention to the dish that is portrayed in the magazine. It thus seems that food styling as it is done at present is not necessarily founded on properly documented theory, and that, for the sake of this growing industry, the lack of conceptual theory for training purposes and marketing should be addressed without delay. Design and design principles in their most elementary form apply as much to food as they do to interior decorating and clothing and fashion – documenting empirical evidence about food styling and its influence in terms of consumers' choices and purchase decisions therefore seems long overdue.

1.2.1 Research question

How does food image creation done by food stylists for printed media take place; and, how, why and to what extent do consumers react and interpret such food images?

The research argues that consumers mostly react to predetermined images matched with particular aesthetic indicators in a heterogeneous manner, but these reactions may not correspond entirely with what food stylists intended when using their stylistic abilities to encode specific messages.

1.2.2 Theories, issues and propositions

Two major bodies of theory, namely communications theory (as a type of systems theory) and the theory of aesthetics were applied in this study in an integrated manner. The role players came from the food marketing world and were represented



by the food stylist and the consumer. The theories on which this study was based are dealt with in detail in Chapter 3.

Communication through the media allows people to change their beliefs, attitudes and behaviour towards products (Verbeke and Viaene 2001: 299). Advertising, as part of marketing, is seen as a form of persuasive communication that tries to convince consumers to do something, typically to buy something (Pracejus, Olsen and O'Guinn 2006: 82). Appearance is important in communicating information to consumers, and will elicit from consumers a variety of psychological responses, both cognitive and affective (Bloch 1995: 19). The passing on of information, or the process of establishing a commonness or oneness of thought between a sender, in this case the food stylist, and a receiver, the consumer, is what is aimed for during the communication process.

Systems thinkers such as Von Bertalanffy, Boulding, Rapoport and Klir (in Mora, Gelman, Forgionne, Petkov and Cano 2007: 2), described many core properties of the systems approach of which wholeness, purposefulness and inter-connectedness are common to communication as a systems approach. Within a systems approach, the image brief, the food stylist's artistic abilities, training and education, the food and prop qualities represent the system's input, while the output is consumers' reaction to the image created (Heylighen, Cilliers and Gershenson 2007: 121). The conceptual model (Figure 3.2) and section 3.6.1 presents a detailed exposition of communications theory as implemented according to the systems approach.

The philosophical discipline of aesthetics of the eighteenth century reasoned that "in the enjoyment of beautiful objects we experience something that cannot be captured by the discursive tools of reason" (Rueger 2009: 181). Alexander Baumgarten, however, attempted to establish aesthetics as a science of the analogonrationis, since aesthetics can also "integrate the experience of beauty into a philosophical framework in which the relevant pleasures have to be accounted for as a consequence of perception of some perfection or other" (Rueger 2009: 181). Consumers therefore adopt an aesthetic attitude towards a food image when viewing it, undergo some kind of aesthetic related experience and behave accordingly.



1.2.3 Contribution of this study

The contribution this study makes is to offer data and discussion on an investigation into how consumers interpret food stylists' food images for print media. It presents:

- the demographic profile of participating food stylists
- food stylists' qualifications, training and experience
- comment on food styling in South Africa at present
- food stylists' creativity and inspirations
- food stylists' conceptualisation of their inspirations
- food stylists' work methodology
- feedback received from consumers
- consumers' views: matching food images with aesthetic indicators
- consumers' choices of food images: a rationale
- the influence of food images on consumers' behavioural intent.

1.3 JUSTIFICATION FOR THE RESEARCH

Research done in the so-called visual domain is prolific. Endeavours are numerous and varied, and include expressions of appraisal, consumer judgement, visual analysis, decoding of visual stimuli and visual consciousness and persuasive imagery. These are examples of the array of themes in the field. Even more extant literature that pertains to food in image format is available, most of which is sensorial in nature, for example, how consumers respond to the colour of food. Hardly any scientific research regarding the creation of food images in print format could, however, be found. Existing theory on food styling per se is limited. Phillips (1997: 77) confirms this, commenting that, surprisingly, little research has been done, particularly to determine how consumers read and interpret images, despite the increased use of complex visual images. Possibly for the same reason, Lea-Greenwood (1998: 325) refers to the neglect in visual merchandising research, suggesting that it may have to do with the fact that these areas that concern perceptions of creativity are areas that are difficult to test. Extant theory on food styling and created food images are limited to instructions and techniques that are



used to manipulate the food and props used for the sake of successful photography to ensure that the food in images is presented as visually appealing as possible (Long 2006: 5; Smith 2004: 2; Choice 2002:3; Perriseau 1995: 56; Kleinman 1990: 13).

Nowadays food is intentionally created and styled to compose very attractive images that are meant to make food visually irresistible - especially for photography and the increased importance of photographic images in hospitality (Pullman and Robson 2007: 124) where food in image format is used as a marketing tool to promote products and encourage sales (Long 2006: 1; Bowen and Morris 1995: 4).

Food images are particular types of images, created by food stylists to communicate an intended message. In the June 2009 issue of the international lifestyle magazine *Martha Steward Living* (Towey 2009: 6) the editor relates readers' applause for the magazine's photographs. He accentuates how powerful photographs are to communicate inspiration, to convey information and to deliver, what he calls 'an emotional punch'. His point illustrates the importance of this study and how useful knowledge of consumers' emotional and cognitive responses can be for the print media world.

Contrary to the fashion and interior industries where trends are communicated well in advance from one season to another, it is not clear where food stylists get their inspiration from when styling food images. Limited evidence could be found to confirm that consumers are, in fact, acknowledged in any way when food stylists plan, perform and implement their artistic creations. Nor is it clear how the working processes and art of food stylists, such as their use of composition, colour, the stylisation of the food and other associated aspects, affect the way that consumers react to food images when they see them. Food images that are created by food stylists are mostly meant to convey specific messages to the viewer of the image which is likely to be a product consumer (Peter and Olson 1994: 186). Examples of these purposes are the intention to order a meal; to buy the food products; or to attempt to create the dish themselves (DeFleur and Ball-Rokeach 1989: 31). In the food styling process as it stands today, it is unclear whether the intended meaning is actually interpreted by the consumer correctly, and whether consumers are taken into



consideration at all when these food images are created, and how a food stylist can use this knowledge to alter a message intentionally. It is suggested, however, that consumers do make purchase decisions based on the influence of an image (Bolan and Williams 2008: 382).

Consumers view images and react to the aesthetic dimensions of the images. Theories relating aesthetics to marketing remain underdeveloped, most notably within the domain of consumer behaviour research. Apparently this is because marketers tend to resist areas of understanding that are intangible, irrationally driven and hard to measure, like having to deal with symbols, myths, legends, arbitrary beliefs and fantasy. While it is common knowledge that food images in printed media are used as a marketing tool, it is not known whether these images significantly affect consumers' buying and choice intentions, like ordering an appealing item on the menu, trying out a recipe from a magazine or paying more attention to the dish or product that is portrayed in the image. Empirical evidence in terms of these suggestions would cover this gap theoretically, so that prospective food stylists and students who wish to pursue careers in the food and the hospitality industries could base their methods on substantiated theory, rather than to follow a trial and error route that could lead to disaster.

Inevitably a focus on food images and aesthetics, with the inclusion of all the related existing theories may instigate the use of alternative research methodologies in the food and hospitality domain. In itself this would provide new and interesting opportunities for future research. Empirical evidence of how food images could be altered to influence consumers' buying decisions could be optimised to strengthen marketing and promotional messages, and to enhance informed, responsible buying decisions, for example, to promote healthy eating patterns in a creative, non-threatening manner. Findings would also link the inherent power of the messages created through food styling to a world of research in the clothing, interior and architectural domains. This which would be invaluable in terms of adding to the existing literature.

Food styling incorporates the art and working methods used to style food and surrounding contexts. The growing space taken up by magazines and cookery books



on magazine stands in recent years (Ketchum 2005: 217) demonstrates the apparent increased interest in food in image format. In this respect, South Africa's own *Food and Home*, Woolworths' *Taste* magazine, Pick 'n Pay's *Fresh* magazine provide evidence of this country holding its own internationally quite ably, and certainly not lagging behind as far as current trends in the field are concerned. Without exception, much effort is put into the highly attractive food images on magazine covers and in almost all of their glossy pages. Many food magazines even have specific target groups in mind: the very consumer-specific food magazine "*Beef*" aimed at German male readers, or "*Olive*", a relatively new British food magazine that particularly targets people in their 30s who eat out frequently, thus focuses on images related to dining in restaurants (Durham 2004: 19).

In the print media, food images are presented to appeal to readers' visual senses. Modern cookery books are far more appealing than those of the past that seldom contained any pictures, apart from simple preparation-stage photographs. Nowadays photographic images on menus in restaurants are conjured up by chefs to literally lead customers into yielding to temptation - even simply, the brief sight of a designer burger that is alluringly displayed on a billboard draws attention. Viewers literally salivate seeing these food images and the more daring may even be inspired to recreate them at home. In addition, entire television channels are dedicated to food and food preparation emphasising the visual appeal of food, for example, the South African pay-channel DSTV Food Network and BBC Carlton Food Network of the 1990s.

It is therefore clearly evident how useful the application of this information will be for the marketing and advertising industry as well as for educationists and consumer facilitators. At the moment food stylists create food images predominantly in an intuitive way, not really knowing what behavioural intent consumers will display when viewing their images. Empirical evidence of how the aesthetics of food images can be manipulated to alter consumers' behavioural intentions, and how marketing and advertising can be far more focused and precise. Similarly educationists and consumer facilitators could be more successful in conveying important nutrition-related information in a creative, interesting way.



1.4 METHODOLOGY

Q-methodology was the broad methodology used throughout this study, and included both qualitative and quantitative research strategies that were followed within the five recognised steps of Q-methodology (refer to Figure 1.1).

Q-methodology was first introduced to the scientific world by Dr. William Stephenson in 1935. It was used in this particular research endeavour because it is broadly philosophical rather than narrowly pragmatic, which is ideal where the purpose for using it is theoretical as well as task-related. Q-methodology comprises five predetermined steps and was considered fittingly suited for this study because it does not require a large number of subjects. Furthermore, it has the capacity to reveal characteristics independent of the distribution of that characteristic relative to other characteristics of the investigation (Van Exel and De Graaf 2005: 2). It combines qualitative and quantitative analysis to provide a systematic and rigorous means of objectively describing human subjectivity. Social perspectives are coherent patterns of opinion about a topic. They rarely match the individual's view completely, but those that match the social perspective defines it more closely, and in the numerical analysis that Q-sorts offers, means that they would be closer to the social perspective (Webler, Danielson and Tuler 2009: 11).

Q-methodology offers a unique opportunity to distinguish salient groupings within the population that have similarly structured attitudes towards an image object, such as food images. Therefore, instead of segmentation on the basis of the target audience's background characteristics, the Q-sort method results in segmentation on the basis of functional, content-specific criteria. Furthermore, it offers formal and well-defined data collection approaches that can be analysed statistically. In the eyes of Q-participants it was also an interesting way of collecting data, particularly in the typically busy times of this modern era when people's willingness to participate in questionnaire-based research is definitely decreasing. Moreover, many of the Q-participants even enjoyed engaging in the actual Q-sort. Q-methodology was also particularly suitable for this exploratory image research, as it provided a cost- and time-effective means for detailed exploratory, targeted research (Ten Klooster, Visser and De Jong 2008: 516).



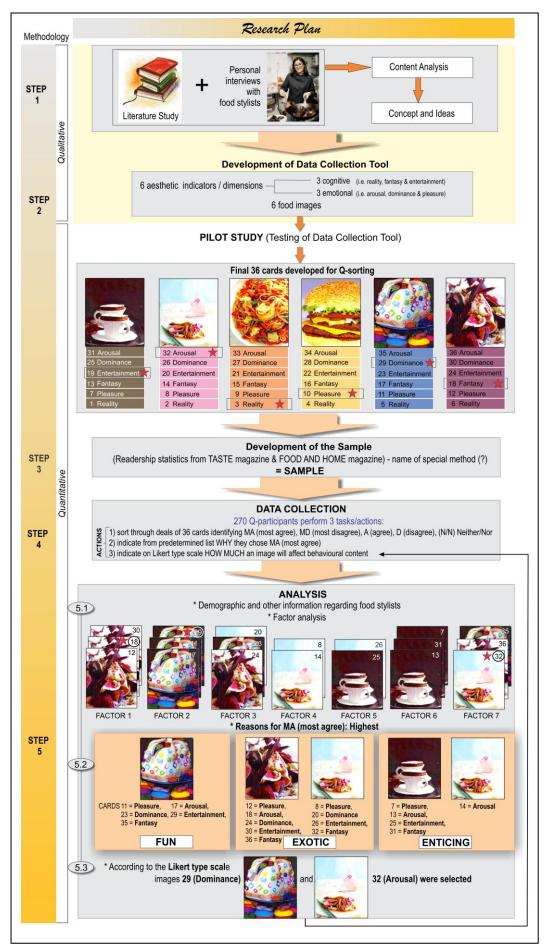


FIGURE 1.1: RESEARCH PLAN SHOWING THE FIVE STEPS OF Q-METHODOLOGY



During Step 1 of the five steps of Q-methodology the working methods of South African food stylists and their conceptualisation process were investigated, as well as their opinion as to whether and how they believed consumers were accommodated during the food styling process. Step 1 sought to obtain core concepts that were used in step 2 during which the data collection tool was developed. Step 3 determined the sample. In step 4, three specific objectives were addressed. The first objective was to determine how consumers viewed specific food images, and how they matched with three particular cognitive experiences (reality, fantasy, entertainment) and three particular emotional (arousal, dominance, pleasure) indicators, operationalised in accordance with the literature and the results from step 1 (Fiore and Kimle 1997; Desmet and Hekkert, 2007; Chuang and Chen 2008). The results confirmed the power of food images to communicate important information to consumers (Fisher, Du Rand and Erasmus 2012:446). Lastly, the two remaining objectives were addressed in this step, namely to determine and describe the reasons for consumers' particular food image and aesthetic indicator choices, and how much they believed the images altered their behavioural intent.

An integration of communication theory structured within a theoretical systems framework and aesthetics theory provided the theoretical platform to organise the content and to order and discuss the findings of this study.

1.5 OUTLINE OF THIS REPORT

This study consists of six chapters that are summarised as follows:

Chapter 1: the introductory chapter offers some background to the research, identifies the research problem, the theories and propositions it encompasses and the contribution it makes to the wider study field. Justification for the research is offered, a brief discussion of the methodologies is offered and the chapter ends with definitions and delimitations.

Chapter 2: this chapter introduces the relevant concepts, namely food styling, the food stylist, food images and the food image consumer.



Chapter 3: in chapter three, the two main selected theoretical perspectives are discussed. Communications theory is dealt with as a systems approach, and the theory of aesthetics used in this study is presented.

Chapter 4: this chapter covers Q-methodology that was used extensively in this study. Justification for the methodology, the research strategy and design is also offered and the chapter ends with some ethical considerations.

Chapter 5: the results and discussion chapter of this study offers some demographic, training and experience information from the food stylists interviewed for this study. It is followed by dialogue concerning the individual study objectives.

Chapter 6: the last chapter of this dissertation offers conclusions about the different research issues as well as the implications for theory, policy and practice, limitations and implications for methodology and suggestions for further research.

1.6 DEFINITIONS

Food styling - "...the little-known art of manipulating and controlling all

the physical elements in a photograph to create an

effective image" (Cox 2006: 3).

Food stylist - persons who prepare food to feed the eyes and the

imagination (Custer 2010: 7).

Central integration - the process that takes place in the mind of the food image

viewer when viewing a particular food image and

consequent reaction to the image.



Behavioural intent - the reaction that a consumer has when viewing a

particular food image and that reveals the slightest

positive interest in the food image.

Aesthetics - the appreciation of formal, expressive, or symbolic

qualities of a product or an environment that results in

pleasure or satisfaction (Fiore, 2010: 4).

1.7 DELIMITATIONS OF SCOPE AND KEY ASSUMPTIONS

Magazines are considered excellent tools for marketing opportunities and to communicate messages (McNutt 2008: 97). In the case of a printed image, the first judgement of the product is made visually, that is, through sight (Bloch, Brunel and Arnold 2003: 551). Sight enables interpretation of size, shape and colour of foods, as well as characteristics such as transparency, opaqueness, turbidity, dullness and gloss (Charley 1982: 1). One may assume that a great deal of effort will be put into an image in order to attract attention. Only printed images were used in this study, even though food stylists also work on motion pictures. Future studies in this area could therefore include motion pictures and other forms of media where food images might be available, such as packaging, billboards, the internet and similar situations.

For this study it was assumed that all food images are created to elicit optimal sensorial pleasure – they are created to make the food as attractive, beautiful and pleasing as possible. Apart from the visual aspects of food in image format, none of the other experiences, such as smell, taste, sound, feel, and other recognised stimuli that are associated with the visual appeal of physical food, were relevant here and were therefore not considered. The aesthetics of food in pictorial format could therefore be best investigated on either an emotional or a cognitive level.

It is important to note that, even though predominantly positive aesthetic indicators were used in this study, unpleasant and conflicting experiences might also certainly exist. A consumer may well, for example, find the image of a chocolate cake appealing, but have an equally unpleasant experience when the image obstructs reaching a goal, such as to lose weight (Desmet and Hekkert 2007: 63).



1.8 CONCLUSION

Chapter 1 has provided the groundwork for this study. It introduced the research problem and research issues. The research was justified, definitions were presented, the methodology described and defended, the report outlined and limitations offered. With this foundation in place, further description of the research procedure continues.

Knowledge of consumers' emotional and cognitive experiences when viewing food images can greatly improve the way food stylists interpret and execute the way they style the content of food images. The following excerpt from a novel (Robbins 1990: 1) clearly relates the passion and heat of human's emotional behaviour towards the colour of vegetables. Much scientific research exists regarding consumer reactions to food of a particular colour, but very little of this study involves consumer's emotional and/or cognitive behaviour towards the visual appeal of food, which includes much more than just the colour of particular food products.

"The beet is the most intense of vegetables. The radish, admittedly, is more feverish, but the fire of the radish is a cold fire, the fire of discontent not of passion. Tomatoes are lusty enough, yet there runs through tomatoes an undercurrent of frivolity. Beets are deadly serious. Slavic peoples get their physical characteristics from potatoes, their smoldering in quietude from radishes, their seriousness from beets. The beet is the melancholy vegetable, the one most willing to suffer. You can't squeeze blood out of a turnip...The beet is the murderer returned to the scene of the crime. The beet is what happens when the cherry finishes with the carrot. The beet is the ancient ancestor of the autumn moon, bearded, buried, all but fossilized; the dark green sails of the grounded moon-boat stitched with veins of primordial plasma; the kite string that once connected the moon to the Earth now a muddy whisker drilling desperately for rubies.

Of course, there are white beets, beets that ooze sugar water instead of blood, but it is the red beet with which we are concerned; ..."



Chapter 2 (contents)

Literature supporting this study

2.1	CLARIFICATION OF THE LITERATURE OVERVIEW	19
2.2	REVIEW OF RELEVANT CONCEPTS	20
2.2.1	Food styling	20
	2.2.1.1 Food styling defined	20
	2.2.1.2 The food styling process	21
	2.2.1.3 Trends in food styling	23
2.2.2	The food stylist	24
	2.2.2.1 Internal resources employed by the food stylist	24
	2.2.2.2 External resources employed by die food stylist	25
2.2.3	Food images	26
	2.2.3.1 Food images defined	26
	2.2.3.2 Application of aesthetics within food image content creation	26
	2.2.3.3 Aesthetics defined	27
	2.2.3.4 Food images used in marketing	30
2.2.4	The food image consumer	32
	2.2.4.1 Visual consumption explicated	32
	2.2.4.2 Food image appraisal	32
	2.2.4.3 Central integration	33
	2.2.4.4 Persuasion through food image consumption and	
	behavioural intent	34
2.3	CONCLUSION	37



Chapter 2 Literature supporting this study

This chapter provides an overview of existing literature regarding food stylists' creation of food images as a form of art and as a marketing tool. Relevant constructs and theory pertaining to food styling, the food stylist, food images, aesthetics and consumer behaviour are clarified.

2.1 CLARIFICATION OF THE LITERATURE OVERVIEW

Food styling, the alluring art of creating stunning, breathtaking food photographs that "pop off the page", as Suplee (2008: 26) describes it, is a relatively new and growing profession that integrates the pursuits of creative food stylists in an endeavour to construe and present anything from very ordinary to extra-ordinary foods and/or ingredients as impressive food images. The efforts of the food stylists are generally meant to entice the palates of consumers and to sway consumer decision-making. The intricate topic of food styling involves inter alia the diligence of gifted individuals who apply their skills through an interpretation of aesthetic principles in a seemingly effortless manner to produce food images that are used in print media, and in various other ways, to communicate persuasive messages. As a communication tool, these images attract the attention of consumers and may ultimately convince them to linger longer mulling over the composition portrayed, and eventually purchase the product or attempt to reproduce it.

A review of literature that pertains to this study provides the theoretical support and serves to justify an investigation that attempts to establish an understanding of food styling as an art form and marketing tool. It pays particular attention to the prominent elements: first, the food stylist's profession or food styling per se (section 2.2.1) and the food stylist (section 2.2.2), as the creator of food images; second, food images



(section 2.2.3) that are the sophisticated presentation or construction of the food image through the application of aesthetic principles incorporating particular aesthetic indicators as an art form, and their potential to serve as a marketing tool to impress consumers and/or to convey a particular message within a particular context; third, and in the last section (2.2.4) the food image consumer who consumes food images visually. These three constructs are subsequently discussed in relation to two prominent theories (chapter 3) in the academic thinking, communications theory that reflects a systems perspective, and aesthetics theory, the basic assumptions of which also pertain to contexts such as clothing, fashion and interior design. In chapter 3 these relevant concepts are brought together finally and presented as the conceptual framework (Figure 3.2) designed for the study.

2.2 REVIEW OF RELEVANT CONCEPTS

2.2.1 Food styling

2.2.1.1 Food styling defined

Food styling is described as an all-inclusive creation of evocative food images that is emerging as a creative scientific and artistic field in the twenty-first century. A distinction is made between editorial food styling that is intended to draw people into the experience of the food, and advertising that aims to capture the perfect vision of the food (Custer 2010: 21). Whatever route is pursued in food styling, it seems as if consumers' needs, preferences and reactions, understanding and expectations (Hutchings 2003: viii) are seldom acknowledged and are even disregarded in the planning of food images (Bhoovaraghan, Vasudevan and Chandran 1996: 232).

Where food stylists derive their inspiration to create images within a specific fashion or trend season is unclear: food styling is an almost magical, often make-believe, transformation of food and other items into masterpiece photographs, very similar to the creation of any other artist (Schoen 1944: 120), only in this instance it involves the transformation of food and additional items such as crockery and cutlery for which the term 'platescapes' is used (Sobal and Wansink 2007: 126), napery and other props, integrating themes, backgrounds and décor to construct food images (Burton 2002: 113). These images are mostly photographed to be used in magazines,



advertisements and on television (Griffith Sine Anno), mainly for marketing and advertising purposes.

Food images may vary depending on the food stylist and the context in which they will be used, and can range from the 'hyper-real' that represents products that Lock (2003: 208) describes as "succulent over-detail" to surreal images. In one of the few publications to date that examines the emergence of the culinary world as an art form, food per se is described as an emotional experience as well as a social, an existential physiological and a psychological experience (Dornenburg and Page 2006: 12, 25). Many others have in the past also referred to food as 'art' in contexts in which the visual intent and aesthetic appeal take prominence over nutritive, physiological intent (Wolff 2006: 290). It is, for example, argued that vegetarian food suffers from its functionality and consequent lack of aesthetics and beauty (Ross 1999: 25). Food styling is even more significant in terms of its potential impact when presented in picture and/or printed format because its success and persuasive influence will then rely on visual appeal only, without support of the other senses (Bal 2005: 53).

2.2.1.2 The food styling process

There are seldom pre-determined guidelines for food stylists to achieve the most perfectly styled food image (Carafoli 2003: 96). During a typical photo session, a stylist would arrange, and keep rearranging, food and additional items until a satisfactory, visually-appealing image is photographed. Food stylists and photographers are even accused of occasionally adjusting facts and manipulating composition to make things appear tidier than they really are (Morgan and Welton 2009: 65).

Food stylists often also have pre-production meetings with various role players who are involved in the creation of food images, such as the food stylist, a props-stylist, the client (for example, the editor of the magazine or product representative), the creative department of the advertising agency and the photographer. During such a meeting ideas are exchanged and consensus is reached on the type of image that is required. These ideas are often vague and may be typical of the copywriter's trade where informal or implicit theories rather than formalised theories of communication



guide the process (Kover 1995: 596). There may be times, however, when ideas are meticulously planned "down to the amount of fizz in the soda" (Lee 1999: 2). The entire brief "from getting the call to invoicing" (Custer 2010: 35) for an image would include the location, time, image format, the style that the content should stand for, the actual food product or products, various additional thematic props as well as possible trends to follow and finally the target market (Baga-Reyes 2006: 1; Green 1996: 49). The food stylist either sources all the props (derived from the term 'properties', used in theatre and in film to describe the necessities to create a realistic context on stage or set) on own initiative, or has additional stylists (referred to as prop stylists) on the team to undertake this task – practice varies from country to country (Bon Appétit 2007: 24; Green 1996: 48). Food may also be prepared by the stylist, or out-sourced in the case of commercial products. Like a painter, the food stylist uses all of these props to construct an image that integrates colour, texture, pattern and shapes (Carafoli 2003: 96).

The following excerpt from a novel (Ozeki 1998: 42) explains the oft emotion-charged process of food styling particularly well in terms of articulating the subliminal workings of the food stylist, the relationship with the art director and other creative people during a food photo shoot:

"It was the most important day, ten hours of tabletop, and we were shooting the presentation of the meat. To stay on schedule, we needed to get two shots: the Sizzle Cut, a big fat slab of raw steak hitting the griddle; and the Presentation, the same steak on a platter, perfectly seared and carved to reveal a moist and tender pink interior. John [the director] hated everything. The choice of plates was inadequate. The vegetable accessories were unappetizing. The meat was dull and lifeless. He complained about the marbling and fussed with the hues, peering over the shoulder of the food stylist as she labored with her little camel-hair brushes to achieve just the right blush of pink. Eighteen hours later he was still unsatisfied with the Sizzle, then the meat wranglers ran out of glycerine to make the beef glisten and the American crew walked. I found him all by himself on the empty set, leaning over a platter of steak, breathing on the lettuce and morosely tweaking a pea."



2.2.1.3 Trends in food styling

Trends in food styling seem to follow a 'hit-and-miss' approach at present: often food is simply made to look as good as possible (Custer 2010: 346; Smith 2004: 2). It is uncertain which guidelines food stylists and those who commission food images use. Two schools of thought can, however, be distinguished in current food-styling: a very real, authentic, albeit not always perfect looking image, or the fake but perfectly styled food image that is created for diverse audiences. Food images used to be rather graphic in the past, but now tend to be more casual and natural (Suzanne Caplan, in Indiatimes Learning 2002: 1). At any given time food images could be perceived as either innovative and modern, or more homely and old fashioned (Lannon 1986: 255).

Some stylists are of the opinion that consumers prefer food images that can easily be recreated, that is, images that are natural, neither too staid nor too contrived, and not too perfect (Green 1996: 48; Smith 2004: 1). The author of 'Food Styling', an Australian Consumers' Association web-site (Choice 2002: 2), proclaims that a photo for a glossy magazine should rather project a casual 'real' look than perfection. This view is confirmed by 'Gourmet Magazine' in-house photographer, Romulo Yanes who has twenty years' experience in food styling. He states that food styling is at its best if someone can associate the dish with a real life situation, but only if this can be conveyed without forfeiting the integrity of the recipe (Carafoli 2003: 64).

In a highly competitive market place, food styling is used to sell a dream (McGlynn 1993: 1) or to persuade and/or seduce the general public into buying a particular product (Carafoli 2003: 94). Mario Batali (a staff writer for the New Yorker) firmly believes that food images need to look so good that they would make people "crawl up to their television set and lick the screen" (Buford 2006: 143). Large food companies commission food stylists to create a specific visual look and unique image for them (Carafoli 2003: 96). In South Africa, and elsewhere in the world, chain restaurants have very specific, recognisable images and the trendsetters among them capitalise on the merit of using specially designed logos and food images.



2.2.2 The food stylist

Food stylists are artists who generally use their own inspiration (Carafoli 2003: 96; Green 1996: 48) to convert food (Indiatimes Learning 2002: 1) and ideas as well as those of an advertising agency, and/or marketing or media company, into specific images. The work of a food stylist is very similar to that of other artists such as ceramicists who would transform clay and glazes into impressive masterpieces. The reason for a food stylist's work may differ: food images are created to be photographed for magazines, cookery books, advertisements or commercials, and food stylists proclaim that when "we are visualizing the presentation of a recipe it is our job to produce food that best represents our client's standards or 'look'" (Custer 2003: 1). It is also said that food stylists are "food-fluffers who make things look preternaturally toothsome for the lens" (Barnes 2003: 56).

Food styling, like many other styling vocations, requires the stylist to draw on and use a variety of internal and external resources simultaneously to achieve integrated beauty. Internal resources refer to those non-physical resources that the food stylist draws from internally, such as their training, knowledge and inspiration. External resources refer to the "props, substitutions and cosmetic shortcuts" (Green 1996: 48) that the food stylist employs with other physical items such as tools. Although food stylists' work may be based on their own ideas and inspiration, the end result has to adhere to the brief that was agreed upon during the production phase of the process (Burton 2002: 31). Food stylists' ability to integrate their own inspiration with the predetermined brief have possibly the largest influence on the final image and can make or break it (Moulton 2005: 19).

2.2.2.1 Internal resources employed by the food stylist

The action of styling food and props into an artistic and aesthetically pleasing composition that will grab the viewer's attention, requires the food stylist to draw inspiration from different sources at once. Of course, formal education or training is most beneficial in any career, but it appears that most food stylists got into the trade by way of assisting other food stylists (Bellingham and Bybee 2008: xiv). Important internal resources employed simultaneously by the food stylist when creating evocative images are represented by: their knowledge of food preparation and the



importance of its aesthetic dimensions (Miele and Murdoch 2003: 4); an art or design background or a combination of both, such as in the case of 'culinary artists' (Horng and Lee 2006: 5); their technical abilities; or where they find their sources of inspiration. Very little evidence of these internal resources being referred to could be found in the literature, except for a review of newly developed food colourants that offer food stylists fashionable seasonal colours that could be part of their repertoire (Pszczola 2004: 42).

2.2.2.2 External resources employed by the food stylist

The food stylist's hands are, to a certain extent, tied when it comes to the external resources required to create beautiful food images. Despite having very little control over the product in question, food stylists do have the ability to source the best examples of products. In one of the few books written about food styling (Bellingham and Bybee 2008: 6) the concept of 'wise shopping' is explained. Four tips are given to food stylists about shopping, ranging from transportation of purchases to being very fastidious when shopping. Further advice mentions the process of identifying the 'hero', which involves wading through numerous trays of the same item and then setting aside a number of perfect specimens (Bellingham and Bybee 2008: 6). From these choices can then be made. The food stylist therefore controls this resource by ensuring that the best examples of the products are used.

Other external resources include items such as props, of which the background is critically important as it is the major prop used to place the food or products on and provides a particular feel in terms of colour and texture (Custer 2010: 91).

Food stylists often have to abide by prescriptions as dictated to during the discussion briefs as well as honouring trade requirements, such as a company's branding image. Of course trends and fashion play an important role and the food stylist may well be guided by what is fashionable or trendy in a particular season or year (Custer 2010: 51).



2.2.3 Food images

The food image is the second prominent construct disseminated in this chapter. After some formal definitions of images in general and food images in particular, the concept of aesthetics is introduced. First, how aesthetics, as found within the formal arrangement of the content of food image, affect consumers' perception and/or consumption of food images is explained. Then the section ends with a discussion on food images being used as marketing tools and in advertising to entice consumers to appreciate their palatable beauty.

2.2.3.1 Food images defined

Food images are presentations of food and additional items that are artistically and aesthetically composed and displayed by a food stylist. Food images play an important role in having food as a trendy, fashionable addition to modern life. Their importance is indisputable as is clearly demonstrated by consumers' preference for illustrated cookery books rather than non-illustrated ones (Barnes 2003: 62).

Images in general are defined as representations or a likeness of a thing, or an optically formed reproduction of an object, such as one formed by a lens (Collins 2001: 727). Images are mostly representational, but may also be imaginary (Lester 2000: 3). Symbols within an image are presented in various ways, depending on the style of the creator of the image (Lester 2000: 51) and, much like food stylists, would each have their own stylistic interpretation when composing an image.

Hardly any evidence could be found that consumer's preferences, and therefore their reactions, are involved or considered when plans for food styling are drawn up or when images are constructed or created (Zellner, Lankford, Ambrose and Lochner 2010: 575).

2.2.3.2 Application of aesthetics to the food image

Food stylists appear to mostly use their innate, natural talent when styling food, drawing on internal and external resources (sections 2.2.2.1 and 2.2.2.2) to prepare the product and chosen additional props to create a food image that is to be photographed. During the styling process - the action whereby food stylists use their



own artistic ability (and that of others) to create an image - they build into the content aesthetic aspects that create messages that, it is believed, communicate a message to the viewer. While such aesthetics can be purposely styled, they generally appear to happen intuitively through a confluence of experience, educational background and artistic ability (Young 2012: 48).

The aesthetic aspects of food appear to have not yet been researched in-depth even though it is accepted that food is generally prepared with visual appeal to stimulate our senses (Cox 2006: 141). However, it mostly happens without a second thought being given to the specific aesthetics that makes food appealing.

2.2.3.3 Aesthetics defined

Both the scientist Darwin and the artist Gauguin are quoted by Caranfa (2001: 158) in an article on emotions and reason that concludes that the one point where science and art coincide is aesthetics that represents a relationship between science as the investigation of truths and the views that people hold at a particular time. Art serves as the carrier of these truths into the emotional realm of people. Aesthetic sensibilities can even be applied to a variety of economic and social activities, to the extent that it is suggested that we are now experiencing an "aesthetic boom" (Miele and Murdoch 2002: 312).

Aesthetics or an aesthetic experience is a sense of beauty that contributes richness and value to life, and can be commonly identified as the idiosyncratic inner interest, pleasure and emotions that an individual freely experiences in response to some object usually through sight. It therefore exists for its own sake, independent of logical reason or purpose. It can be summarised in one clear sentence, namely, that "aesthetic experience involves the perception of different objective realities of the world experienced through the different subjective receptivity of individuals" (Nuttavuthisit 2003: 1). A simplified version states that it is the experience associated with an object towards which one is adopting an aesthetic attitude (Dickie 1974: 13). Aesthetics refers to the manner in which elements of design - line, form, colour and texture - are integrated in design; or the study of human reaction to the non-instrumental qualities of an object or occurrence (De Klerk and Lubbe 2008: 36).



In her book on "Everyday Aesthetics" the author Saito (2007: 9) laments that attention given to aesthetics, let alone the study of it, appears to see the phenomenon as primarily being so prevalent and mundane in nature, and Western aesthetics' exclusive emphasis on art being so inept, that it tends to be underrated and even misrepresented. Her work shows clearly how everyday aesthetics, tastes and judgments can exert a powerful influence on an individual's quality of life.

The study of aesthetics previously concentrated mostly on aesthetic judgement, but nowadays aesthetics is regarded as an experience, unfortunately resulting in it being seen as a topic full of philosophical tension (Fenner 2003: 44). Basically, two concepts are fused together – on the one hand, that of aesthetic experience as being a natural part of life and, on the other hand, an appreciation of something aesthetically that focuses on its formal qualities that are accessed through looking, hearing and touching. Aesthetic experience is made up of formal analysis, associations, contexts and external factors (Fenner 2003: 44). It is believed that it has to do with the sensuous and sensory aspects of experiences as the primary concerns, and that these purely sensory aspects can be isolated from other parts of the complex aesthetic experience. Thus the subject matter becomes less important than the way in which it is presented. Aesthetic terms are used to describe what is perceived by the consumers' senses through their eyes, ears or noses. It is from these basic objective properties of an object's lines, colour, proportions, contrasts and other specific features that a view of the object's aesthetic qualities comes about, and this, in turn, determines its aesthetic worth. Exploring the importance of understanding how products affect consumers' emotions, particularly in product manufacturing, results in a startling conclusion that suggests the significant potential of aesthetics to attract a consumer's attention and elicit pleasure (Chang and Wu 2007: 3).

Modern research in the area of philosophy shows that what was originally thought of as aesthetics may no longer apply. A theory developed by German Enlightenment thinker Alexander Gottlieb Baumgarten (among others) in the first half of the eighteenth century would only serve as a basis for what is currently accepted as aesthetics (Gross 2002: 403). At the time, aesthetics implied a philosophy of art and/or beauty that was limited to artworks and their perception or sensuous



cognition; Baumgarten accounted for the experience of beauty by analysing it as facilitated cognition (Reuger 2009: 182). These days it is a much more inclusive discipline and is often described as a sociological activity, to such an extent that the production of a cultural approach is adopted that "sees art as being like all work, suggesting, in contrast, that all work is like art" (Fine 1992: 1268).

Even an aesthetic stalwart like Theodor Adorno (in Adorno and Tiedemann 1997: 332) admits that there is hardly another discipline that "rests on such flimsy presuppositions as does aesthetics". Adorno's principal concept, "art is identical with form", is even further questioned because he neglects to include controversial French Dada artist Marcel Duchamp's postulation that art can be any "found object" (Bruns 2008: 225). This contrasts sharply with modern aesthetics theory that purports that not everything is art, but that everything can be art – and, most importantly for this study, that "aesthetic appreciation need not be confined to [the] appreciation of art works" (Woodruff 2001: 31).

Involving a broad cluster of terms, aesthetics' core ethos concerns the sensory qualities of experiences and objects, such as beauty, creativity, elegance and goodness to name but a few. For this study, aesthetics is defined as "an object (or act) that is intended to produce a sensory response in an audience" (Fine 1992: 1269), with particular reference to visual sensory response that is understood as suggesting that seeing can never be "innocent or passive, purely sensory, retinal seeing" (Spitz 1982: 30), whilst conceding, of course, that seeing as a visual sensory response is always laden with other aesthetic experiences.

Aesthetics within food image content creation

Almost all food images are especially created to get the viewer's attention. Food product choice behaviour is an extensively researched area which includes eight basic motivations (Van Trijp and Meulenberg 1996: 280) that build on theory based on Maslow's original work. One such motivation suggests, for example, an appetite origin and suggests more hedonic aspects of consumption such as sensory pleasure, intellectual stimulation and conspicuous consumption for the sake of social approval. Thus images have two types of effects, drawing attention and eliciting emotion (Messaris 1997: 4).



Aesthetic experience is no longer confined to an experience associated with art - it now involves many things we encounter daily, such as any commodity found in the marketplace, including food. Aesthetics is nothing new in the field of marketing, and marketing managers who frequently make decisions about products, advertisements or store design, always consider form, colour, sound and other sensory elements. The formal arrangements of the elements in a picture therefore also dictate how an image will be seen by the consumer (Rose 2001: 26).

In this study, six specific aesthetic indicators or dimensions were operationalised (Chapter 3, section 3.4.1), drawing from the published material of Chuang and Chen (2008), Desmet and Hekkert (2007) and Fiore and Kimle (1997). These aesthetic dimensions are the basis on which the rest of this study rests as it investigates their effect on consumer's visual consumption and subsequent behavioural intent.

2.2.3.4 Food images used in marketing

Food images are regularly used in the world of food marketing as the main concern of the marketer is to attract the attention of consumers (Evans, Jamal and Foxall 2009: 46). Marketing research has shown that food and food products are often bought with the eye (Alfranca, Rama and Von Tunzelmann 2003: 4; Westphal 1997: 19). Brad Schiff, Executive Vice-President of marketing for an American family-style restaurant, claimed that sales in their restaurants increased by 50% when they included images of the food or beverages that they tried to promote. He explains that photographs communicate the content of the dish; the portion sizes and shows exactly what the consumer can expect (Carafoli 2003: 96). Additionally to the core aim of marketers, that is, to use images to increase sales, the same images also inform consumers so that when they receive the product/dish, it coincides with their expectations.

Marketing has reached a highly sophisticated level in the food industry and consumers live in very close contact with the marketing world as they are being subjected to an abundance of such efforts (Mattila 2002: 379; Zikmund and D'Amico 2001: 4). Marketing communication exposes consumers to aspects of products they might otherwise not know anything about (Assael 1995: 711). To market successfully,



various aspects of consumer markets are intensively researched, such as customer preferences, likes and dislikes and use of products (Condoor and Quijano 2003: 18), even though it is claimed that not so much is known about the role of emotions in marketing behaviour (Bagozzi, Gopinath and Nyer 1999: 184).

The ultimate goal in marketing is economics-driven, that is, to sell products, services and lifestyles to make a profit (Mann, Reeve and Creed 2002: 13). However, even though the marketing industry seems to be well aware of the importance of knowing what the consumer wants, the contrary is true for the food styling industry. A food stylist rarely receives feedback from consumers about their creations. Even though no empirical evidence could be found to specifically prove that appetising food images are beneficial and enhance sales, the preceding statements favour the importance of food images in terms of the marketability of food products and to increase sales. In a paper on food promotion that deals directly with the need to catch the consumer's attention, Westphal (1997: 18) explains the critical need for marketers in the food industry to understand consumers' behaviour, and argues that, since food purchases are driven more by human emotion than by a pure physiological need, it results in food advertising being about drama and emotion.

Food photography and food styling are art forms, which, if they are done well, greatly enhance marketing efforts (State of Colorado Department of Agriculture 2003: 2). Taking good food pictures is described as an art form that requires a great deal of skill, knowledge and experience (Okumus, Okumus and McKercher 2006: 253). Although texture and flavour always exert significant pressure on consumers' perceptions, a food product or its image is "almost always tasted with the eyes first" (Imram 1999: 224, Locht *Sine Anno*: 2) and, as a consequence, are either accepted or rejected. Considerable emphasis is placed on the effects of various stimuli to produce emotional reactions, such as advertising, packaging, noting particularly the role of food images in packaging, and how favourable images can stimulate demand (Nelson 1962: 67), and this assumption is based on the premise that emotions or moods trigger buying responses (Bagozzi *et al.* 1999: 192).



2.2.4 The food image consumer

The fourth and final construct to be explicated in this chapter is consumers' perception of food images. Consumers look at food images and are either attracted to them or not. The image either makes the viewer want to see more and creates interest, or it simply fades away and no further interest is generated. The food image viewer or food image consumer is thus a visual consumer. Visual activities, such as watching videos, leisure tourism pastimes or window shopping are included in traditional definitions of visual consumption, and also incorporate methodological frameworks for the interstices of consumption, vision and culture (Schroeder 2004: 229). This study investigates how particular aesthetics, as embedded in the stylists' artistry within the design of the particular content of everyday print media food images, affects the so-called visual consumers' behavioural intent.

2.2.4.1 Visual consumption explicated

How consumers view imagery is commonly referred to as visual consumption and is a recognised field of research (Schroeder 2002: 4). In humans, the senses of taste, smell and the process of chemesthesis have become secondary to vision and audition (Cardello and Wise 2008: 91). Not only are visual issues of great import in consumer behaviour, they also constitute a considerable part of the communication process (Petrova and Cialdini 2005: 32; Schroeder 2002: 19). In contemporary marketing a key strategy is to create compelling images. Schroeder and Dobers (2007: 230) consider "photography [to be] a cornerstone of visual consumption". This explains the interest of this study in photographic food images in print media.

2.2.4.2 Food image appraisal

The concept of food appraisal or evaluation through sight was introduced by Cardello (1996: 11) who said that food is first detected at a distance through the sense of sight, and that vision therefore plays a critical role in food acceptance. Perceiving (something/anything) is the same as experiencing – therefore when consumers look at food images and they perceive something, they are in fact experiencing it (Mitias 1982: 157).



A consumer's judgement of a product is based on sensory evaluation of it (Brown 2004: 2; Murano 2003: 420; Raats, Daillant-Spinnler, Deliza and MacFie 1995: 239). In the case of a printed image, the first judgement of the product is made visually through sight (Bloch, Brunel and Arnold 2003: 551). Sight enables consumers to interpret the size, shape and colour of foods, as well as characteristics such as transparency, opaqueness, turbidity, dullness and gloss (Charley 1982: 1). It is therefore understandable why so much effort is put into images to attract attention.

In a paper on the Development and Acquisition of Food Likes, Mela (2001: 9) discusses the use of the word 'like' versus 'preference' in food-related consumer research. He says that the words are often interchangeable, but that preference is better to express choice, and that 'liking' is judged against an internal reference scale of intensity and refers to the perceived attractiveness of, or aversion to specific objects. It should also be borne in mind that these affective responses are influenced by cognitions such as attitudes, beliefs and expectations. The same physical stimulus that arouses pleasure in one individual may arouse displeasure in another (Cardello 1996: 8). Pleasure and displeasure, liking or disliking are not sensory phenomena, although they are associated with most sensory stimuli. Rather, pleasure and displeasure are affective experiences, i.e. emotional responses with somatic effects that are accompanied by a cognitive experience of the emotion.

Specific emotional responses are produced not by events or physical circumstances, but by the unique psychological appraisal made by the consumer when evaluating and interpreting events or circumstances (Bagozzi *et al.* 1999: 185).

2.2.4.3 Central integration

In studying the field of aesthetics - the study of beauty and appreciation — it is interesting that reactions to the same stimulus can be interpreted positively or negatively by different people. The reason for this could be that when humans encounter food, its physicochemical characteristics together with human senses produce experiences of appearance, taste, smell, texture and possible others that are less dominant. These basic human sensations are defined in the psychological area of psychophysics (or sensory evaluation in applied areas of food science). It is during this next level of higher-order information processing (central integration) that



a variety of cognitive variables, aspects of bodily states (hunger or thirst), learning and memory, psycho-social and cultural influences are integrated centrally (in the human brain) resulting in some form of phenomenological response. It is these phenomenological aspects that food acceptance specialist Cardello (1994: 255) finds the most measurable, because of the individual's prima facie self-reporting validity.

2.2.4.4 Persuasion through food image consumption and behavioural intent

In the world of images, visual persuasion is an extensively researched field. Researchers in this field make it clear that even though visual perception is an autonomous psychological process, real-world vision is directly connected with emotion, which is again linked to our functional needs as biological and social beings (Messaris 1997: 4).

When exposed to a food image, a consumer visually consumes the content of the image. This will affect a person's reaction towards the product favourably or adversely in terms of the intention to buy or purchase or try or reproduce. The marketing industry places much emphasis on images and visual consumption as key characteristics of the twenty-first century economy (Schroeder 2002: 5). In much the same way that advertising tries to convince consumers to do something – and mostly buy something (Pracejus, Olsen and O'Guinn 2006: 82) - food images operate as persuasive communicators. Each person who pages through magazines or newspapers or other print media uses it in a different way because of a very specific state of mind.

A distinct feature of advertising is its reliance on pictures to persuade (Phillips and McQuarrie 2006: 231). Astronomical figures money-wise are thus spent annually on advertising in the fashion industry, where it is almost exclusively about imaging. A Global Food Survey (2012) estimates that the annual marketing budget of global food industry rose from US\$ 1,3 million in 2010 to US\$ 3,5 million in 2012. This same report provides an annual analysis of how food industry companies' media spend, marketing, sales strategies and practices changes from year to year. Other examples include the fast-food brand McDonalds that spent 42 million British pounds on advertising in 1999 (Advertising of Food *Sine Anno*: 2), and that their food marketing



system is the second largest advertiser in America (Gallo 1999: 173). The visual sensory effect of well-styled images is confirmed by the existence of a large and dedicated trade in food magazines that provides employment to food stylists who focus specifically on the aesthetically pleasing presentation of food. One may propose that a 'pictorial turn' is currently occurring in society, whereby the dominance of textual approaches to understanding culture and society is being challenged by images (Manghani and Fukukawa 2007: 9).

Many studies have been done in non-food related fields, such as tourism, where the persuasive power of photographs is used in tourism advertisements (Hem, Iversen and Grønhaug 2003: 49) or through images in service promotion (Bolan and Williams 2008: 382). Some research has been conducted in nutrition on the effect that images of chocolate have on dieters (Fletcher, Pine, Woodbridge and Nash. 2007: 211), or the hedonic value of food (Stoeckel, Cox, Cook and Weller 2007: 139) and images used in a study on portion sizes (Venter, MacIntyre and Vorster 2000: 205). Unfortunately the persuasive power that food images may have on consumers' decision making seems neglected. Such research will be valuable to food marketing, so as to emphasise the critical importance of advertising information in marketing policies (Franke, Huhmann and Mothersbaugh 2004: 20).

Buyer or behavioural intent refers to a consumers' plan to engage in specific behaviour to reach a goal (Peter and Olson 1994: 147). It differs from unconditional, categorical prediction of a purchase (O'Shaughnessy 1987: 178). The theory of reasoned action that is used to measure buyer intent involves two conceptually independent components, namely, an attitudinal component and a normative component, also called the subjective norm (Johnston, White and Norman 2004: 2524; Taylor 2001: 3). Attitudes are shaped through beliefs that are accumulated over time. Subjective norms are beliefs about what others, particularly friends and family, will think about such behaviour, for example, an impression of sophistication when a certain dish is prepared. Intent may be positive, negative or neutral in nature. Positive intent indicates that the consumer plans to engage in a plan to do something about it, for instance, to go out and buy a product or to select a meal in a restaurant. Negative intent means the contrary, and when the consumer



shows no intent, no reaction is expected and the consumer may even react negatively towards the image.

The theory of reasoned action theorises that, in order to predict buyer behaviour, it is very important to measure consumers' intentions just before buying. Buying intentions imply a state of mind and are always conditional depending on time, place and circumstance (O'Shaughnessy 1987: 178). Various purchase intent scales are used in contemporary marketing research (Mullet and Karson 1985: 93), such as the so-called intention-to-buy scales (Schiffman and Kanuk 2000: 205). They are generally based on 5-point Likert-type-format scales, which range between very likely (5) and very unlikely (1) (Konradt, Wandke, Balazs and Christophersen 2003: 168; Kalwani and Silk 1982: 243). Bruseberg and McDonagh (2002: 303) state unequivocally "the initial visual impact is a major factor when making purchasing decisions". It may not be possible to draw a direct relationship between a consumer's intention to buy and the actual buying behaviour, but what it indicates is interest in a product, and the probability of purchase even if it is in the future.

Consumer research has revealed the difficulty in measuring consumers' actual buying patterns after their exposure to any product information, such as food images. A persuasive ability is therefore suggested as an alternative (Assael 1995: 269, 288). Buyer intent provides an indication of demand for a product or for information that is useful, or for forecasting sales of existing and/or new products and services (Tsiotsou 2006: 207). Buyer intent involves conation, the behavioural element of attitude (Du Plessis and Rousseau 2003: 264). It indicates the likelihood that consumers will buy or try a particular product, and therefore, bearing the difficulty of measuring this in mind, the focus is placed on how persuasive the image is or possibly might be. That modern man makes choices based on the aesthetic value and the distinctiveness of the visual design of a product, is undisputed. In particular it is accepted that "aesthetics' centrality may determine the manner in which product aesthetics are evaluated and used in arriving at a purchase decision" (Bloch et al. 2003: 551).

Consumers often do not evaluate food or food products with particular knowledge of the physical characteristics, but rather by means of their behavioural qualities. The physical properties of the food influence consumers' behaviour; a food stylist



therefore aims to stimulate such behavioural qualities. A problem may arise in consumers' interpretation of the message, since the aesthetic experience intended by the stylist should be appreciated by the consumer and affect their aesthetic experience accordingly (Fenner 2003: 40).

No empirical evidence could be found in terms of how consumers view food images, how persuasive food images are, or not, nor how - and whether - the needs and preferences of consumers are acknowledged in the food styling industry. The persuasiveness of images has, however, been widely researched in other areas that are not food-related, such as clothing and advertising.

Even though both the food styling and marketing industry will benefit from knowledge about aesthetic indicators' potential to persuade consumers, it should also be noted that aesthetic autonomy could reduce consumers' agreement on which aesthetic indicators influenced their judgment of food images the most (McGonigal 2006: 333). Aesthetic autonomy can be as revelatory as aesthetic agreement. We are reminded that "both the emotional response and the cognitive perception of the object may be of equal importance in determining behaviour" (Risvik 2001: 23).

2.3 CONCLUSION

Consumers apparently want food images to be perfect and to look enticing and they respond to them by way of their purchasing actions. The fact that the very tasteless but perfect-looking Red Delicious apple is the best selling variety of its kind in the United States of America explains this phenomenon (Civitello 2008: 307).

The persuasive ability of food images depends on the characteristics of the content of the food images. Food stylists assemble the content of food images according to a brief (which could be to simply polish a red apple to a high gloss), which in turn is captured by specialist photographers. Much like apparel products that not only elicit sensory reactions, but have very specific emotional and cognitive reactions (De Klerk and Lubbe 2008: 36), food images also have a sensory, emotional and cognitive capacity for persuasion. Food images may be purposefully created to convey a



particular message, for instance, to reveal new ideas, or to enhance or stimulate the use of specific products (McGlynn 1993: 1).

In body, soul and mind a consumer is driven by sensory compulsions, emotions and cognisance. Some consumers may react strongly to functional aspects, but Maslow and other theorists propose that as soon as certain basic desires are satisfied, higher needs will emerge. Consumers who are better off can afford to consume food for more than functional reasons, for example, to satisfy aesthetic needs. The marketing world usually concentrates on the latter, but to satisfy consumers, both the functional and the aesthetic desires should be addressed. Although the food stylist is mostly geared to addressing the latter, an attempt could simultaneously be made to convey, for example, cues about healthy eating.

Images are powerful resources in conveying messages and are particularly useful in expressing messages that are not easily explained with words (Bruseberg, McDonagh and Wormald 2004: 114). The way that consumers experience aesthetics conveyed by images can be used successfully in the marketing industry to persuade consumers to try a product or dish. It could be done very subtly, for example, to just trigger an interest that may result in a purchase at a later stage. Images are exceptionally important in the advertising industry where they represent dreams and ideals that are intentionally communicated to sell products (Bell, Joyce and Rivers 2004: 158).

Food images evoke certain emotions, and may make sense to the viewer or not. An image has a message that the viewer decodes and which subsequently leads to an experience that could be aesthetically pleasing or not. These content-driven messages that are encoded by the food stylist through professional talent, and which are then interpreted by consumers, contribute to an altered persuasion or choice intention. Knowing how consumers respond to the content, that is, image aesthetics, will greatly benefit the food stylist and ultimately the marketing of food product illustrated.



Chapter 3

Selected theoretical perspectives and conceptualisation

3.1 INTRODUCTION		40
3.2 RATIONALE FOR INTEGRATING A SYSTEMS THEORY APPROACH 41		
3.2.1	Core inferences of the systems theory	42
	3.2.1.1 The system's totality	42
	3.2.1.2 Interrelatedness and interdependence	43
	3.2.1.3 Equilibrium within the system	44
	3.2.1.4 Different ways to reach a goal	44
	3.2.1.5 Processes and activities stem from feedback	45
	3.2.1.6 Improving food styling tasks	45
3.2.2		45
3.3	RATIONALE FOR INTEGRATING COMMUNICATIONS THEORY	46
3.4	RATIONALE FOR INTEGRATING THE THEORY OF AESTHETICS	47
3.4.1	Sensory appeal of food images	47
3.4.2	Eliciting emotional reactions through aesthetics	49
	3.4.2.1 Pleasure	49
	3.4.2.2 Arousal	50
	3.4.2.3 Dominance	50
3.4.3	Aesthetics and cognitive experiences	50
	3.4.3.1 Reality	51
	3.4.3.2 Fantasy	51
	3.4.3.3 Entertainment	51
3.5	COMMUNICATIONS THEORY EXPLICATED WITHIN THE SYSTEMS	
	APPROACH AND AESTHETICS THEORY	52
3.5.1	Elements of the system (inputs)	52
3.5.2	Transformation of stimuli within the aesthetics perspective	52
3.5.3	Outputs	53
3.6	THE CONCEPTUAL MODEL	53
3.6.1	Discussion of the conceptual model	55
3.7	RESEARCH OBJECTIVES	56



Chapter 3

Selected theoretic perspectives and conceptualisation

This chapter presents the two theoretical perspectives underscoring the approach to this study, and integrates the key concepts, as discussed in the previous chapter, in the conceptual framework that was used to structure the investigation. The chapter concludes by stating the sub-objectives that guided the research process.

3.1 INTRODUCTION

In this study two distinct theoretical perspectives were integrated, communications theory that represents a systems approach and the theory of aesthetics. Their perspectives and basic tenets were implemented throughout the study.

First, communications theory was applied as a systems approach with distinct inputs such as the food stylist's training, background, creative ability and the product (to name a few). These are instrumental in terms of the creation of food images. After the transformation (the actual viewing interpretation of the food image by the consumer), the output is represented by the behavioural intent of the consumer that is based on the aesthetics of the content of the food image. The aesthetic characteristics are the outcome of particular styling techniques employed by a food stylist. The image is interpreted by consumers. As very little evidence could be found about how consumers' behavioural intent changes when viewing food images, this study aims to investigate certain emotional and cognitive indicators that could be used to augment the way in which food stylists compile food image content. Ultimately the ideal is to achieve a desired output in the form of food images that convey information as a message that would positively influence consumers' behavioural intent.



Second, aesthetics theory focuses on mental processes, on how consumers react to objects which they either perceive as beautiful or not. Aesthetics theory is applied when studying consumers' reaction to entities that are considered a form of creation or art. Consumers interpret, analyse and use their surroundings that influence their attitudes and behaviour towards the world around them. By way of example, the way they view a food image. Sometimes one consumer might not be influenced by looking at one particular food image in any way at all whereas another might. One food image might impress one consumer and not another. However, the image and the particular way that the content is styled could also have a noteworthy effect on the person's experience when viewing the image. Consumers are affected by the sensory attributes of the image and the appearance of the food image. Does it for example look appealing and delicious? Consumers are also subconsciously affected by the cognitive and emotional attributes of an image. The goal of this study was therefore to make possible suggestions to food stylists about cognitive and emotional attributes that could contribute to a positive change in consumers' behavioural intent when they view food images.

3.2 RATIONALE FOR INTEGRATING A SYSTEMS THEORY APPROACH

The systems theory has at its core the study of components and sequences, that is, both in occurrence order and according to hierarchy, to indicate relationships and interdependencies of variables, "which provide methods to describe the global behaviour of systems of differential equations" (Lansing 2002: 283). Put forward in the 1960s by Ludwig von Bertalanffy (a biologist), the theory emphasises that systems are not only open to their own environment, but also interact with it so that they are in a state of constant evolution. Systems theory, in contrast to other theories that may reduce an entity to the properties of its parts, concentrates on the composition as well as the relations between the parts that connect them into a unitary whole (Heylighen and Joslyn 1992: 1). It is this assumption particularly that suits this investigation into food image creation and the visual consumption environment of the food stylist, as it never operates in isolation, but is always an inter-connective, changing process. All the unique characteristics of a system as defined by Spears and Gregoire (2007) such as interrelatedness, interdependency of parts, dynamic equilibrium, equi-finality, permeable boundaries, interface of systems,



the presence of subsystems and the hierarchy of the system are in some way or another relevant for the food styling milieu.

3.2.1 Core inferences of the systems theory

3.2.1.1 The system's totality

The basic aim of systems theorists is to explain all types of complex organised systems (Whitchurch and Constantine 1993: 325) in such a way so as to capture the core idea of systems thinking that suggests that all objects within a system are interrelated, with the focus being placed on the relationship and interrelationship between and among the parts of a system, and how they connect to the whole (Heylighen and Joslyn 1992: 1). It is a holistic approach, where the whole and the contribution of all components to the whole rather than the individual parts or components are accentuated.

A systems approach allows for the investigation of a totality so is ideally suited to this study theme that focuses on changes in consumers' behavioural intent after viewing food images. Consumers are rarely aware of the integrated process that is involved in creating food images. They page through food magazines and cookery books and view food images without any or even limited knowledge of the procedure that is followed to create food images. Food stylists are commissioned to create food images for specific magazines, publishing houses or advertising/marketing agencies. The creation of these food images does not occur in isolation; the way food stylists create an image is influenced by their training, prior experience and their vision of the world around them. It is also influenced by fashion, personal style, recent trends, the season and the limitations of the brief. Each one of these many represent smaller systems with particular characteristics that are eventually integrated too.

Food in image format is first and foremost only interpreted through vision. Audition, kinesthesis, somesthesis, gustation and olfaction (other sensory measurements) largely apply to one's evaluation of food in physical form. However, according to Cardello (1994: 253), during the physicochemical evaluation of food and resultant food acceptance (which includes basic sensory, perceptual and hedonic stages of processing of food information), vision enables the primary sensory measurement. A



consumer's response when viewing food images is of course not influenced by the image alone. Psychosocial influences, cultural influences, bodily states, learning, memory and expectations also affect the way in which consumers view images. The resultant response may be acceptance or approval of the images, or a contrary reaction, and subsequent behaviour. Again, none of these actions happen in isolation thus confirming the existence of interrelationships that characterise a so-called system.

Although a food image is always viewed as an entity, it will inevitably also be scrutinised in terms of its components. Positive persuasion thus requires a study of consumers' interpretation of the individual elements of a food image, as well as their interpretation of the image as a whole, to gain a comprehensive understanding of the importance of particular attributes of an image in terms of its potential to persuade or inform or educate consumers. The apparel industry too aims to establish whether an intended message is decoded 'appropriately' in a similar vein (Kerfoot, Davies and Ward 2003: 143). Negative judgements would require reconsideration of the techniques, props or whatever elements are less favourably perceived by the viewers. Both positive as well as negative judgements count as a relevant experience, and would affect food stylists' future planning and/or encoding of food images.

3.2.1.2 Interrelatedness and interdependence

Interrelatedness and interdependency implies that each part of a system, in this study, the components of the food image, mutually affects the performance, the consumer's judgements in this case, of the other parts of the system. This aspect highlights the importance of viewing a system as a whole and not just considering the parts in isolation. Systems can be described as groups of elements that are interrelated (Alter 2007: 10; Whitchurch and Constantine 1993: 325) where the focus is on the arrangement of and relationship between the parts in the system that form a whole (Heylighen and Joslyn 1992: 1). Within the systems approach, this means that, when consumers view food images, the focus is on the end result, the aesthetic characteristics of the whole image, rather than on the individual components that were used. The way in which each element or component of a food image is styled will affect the other elements – for example, the background will have a noteworthy



influence on how the whole image is perceived, but it will also influence the way in which other elements, like texture and colour, are sensed.

3.2.1.3 Equilibrium within the system

The principle of dynamic equilibrium within the system suggests that continuous reaction and adjustment occurs between the internal and external environment of the system to acquire new properties that would result in growth (Alter 2007: 8; Heylighen and Joslyn 1992: 1). "No system is totally independent; it is always related to other entities" (Spears and Vaden 1985: 31). Food images change constantly, because they are at the mercy of fashion trends, seasonal changes and multiple other influences. Food images are not created in isolation; what they consist of and how they are created inevitably depends on a multitude of external and environmental factors. This also explains the so-called permeable boundaries of systems. It is therefore the relationships between subsystems that create homeostasis, the equilibrium that the functioning system seeks to achieve.

Food stylists perform work for clients (magazines, advertising agencies or product manufactures to name but a few) that draw their ideas from other sources and eventually share ideas with others. This demonstrates the interface between one system, for example, an inspiration, or subsystem and other systems, the precondition being that they must understand one another, that is, be interpreted in a similar way.

3.2.1.4 Different ways to reach a goal

Equifinality implies that "various alternatives may be used to attain similar results" (Spears and Vaden 1985: 29). During food styling, various options can be used to attain a favourable response to the aesthetic qualities of the styled food image from consumers. The mere fact that different food stylists, with completely different work procedures can, and often do, collaborate successfully for the same magazine with a specific identity, indicates that similar aesthetic qualities can be applied by different stylists to create, and achieve, a coherent impression of the magazine. This supports the first core assumption, namely, that the "whole is greater than the sum of its parts".



3.2.1.5 Processes and activities stem from feedback

The systems approach proposes that feedback that results from a previous process or activity contributes to and facilitates subsequent interpretations of similar objects, images and experiences. Consumers thus remember a message by storing it in their memory for future reference (Evans, Jamal and Foxall 2009: 46). In this way previous experience affects how consumers view and interpret food images. Through the use of aesthetic principles a food stylist can alter the persuasive power of styled food images by relying on the emotional and cognitive responses of consumers towards styled food images. Food stylists can thus amplify their communication with consumers through prior knowledge for which aesthetic stimuli are needed to evoke cognitive and emotional responses, and by emphasising certain aesthetic food styling elements. It is possible that the cognitive aesthetic element of reality may be the most easily understood or interpreted by the consumer. If this is true, a food stylist can focus on real artefacts when planning a food image.

3.2.1.6 Improving food styling tasks

Control in a system can be used to intervene and to rectify or improve creations, should this be required. This is done to boost positive persuasion and to ultimately increase consumers' behavioural intent that could lead to purchase, to prevent negative responses to food images, or ultimately to enhance the effectiveness of the food marketing goal (Spears and Gregoire 2007: 3).

At present the so-called control mechanism, as explained within the systems approach, is neglected in terms of styled food images when considering them as a persuasive tool for marketing purposes or to increase sales. It appears as though very little, if any, feedback with regard to how consumers respond to styled food images ever reach food stylists. Very little adjustment in order to control is thus ever made in terms of corrective measures to improve consumers' reactions to food images.

3.2.2 Applicability to the study

In this study, the theory of aesthetics combined with the theory of communication (as a systems approach) were applied, using Q-methodology to address the problem of



intended communication in food images to convey particular messages to the consumer.

3.3 RATIONALE FOR INTEGRATING COMMUNICATIONS THEORY

No fewer than at least two hundred definitions for what 'communication' is were found in a literature search, and they varied depending on the more appropriate emphasis. In this study communication was taken as "the transmission of information, ideas, emotion, skills, etc., by the use of symbols, words, pictures, figures, graphs, etc." (Steiner in Fauconnier 1986: 29). It is also important to note that new languages of communication are constantly being suggested for the new millennium, such as visual literacy that communicates without words, or the messages contained in images (Callow 2003: 1). A paper on the role of communication with respect to food health issues (Verbeke and Viaene 2001: 299) explains the effectiveness of communication in terms of sales of commodities.

The communication model of Burton (2002: 32) describes the function of communication concerning food images within the systems approach very aptly. All communication models start with a production phase - for food styling it involves the food stylist. The food stylist conveys a specific message by creating a specific food image that encodes the message. The photographer then photographs the image which is the 'product' where after the viewer, who could be a consumer, views the image, interprets it, decodes it and makes some sort of cognitive assimilation of it in the brain. In other words, after the consumer is exposed to the message and pays attention to it, it is interpreted within their own frame of reference to make sense of the message. At the perception stage, a consumer would recognise familiar elements, select a coherent schema in memory to organise and interpret the message (Evans et al. 2009: 46). This is done independently by the individual, hence one person's interpretation could differ from that of another because their frames of reference are not necessarily the same.



3.4 RATIONALE FOR INTEGRATING THE THEORY OF AESTHETICS

Aesthetic experience is the interaction between the viewer of the image, the environment, for example, the surroundings of the image, and the food image as such. Since aesthetics has much to do with what consumers see with their eyes, a food image contributes to the sensory, emotional and cognitive related aspects of aesthetic experience as the food image implies the content through the styling of the items that make up the food image. Aesthetic experiences are described as multisensory (Fiore and Kimle, 1997: 37) involving all the sensory information available through sight, touch, kinesthetics, smell, hearing and taste. This description aptly applies to food in its physical state. However, much of this benefit is lost when food is represented in image format because food in image format cannot be touched or smelled nor can one hear the sizzle of cooking food. Herein lies the challenge for the food stylist. A consumer's preconceived ideas and expectations of what the food will smell and taste like will therefore also be integrated in the perception of the food image. Finally there is a possibility that the quality of the paper on which the food images are printed, the actual smell of the ink and other similar attributes, could also play a role in the sensory experience and the aesthetic experience of a viewer of a particular image.

3.4.1 Sensory appeal of food images

The belief is that food images are created to evoke the ultimate visual sensory appeal and to make food look its best. It is therefore presumed that they should always satisfy consumers at a visual sensory level. A general framework for product experience distinguishes three distinct components: aesthetic qualities; the experience of meaning; and emotional experience (Chuang and Chen 2008: 31; Desmet and Hekkert 2007: 57). However, food quality too has to be considered.

Food and the food product have many facets that have to be considered when assessing their quality. The physical qualities include their composition, their nutrients and other physical properties such as taste and flavour and their aesthetic merit. Furthermore, food quality can be divided into behavioural qualities that can either be functional or aesthetic. Functional behavioural qualities refer to attributes



like how healthy the food may be; whether the food is suitable for satisfying hunger; whether the food is destined for entertainment; and other specific purposes. The aesthetic qualities have three main categories: sensory (taste, what it looks like, texture, smell, etc.); emotional (what humans feel about food) and cognitive (what humans think about food) dimensions (De Klerk and Lubbe 2008: 36). The aesthetic level of food quality and a person's food experience involves a product's capacity to delight or other more sensory modalities. The meaning level, representing the cognitive dimension, involves one's ability to assign personality or other expressive characteristics to an image and to assess the personal or symbolic significance of products. The emotional level involves experiences that are typically considered in emotional psychology and that are used in everyday language to express emotions such as love and anger - which are elicited by appraised relational meaning of products. As far as emotional and cognitive experiences are concerned, one might argue that how the consumer is affected emotionally and cognitively depends largely on the way the food stylist has styled the content of the image. The food image may arouse emotions on many levels within the viewer. Thus the essence of the emotional experience can be captured by using the three dimensions of pleasure, arousal and dominance (Fiore and Kimle 1997: 42). Cognitive symbols, on the other hand, are derived from mental activity and also have three components which are reality, fantasy and entertainment (Fiore and Kimle 1997: 42).

Desmet and Hekkert (2007: 59) explicate the three types of product experience by using their visit to China by way of illustration. They returned with some teacups that were bought because they were truly beautiful and provided sensory pleasure through the sound produced by the fragile lid, a cognitive experience that was attached to the cups as mementoes of their travels. The emotional experience was gained from drinking tea that satisfied their needs. This analogy can be transferred to a food image by suggesting that a consumer would enjoy the sensuousness of the lines, shapes and forms incorporated in the styled food and the props. The consumer then experiences the image's meaning in that it may signify a particular type of food, or food from a specific country. Lastly, the consumer will have an emotional experience that will be remembered as comforting food. Desmet and Hekkert (2007: 61) conclude their discussion on the relationship between the three levels of product experience by explaining that "even though these three components of an



experience can be clearly conceptually separated, they are very much intertwined and often difficult to distinguish in our everyday experience – we experience the unity of sensuous delight, meaningful interpretation, and emotional involvement, and only in this unity do we speak of an experience."

3.4.2 Eliciting emotional reactions through aesthetics

Beyond attracting the viewer's attention, images are typically meant to give rise to some emotional disposition (Messaris 1997: 34). A definition for the theory of emotions - also called appraisal theory – suggests that a certain emotion is elicited when evaluation or appraisal of an event, situation or one's own thoughts, takes place (Desmet and Hekkert 2007: 61; Bagozzi *et al.* 1999: 184) and may often be expressed physically, resulting in specific actions to affirm or cope with the emotions (Bagozzi *et al.* 1999: 184). It is, in fact, the interpretation of the product, rather than the product itself, that causes the emotion.

The emotive connotations associated with the consumption of various foods include descriptions such as primal, aphrodisiac, challenging, comforting, earthy, feminine, masculine, playful and surprise. These all have to do with the actual consumption of food. The question that arises is whether the power of suggestion, for example feminine, may be enough to stimulate such feelings (Dornenburg and Page 2006: 32). In a study conducted by Desmet and Schifferstein (2008: 290) about emotions experienced when consumers tasted or ate food, 22 specific emotions were identified. Only the three aesthetic emotional indicators that pertained to visual emotions, pleasure, arousal and dominance, were considered relevant for this study as the others were related to eating per se.

3.4.2.1 Pleasure

The first of the three emotional indicators to consider is that of pleasure, the preferred, most likeable, good emotion. This is also the easiest dimension for individuals to recognize when they perceive an image (Fiore and Kimle 1997: 43). Even though a consumer can apparently describe the sensation of pleasure through touching an object such as a garment, pleasure derived through viewing a food image may not be that simple to define because one cannot touch or taste it. The



textures and smell, however, may be implied by the images. One thus wonders whether pleasurable emotion could be elicited when viewing a food image and whether there are consistencies in what consumers believe arouse pleasurable aesthetic experiences and food images styled in a particular way.

3.4.2.2 Arousal

The second emotional indicator is that of arousal that is driven by dimensions such as colour which is a very powerful tool in food styling. Arousal can very simply be applied to an aesthetic experience when someone views a food image. Bright, highly intense colours are, for example, more arousing than dull, low intensity colours (Fiore and Kimle 1997: 43). The background colour that a food stylist chooses when styling food and props has pertinent effects. Warm hues (red, orange, and yellow) are exciting and arousing and produce elated mood states, while cool hues (green and blue) are less arousing and used to produce a relaxed mood.

3.4.2.3 Dominance

Literature states that *dominance* – the third emotion - is evoked where a consumer, for example, has a low dominant feeling because of being in love. The person may therefore express emotions of low dominance when viewing soft, sensually styled food images which suggest the feeling of being unrestricted or in control of the situation (Fiore and Kimle 1997: 44). More specifically, the food image may be perceived as a challenge. For example, it could be an emotional experience that a viewer could sense a feeling of dominance when looking at an image of a dish that was very difficult to prepare, like a very time-consuming pastry, as in itself it indicates a person's prowess as a chef.

3.4.3 Aesthetics and cognitive experiences

In the field of aesthetics, cognitive pleasure or satisfaction derives from mental activity that consists of the understanding and creation of content with symbolic meaning. Aesthetic experience is therefore derived from communicating and extending insight about the world around us (Fiore and Kimle 1997: 45).



In food styling, images also have cognitive meaning. An image that is intended to be interpreted in a specific way could be styled purposively to give clues as to how the food should be understood. The choice of food props, background, lighting, and so forth, could all contribute to an immediate recognition of the reality, for example, a seaside beach holiday meal, or the playfulness that Italians associate with ravioli (Dornenburg and Page 2006: 33). It is possible to create food images with specific symbolic meaning for consumers to experience, even though the experience may be subject to individual or cultural interpretations (Desmet and Hekkert 2007: 60). Cognitive experiences relate to the three dimensions, namely reality, fantasy or entertainment, as will now be illustrated.

3.4.3.1 Reality

The first of these dimensions is reality that is communicated through something that is used to represent a view of the world of 'what is'. It is the consumer's view or perspective of the world. Cognitive reality is derived either from one's representation of internal reality or, but more importantly in the food styling world, the understanding of another person's, insightful view of the world in this instance, the food stylist's.

3.4.3.2 Fantasy

The second dimension, fantasy, involves the vision of 'what could be. "This is done by supporting an alternative existence or through envisioning a pleasurable experience" (Fiore and Kimle 1997: 46). In food styling this could very well be a case of envisaging a good time at a dinner table, a Christmas meal, or a successful children's birthday party, that could be represented by a fantastic birthday cake in a carefully styled children's birthday party scene. It could even be a case of taking the viewer into another envisioned reality, a longing for a romantic dinner, a healthy lifestyle and similar ideas.

3.4.3.3 Entertainment

Entertainment is the third dimension that involves seeking or finding something new, unusual, unexpected or challenging. It involves creativity such as ethnic stylistic scenes. Experiences of other cultures are intriguing and exciting to compile. Memories of foreign adventures, recollections of a childhood scene or experience,



even something as simple as a food image of something that is seen as new, may all contribute to a cognitive experience that relates to entertainment.

3.5 COMMUNICATIONS THEORY EXPLICATED WITHIN THE SYSTEMS APPROACH AND AESTHETICS THEORY

Systems theory offers a suitable framework to organise communications theory that demonstrates how the components of food images, as created by food stylists through plying their trade as input, enable consumers to interpret, via their responses to specific sensory, cognitive and emotional aesthetic indicators during the transformation phase, to ultimately realise the outcome in terms of behaviour or behavioural intent – specifically towards the image/s in question.

3.5.1 Elements of the system (Inputs)

Within the ambit of systems theory it is postulated that the food stylist encodes by combining various food ingredients and/or props in a creative way. This is accomplished through the implementation specific techniques, inspirations, ideas, talents and knowledge, training and education, following trends and using guidelines in terms of a structured brief, to create food images for the print media. All the aspects of artistic creation that are combined represent the inputs of the food image system.

3.5.2 Transformation of stimuli within the aesthetics perspective

Transformation indicates the collective change of inputs into outputs (Spears and Gregoire 2007: 2). In this particular example of a communications system - the food image creation and evaluation system - the consumer or viewer of the styled food image applies their mental abilities to decode the message content encoded by the food stylist, that, in turn, facilitates a response to the image as the transformation action. Aesthetics are of utmost importance during this phase, as the three dimensions, the sensory, cognitive and the emotional, will each, in their own turn, affect the way in which the viewer decodes the message content and then responds. This is by no means an easy task, particularly since research in the area of



aesthetics has made it clear how difficult it is to unravel such intricate aesthetic dimensions but to date an explanation to the issue has not yet been found (Danto 1993: 273).

3.5.3 Outputs

Visual images succeed or fail depending whether we can interpret them successfully or not (Mirzoeff 1999: 13). Decoding is the term used when signs and cues that are received are converted into meaning (Morgan and Welton 2009: 6). Decoding of an image relates to the viewer's ability to unpack an image to access its meaning (Burton 2002: 31). Communication is successful only when the meaning that was produced coincides with how the viewer decodes it. Preferably messages should not be so complex that only people with superior knowledge are able to interpret them (Schroeder 2002: 38), a proposition that is particularly relevant for food images.

The viewer decodes the image in terms of the total, whole image as well as its elements: this message persuades or creates an intention that is either favourable or not, the output, that is, to try, to order, to copy or to merely remember the product, or, naturally, to refrain from doing so. Behavioural intent may be influenced positively by various individual factors, for example, the presence of interesting ingredients, the styling and/or combination of the ingredients or props, the preparation or serving method used that would have served as the input into the system.

3.6 THE CONCEPTUAL MODEL

The following schematic model of food-related behaviour (Figure 3.1) was used on which to base the conceptual model devised for this study (Figure 3.2). Cardello's (1994: 254) model (Figure 3.1) shows that regardless of the "particular behavioural response that is measured, the sensory and hedonic experience of the food interacts with post-ingestional effects to produce consequences that feedback on learning, memory and bodily states. These in turn, affect subsequent responses to that food item".



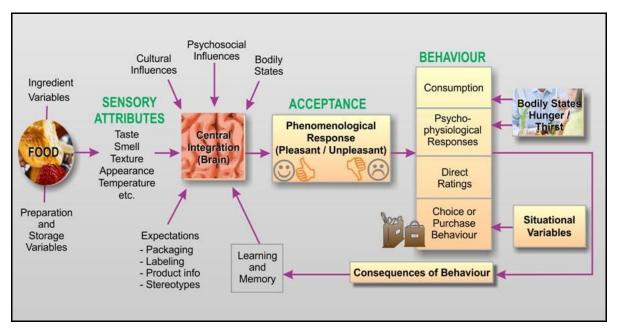


FIGURE 3.1: FOOD-RELATED BEHAVIOURS (CARDELLO 1994: 254)

The following (Figure 3.2) conceptual model was developed for this study and is based on the preceding food-related model of Cardello (1994: 254).

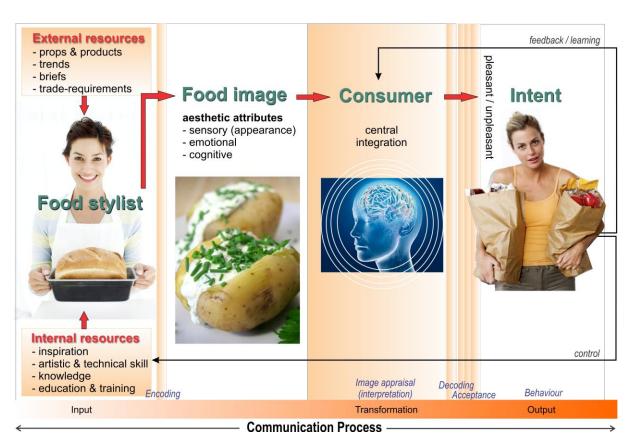


FIGURE 3.2: CONCEPTUAL MODEL



3.6.1 Discussion of the conceptual model

The conceptual model (Figure 3.2) was developed from information found in relevant literature. It has at its roots in the model (Figure 3.1) developed by Cardello (1994: 254), which depicts food-related behaviour and the way it is conceptualised and becomes centrally integrated in the human brain, where relevant schemata are stored to facilitate comprehension. The model introduces consumers who are experiencing food in some form, to processing the related information received from stimuli by using an array of inputs, such as bodily states, psychosocial influences, knowledge and memory. Together these inputs are centrally processed in the brain, resulting in a response which consumers would describe as either pleasant or unpleasant, and this would subsequently result in either positive or negative acceptance. Behavioural intentions and actions would then follow.

The conceptual model (Figure 3.2) as adapted, incorporates only certain aspects of the Cardello model (Figure 3.1). The major adaptation is that food is not dealt with as a physical object that determines consumers' behavioural intent. Instead, it focuses on consumers' perceptual viewing of food images and determining how persuasive these images may be in capturing their attention and influencing their behavioural intent, through aesthetics, as employed by the food stylist to compose the content of the food image.

The conceptual model incorporates the communication process as part of a so-called system, whereby particular messages are encoded by the food stylist, to be decoded by the viewer. Cardello's model (Figure 3.1) does not investigate the appearance of food in any depth hence it is adapted to accommodate the principle that food has certain sensory attributes such as taste, smell, texture and temperature, to name a few. In this context, this study's conceptual framework (Figure 3.2) focuses on the appearance of food in a food image that is the input. However, as is seen in Figure 3.2, the appearance of a food image is further analysed in terms of aesthetic attributes, namely, the sensory element of food which, in this study, is interpreted as the appearance of food, or what it looks like, and the emotional and cognitive attributes that relate to schemata in the brain of the viewer/consumer during appraisal. Appraisal is an evaluation that functions as a diagnostic process to



establish whether the situation that faces a consumer has adaptation relevance and, if so, to produce an appropriate emotional response (Desmet and Hekkert 2007: 61). The original model (Figure 3.1) shows a vast array of influences that may affect the response of the consumer during appraisal but none of these factors, other than the aesthetic attributes associated with the appearance of the images, were incorporated in the conceptual model (Figure 3.2) structured for this study.

The food stylist purposely or unknowingly encodes certain messages in terms of a food image through their stylistic abilities. The consumer decodes the message when appraising or viewing the image visually; then uses the message when central integration occurs; and responds in a particular manner, thus finding the image pleasant or unpleasant, the consequence of which may alter their behavioural intention.

3.7 RESEARCH OBJECTIVES

To carry out an exploratory investigation of food image creation by food stylists for print media, and to explore consumers' interpretation of food images, the research procedure embodies a number of particular sub-objectives in keeping with the chosen methodology, which will be dealt with in chapter 4:

In line with step 1, the concourse development phase (Q-Method), a stated sub-objective is to:

- examine South African food stylists' work methodologies compared with those of international contemporaries
- identify and describe the sources of inspiration drawn on by food stylists
- uncover the conceptualisation of the inspiration for food styling
- disclose ways that consumers are accommodated during the food styling process

In line with step 4, the Q-sort, the sub-objective in terms of consumer interpretation is to:

determine consumers' choices of food image and aesthetic matches



- describe consumers' reasons for selected food image choices
- determine to what extent consumers believe selected food images will affect their behavioural intent.



Chapter 4 (contents)

Research Methodology

4.1	INTRODUCTION	59
4.2	RESEARCH STRATEGY	61
4.3	RESEARCH DESIGN	62
4.4 4.4.1 4.4.2	RESEARCH METHODOLOGY An overview of Q-methodology Q-methodology explicated 4.4.2.1 Step 1 – Concourse development 4.4.2.2 Step 2 – Discourse development: the Q-sample 4.4.2.3 Step 3 – P-set development: the Q-participants 4.4.2.4 Step 4 – Q-sorting: the procedure 4.4.2.5 Step 5 – Q-sorting: data preparation 4.4.2.6 Step 6 - Data analysis and interpretation	62 63 64 64 68 77 78 82 86
4.5 4.5.1 4.5.2 4.5.3 4.5.4 4.5.5	QUALITY OF DATA Conceptualisation – Theoretical Validity Operationalisation – Construct Validity Sampling – Representativeness Data Collection – Reliability Data Analysis – Inferential Validity	88 89 89 90 90
4.6	ETHICAL CONSIDERATIONS	91



Chapter 4

Research Methodology

This chapter explicates the research approach and the methodology that was used to obtain the data in compliance with the objectives that were formulated for the study.

4.1 INTRODUCTION

Q-methodology, first introduced to the scientific world by Dr. William Stephenson in 1935, a brilliant protégé of Charles Spearman, the inventor of factor analysis (Brown *sine anno*: 1), was the prevailing methodology for this study. The five methodological steps were:

Step 1: the development and defining of the concourse;

Step 2: agreement of the discourse and the development of the Q-sample;

Stage 1 – Development of the Q-sample stimuli: aesthetic indicators

Stage 2 – Development of the visual Q-sample stimuli: food images

Stage 3 – Conducting a pilot study: pre-testing the Q-sort

Stage 4 – Factorise pilot study data and make alterations

Stage 5 – The final Q-sample

Step 3: the selection of the P-set - who the Q-participants were;

Step 4: Q-sorting;

Action 1 - Food image card sorting

Action 2 – Reasons provided for Most Agree card choice

Action 3 – Lickert-type scale indication of behavioural intent

Step 5: the analysis and interpretation of the data (Van Exel and De Graaf 2005: 4).



This chapter deals with steps 2, 3 and 4. Step 1 was covered in Chapter 2 that dealt with the theoretical background in relation to the literature reviewed for this study. Here the concourse development for this study was developed in line with Brown's (sine anno: 2) succinct explanation that concourse is all the relevant "flow of communicability surrounding any topic found in ordinary conversation, commentary and discourse of everyday life". Step 5 is presented hereafter in Chapter 4 – the analysis of the results and interpretation.

In this chapter the statistical methods that were employed are also introduced and the research design and survey instruments elaborated on with specific reference to the research population, sampling and data collection method. A discussion follows on how the constructs and their associated variables were selected and how these variables and their scaling were used to measure the constructs. A description of the operationalisation of constructs is provided after dealing with the development of stimuli that were used to refine the measuring scales and the survey instrument through pre-testing that included data collection and data analysis. Lastly, the issues of reliability and validity of the measuring scales are presented. The conceptual model (Figure 3.2, Chapter 3) specifies all the relevant concepts accommodated in this study.

It is often suggested that the reasons for using Q-methodology are broadly philosophical rather than narrowly pragmatic, where the purpose for using it is theoretical as well as task-related. As opposed to studies that need a large number of subjects, Q-studies reveal characteristics independent of the distribution of that characteristic relative to other characteristics (Van Exel and De Graaf 2005: 2), substantiating evidence why Q-methodology was perfectly suited for this study. The Q-methodological study of Jacobsen (2007: 247) emphasises the powerful results found in a study where verbal and pictorial stimuli were combined, and how the use of photographs offers experimental control over presentation contexts and procedures.

Furthermore, subjective communicability, the first of three important principles and justifications for using Q-methodology, was put forward by Brown (sine anno: 1),



together with quantum theoretical aspects, operantcy and interbehaviourism. Subjective communicability makes it possible to assess any person's axiom of subjectivity, such as a consumer viewing food images through Q-methodology, representing their "vantage point for purposes of holding it constant for inspection and comparison". Second, Q-methodology's quantum character of subjectivity is not in equivalence, but a reality, and therefore "gains meaning in relation to actual measurements". The third principle of operant subjectivity stems from the resultant emergent factors that are obtained from the consumer viewing the food image and therefore providing their own measure of their own viewpoint. The centroid method of factor analysis, with its statistically imprecise nature is the reason, much like the way food-image-viewing consumers interbehave with the image and the "factor analyst interbehaves with factor space, so that theory and data can interact within their own field also" (Brown sine anno: 1).

Finally, an important reason for choosing Q-methodology is that it makes a rigorous method available to do research without a large budget and without necessary computer facilities to analyse a large data set (Dewar, Mei Li and Davis 2007: 4; McKeown and Thomas 1988: 12).

4.2 RESEARCH STRATEGY

Like most exploratory studies, the objective of this study was to gain new insights, to explicate central concepts and to undertake a preliminary investigation (De Vos, Strydom, Fouché, Poggenpoel and Schurink 1998: 124). This empirical study employed the multi-technique nature of Q-methodology that uses both textual and numeric primary data. A predominantly positivist approach was taken to obtain quantifiable data with a consequent statistical verification that included a combination of qualitative and quantitative techniques as performed in the five precise Q-methodological stages for the purpose of triangulation. The hypothetico-inductive method involved a general procedure to identify specific concepts and to reconstruct them in such a way that the chosen procedure could be concluded. Food stylists' perception of the food styling industry and the methodology of their work in creating images, together with scientific literature and laymen's reporting, were used to draw conclusions that were used to test specific aesthetic indicators in given images. Data



came from a particular sample drawn from the readership of two selected South African food magazines. The research was cross-sectional because it involved perceptions and judgements pertaining to a set print media example in a definite context at a given time.

Steps 1 and 2 that involved developing and defining the concourse and the discourse development (the Q-sample development) were conducted formerly, whilst steps 3 and 4, the P-set development phase and Q-sorting was executed over a 4 month period thereafter.

The strategy for this study entailed following Q-methodology's five sequential steps to investigate and describe:

- the food styling industry from the viewpoint of the food stylist;
- how the food styling industry operates;
- how communication through the food stylist to the consumer takes place; and
- whether information gained through testing two distinct aesthetic indicators associated with food images could be used to alter food styling in order to change the consumer's behavioural intent.

4.3 RESEARCH DESIGN

This explorative investigation involved the use of Q-methodology which has not been extensively used in many food-related contexts before and to determine the merit of its future application in this particular field of study, food styling. The investigation was predominantly quantitative.

4.4 RESEARCH METHODOLOGY

In conducting this study the primary data was collected by means of qualitative and quantitative methods following the five sequential steps of Q-methodology. The theoretical platform for structuring the content, establishing an order and discussing the research process was based on a combination of communications theory, the systems approach and aesthetics theory.



4.4.1 An overview of Q-methodology

Q-methodology is a method for scientific study of human subjectivity, where it relates to a person's communication of personal viewpoints, opinions, beliefs, attitudes etc. (Van Exel and De Graaf, 2005:1; McKeown and Thomas 1988: 12). It originated as a personality assessment technique, combining qualitative and quantitative analyses to yield organised and exact measures to objectively describe human subjectivity, to the extent that its quantitative character causes it to be somewhat of an unusual qualitative research method (Jacobsen 2007: 242). It is often described as a combination of qualitative (discourse analysis) and quantitative (q-factor analysis) methods of social science (Bajek and Okada 2006: 168). In research today it is often used in the social sciences and the specific technique utilises Q-participants' ranking of images according to specific instruction to disclose subjective viewpoints or a personal profile (Van Exel and De Graaf 2005: 1). It is rooted in self-reference, which is the person's internal frame of reference - to such an extent that Q-methodological studies, from conception to completion, adhere to the methodological axiom that subjectivity is always self-referent. It is a methodology that may be considered new or innovative, even though it originates from the 1930s (developed by William Stephenson at the University of Oxford) (Webler et al. 2009: 5), and is a strategy often used for conducting behavioural research. It has a long history of use in psychology, but these days is used in a variety of quite diverse fields such as environmental planning, ideas of democracy (Eden, Bear and Walker 2008: 625), classroom practices (Bracken and Fischel 2006: 417) and agriculture (Davies and Hodge 2007: 323).

Q-methodology offers the opportunity to extract large unexplored viewpoints from a population related to phenomena such as their tastes, preferences, sentiments, motives and goals (to name but a few), and are very much that part of the personality that greatly influences behaviour (Eden *et al.* 2008: 626; Van Exel and De Graaf 2005: 2), but in this study the aim was to establish what Q-methodology could disclose about consumers' interpretations of aesthetics found in food image content.



4.4.2 Q-methodology explicated

Even though not all the studies that were consulted implemented the five sequential steps of Q-methodology in exactly the same manner, this study did. Some studies (Ten Klooster *et al.* 2008: 512; Previte, Pini and Haslam-McKenzie 2007: 137; Bajek and Okada 2006: 168) separated the literature study and interview part to obtain the concourse in two separate steps, but then they did not have a clear P-set development step. Ten Klooster *et al.*'s (2008: 512) study for instance only has four clearly defined steps. What is clear though is that there is a clear sequence of the steps, even if some steps are combined or even omitted.

Following the work by Van Exel and De Graaf (2005: 4) who based their "Sneak Preview" study of Q-methodology on one of the great researchers in this field, Steven R Brown, this study followed the basic five step Q-sequence, namely, **Step 1**: concourse development, **Step 2**: discourse development (Q-sample agreement), **Step 3**: P-set development (Q-participants), **Step 4**: Q-sort (data collection) and finally **Step 5**: analysis and interpretation. Findings obtained in Steps 1 and 2 formed the basis of the investigation for Step 4, the actual data collection phase through the Q-sort. These steps are explicated in the following figure (Figure 4.1).

4.4.2.1 Step 1 – Concourse development

A Q-study almost always starts with ascertaining the concourse, or a body of literature about the topic (Webler *et al.* 2009: 5). Two particular points about this study are to be noted. First, because the body of literature on the topic of food styling is limited it was combined with information obtained from the food stylists themselves through interviews. Second, the concourse not only led to the determining of a strategically select number of statements, the aesthetic indicators and dimensions, but it also gave direction to the discourse development in terms of selecting the food images that were combined with the aesthetic statements to create the final Q-sample.



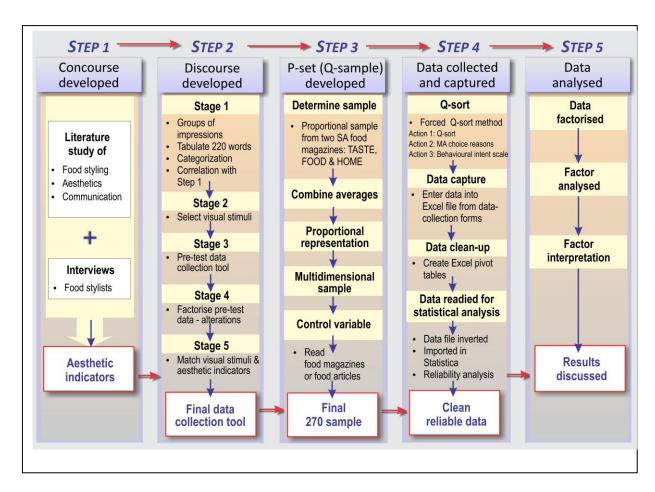


FIGURE 4.1: FIVE STEP Q-METHODOLOGY PROCESS FOR THIS STUDY

In the following comment Brown (*sine anno*, 10) states how useful the Q-Methodological technique is to enable Q-participants to represent their vantage point for the purpose of holding it constant for inspection and comparison, because subjectivity is at the root of concourse development, which is everywhere, "from the loftiest philosophizing and diplomatic negotiating to the street talk of the juvenile gang and the self-talk of the daydreamer". He continues by impressing on us that the axiom of subjectivity is first and foremost central to human affairs. "Q-methodology compares patterns of subjective and coherent viewpoints between small numbers of individuals, identifying areas of common ground and of divergence, and commonly uses quantitative techniques to organise the data" (Eden *et al.* 2008: 625).

Q-methodology therefore requires the development of a concourse of stimuli items (Dewar *et al.* 2007: 36), hence in this study the thorough literature study combined with information gained from discussions with food stylists led to the identification of stimuli items used, namely, the aesthetic indicators and dimensions as well as the



food images. Much of image content is determined solely by the food stylist and influences the aesthetic indicators directly. Concourse development involved firstly, testing the interview schedules, and secondly, the actual interviews with food stylists. Personal interviews with food stylists were done to identify their working procedures, sources of inspiration and to provide an explication of how they conceptualise the trends and inspirations in terms of food styling as an art form. Interviews established whether, and how, consumers are acknowledged in their work. Some of this information was used to determine the aesthetic indicators and dimensions in **Step 2**, the discourse development stage of the Q-study.

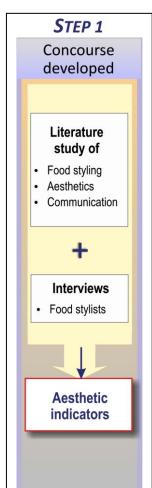


FIGURE 4.2: STEP 1 OF Q-METHODOLOGY

Grounded theory was therefore used to explore the world of the food stylist in-depth, a suitable approach according to Leedy and Ormrod (2005: 140) to uncover and understand what secrets the food image creation world holds (Strauss and Corbin 1990: 19; Zellner *et al.* 2010). The extant research analysed (Figure 4.2) was mostly from areas not directly associated with food styling, such as literature about non-traditional forums, for example, blogs, as well as the limited number of publications that were available on food styling and others areas such as the visual arts, clothing, marketing and other food-related areas that provided relevant literature on aesthetics, communication and imagery.

The interview schedule used in **Step 1** (the concourse development of the study) to gain insight into the world of the food stylist, was tested beforehand to ensure that instructions were clear, questions not too long and the content relevant. People who would fit the initial criteria for the food stylist sample were asked to answer some of the questions to ensure reliability, validity and to ascertain whether the questionnaire functioned in the way it was meant to or not. Valuable input was given by an academic expert from the University of Pretoria, a



practitioner who does food styling for a produce representative in the industry, and has authored several cookery books for which she did most of the styling herself.

A set of cases that Neuman (1997: 201) suggests would be the sample, was identified and a list of possible interviewees from local food magazines, and from among the researcher's personal contacts, was compiled. The sampling method involved convenience in the form of snowball sampling (Neuman 1997: 207) to recruit willing participants. Unstructured interviews were to be guided by a schedule of questions and topics (Addendum 1) to ensure that all objectives were covered during the interviews. Appointments were made with the food stylists, either via electronic mail or telephonically. Most food stylists contacted indicated that they preferred being interviewed at their studios, as most of them operate from a formal work studio. Unstructured interviews with an interview schedule were then conducted in the Gauteng and the Western Cape provinces of South Africa. The pre-tested schedule acted as a guideline to limit the interviewer's prompts for discussion within the themes that were important to this study (as advocated by De Vos et al. 1998: 299), but also to provide additional information, or in the case of vague answers, to elaborate on a specific issue. A total of 16 South African food stylists were interviewed. This possibly represents the largest part of the total South African food styling population as, according to the food stylists themselves, there might not be more than 10 to 20 professionals working in this field in the country. An adapted interview schedule (Addendum 2) that allowed the food stylists to complete their answers electronically in the spaces provided, was mailed electronically to international food stylists, the majority of whom operated in the United States of America. Seventeen replies were received from them and this not only provided further but limited data, but also corroborated all the South African food stylists' responses.

All the food stylists' inspirations, techniques, working methods and other items of interest were recorded. As many other scholars (De Vos *et al.* 1998: 152) have noted, during quantitative data collection or data gathering researchers "identify one or a few variables that they intend to study and then collect data specifically related to those variables" (Leedy and Ormrod 2005: 95). It is understood that this form of data collection has at its core the advantage of flexibility that can lead to the most varied



response (Oppenheim 2004: 30) – this researcher's reason for choosing this method of data collection. Probing allowed the interviewer to cover all the areas in question and to minimise any bias. Interviews were not transcribed verbatim but were used to clarify and verify the interviewer's notes if required when the content of the interviews was analysed.

When data saturation was reached, the same schedule was slightly adapted and mailed electronically to 242 American food stylists whose e-mail information was found on an American web site that provides a platform for food stylists to publicise themselves. Even though this was not a computerised self-administered questionnaire (CSAQ) the 17 responses received were used as part of the triangulation done using data from the international participants. The unit of analysis was the food stylist. Babbie and Mouton (2004: 16) aver that the unit of analysis a key element in an investigation of human beings as well as their actions of world.

4.4.2.2 Step 2 – Discourse development – the Q-sample

STEP 2 Discourse developed Stage 1 · Groups of impressions Tabulate 220 words Categorization Correlation with Step 1 Stage 2 Select visual stimuli Stage 3 Pre-test data collection tool Stage 4 Factorise pre-test data - alterations Stage 5 Match visual stimuli & aesthetic indicators Final data collection tool

The Q-sample, as defined, is a collection of stimulus items (McKeown and Thomas 1988: 25) – in the case of this study, food images with particular aesthetic dimensions. This section involved the following stages as seen from Figure 4.3:

Stage 1: the development of the Q-sample stimuli:

aesthetic indicators

Stage 2: the development of the visual Q-sample stimuli:

food images

Stage 3: conducting a pilot study: pre-testing the Q-sort

Stage 4: factorising the pilot study data and make

alterations

Stage 5: the final Q-sample

FIGURE 4.3: STEP 2 OF Q-METHODOLOGY



Naturalistic and ready-made are the two types of Q-samples. A statement categorised as naturalistic implies that the respondent's communication was either oral or written, while statements taken from sources other than the respondent's own means of communication is called ready-made. In this study a hybrid sample, or a combination of the two, was used. Because Q-samples are representations of communication contexts, all communication possibilities can be included. This raises a question about the process of selecting some whilst excluding others (McKeown and Thomas 1988: 25, 28). To solve this potential problem, the design principles for the Q-sample could either be unstructured sampling as was the case in this study, or structured sampling. Due to under or over-sampling it is, of course, possible that some bias could inadvertently be incorporated in the final Q-sample. In the case of unstructured sampling, in as much as items presumed to be relevant to the topic are chosen without undue effort to ensure coverage of all possibilities, a problem too could arise with regard to coverage. Nevertheless it provides a reasonably accurate survey of positions taken on a specific issue.

Even though literature lacks guidance or rules on how to determine what the Q-sample (or Q-set as stated in certain studies) should be, the goal remains the same, to develop a Q-sample with as comprehensive item coverage as possible (Bracken and Fischel 2006: 420). Using information obtained from Step 1 of this study, namely the food stylist interviews, as well as from the thorough literature investigation, the Q-sample for this study was developed according to the process now described according to its stages.

• Stage 1 - Development of the Q-sample stimuli: aesthetic indicators

The stimuli development took place over an extended period and involved a number of steps. Contrary to other studies like those of Miyazawa and Iwasaki (2009: 16) and Sabatini, Della Penna, Franciotti, Ferretti, Zoccolotti, Rossini, Romani and Gainotti (2009: 259) that used visual stimuli, including neutral stimuli, this study only used stimuli to which the consumer was forced to respond, supported by the particular psychometric responses attained through the specific Q-sorting method.



As very little published work was found that could be used as source material for obtaining consumers' emotional or cognitive responses to food images, another route had to be followed for developing such stimuli. Cognizance is taken of logical point that De Klerk and Lubbe (2008: 36) make that consumers may not be conscious of the functional contribution of aesthetics in their reactions to food images. However, for this study, the researcher had already identified specific variables as equivalent to those aesthetic dimensions that could singularly, or in combination, be more likely to affect a consumer's evaluation of food styling in a food image.

In marketing research there seems to be growing use of emotional stimuli, yet at the same time such studies are extremely divergent as far as content and structure is concerned (Laros and Steenkamp 2005: 1437). The particular Q-sorting procedure used in this study required Q-participants to indicate how much they felt a specific set of emotional and cognitive indicators corresponded with particular food images, according to a scale from 'most agree' through to 'neither/nor' to 'most disagree', In order to determine groups of impressions, it was the purpose of this part of the research process to find the emotional and cognitive indicators that also corresponded with indicators found in studies done in similar, but not food-related, fields.

A preliminary experiment was performed to obtain valid materials for stimuli development, as is common practice in an investigation of this nature, as noted in the literature (McCarthy, Heath and Milberg 2001: 77; LaRocca and Kromrey 1999: 925). Undergraduate Hospitality students at the University of Pretoria's Consumer Science Department were asked to each identify three food images. No limitations in terms of where they found these images were stipulated. They could be sourced from local or international magazines, newspapers or any other print medium to keep the scope as wide as possible. Seventy-three students took part in this developmental phase of the study. They were also asked to summarise each image in one word, describing what they believed best encapsulated their feeling in terms of the styled content of the image. These suggestions were tabulated as 220 individual words (most students provided multiple words that were used as descriptors), ranging from very personal descriptions such as "Eew!" and "Boarding-house-food", to others that represented the highest ranking food image descriptors, namely attractive, healthy, simple, fresh,



summer and comforting. These descriptors were then grouped into clusters that yielded six categories, *nostalgic*, *season*, *finesse*, *healthy*, *indulgent* and one category for all the *negative* words. It is important at this stage to acknowledge that research has shown that aesthetic indicators may easily be reduced to simple positive and negative dimensions, but that important nuances are lost when the same valences are collapsed together (Laros and Steenkamp 2005: 1444). When new information is produced - that is data that requires further processing - it should ideally first be reduced, which means qualitative and quantitative data are summarised before being analysed. These words were then categorised and thereafter correlated with aesthetic indicators such as those found in the work of Fiore and Kimle (1997) and Bagozzi *et al.* (1999).

For cognitive aesthetics the following three indicators showed a definite correlation between those found in literature and those collected from the student's summaries: reality, fantasy and entertainment. For emotional aesthetics the following three indicators: arousal, dominance and pleasure were found.

• Stage 2 - Development of the visual Q-sample stimuli: food images

The next step involved selecting suitable food images for each of the aesthetic indicators to be used for purposes of stimuli development. The selection of food images was based on a sampling frame of aesthetic messages derived from the aesthetics theories, being the cognitive indicators of *reality, fantasy, entertainment* and the emotional indicators of *arousal, dominance and pleasure*, corroborated in the previous step of this study's methodology together with the text of Fiore and Kimle (1997: 42).

One photograph for each of these indicators/dimensions was chosen. At this stage the food stylists were not involved, particularly because the data collection Q-sorting tool would first have to be pretested. The food stylists, interviewed in Step 1 of this study, were involved in the final selection of food images and were then asked to match the chosen images with the cognitive and emotional indicators.

No formal studies could be found where food images were employed in terms of their aesthetic content, although a number of studies in nutrition and dietetics used Q-



methodology and food images. In a study of landscape perception, Jacobsen (2007: 41) explains three very particular photo-based research methods, of which the third option was a photograph sorting procedure similar to the Q-sort employed in this study.

Finding appropriate visual stimuli in the form of food images proved difficult, as possible correlations between food images and cognitive or emotional indicators currently seem to exist only in the minds of individual food stylists. Much like the Laros and Steenkamp's (2005: 1439) study of emotional behaviour, the developed structure of words were therefore used to source images that best fitted the cognitive and emotional indicators determined in the previous section of this chapter.

Initially a large selection of food-specific consumer magazines was used to source possible images that would suitably portray the six aesthetic indicators. The following six photographs (Figure 4.4) were initially chosen, and 10 cm x 5 cm full colour high gloss cards were printed, each of the six images with a correlating aesthetic indicator printed in black Time New Roman font in a white bar at the bottom of each image. A total of 36 images in each set resulted.

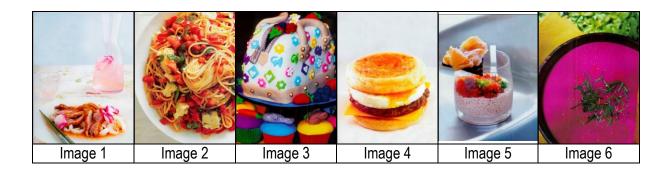


FIGURE 4.4: INITIALLY SELECTED FOOD IMAGES

Traditional Q-sorting employs either images on their own (McKeown and Thomas 1988: 30) or the more classic use of Q, where it is asked of the Q-participants to rank written statements. By combining selected food images with statements, it was possible to extract consumers' viewpoints as to how well they believed the aesthetic dimension correlated with a particular image.



Stage 3 - Conducting a pilot study: pre-testing the Q-sort

Q-methodology was initially developed to operate with short descriptive phrases, even though it was used successfully with visual images in later studies. For this pilot study, the initial six images chosen to represent the six aesthetic indicators were merged with a matching phrase at the bottom of the image. Thirty six high-gloss print images of 10 cm x 5 cm were created with a white bar at the bottom on which each of the following statements were printed. These statements were in the form of questions pertaining to the food images on the 36 individual cards:

- Does this evoke an idea of being in control for you?
- Does this intrigue you in an exotic, unusual way?
- Does this represent the world as you see it?
- Does this evoke an idea of what could be real for you?
- Is this an image that represents excitement for you?
- Is this an image that has a positive effect on you?

• Stage 4 – Factorise pilot study data and make alterations

During the pre-test, 60 undergraduate Hospitality students from the Consumer Science Department of the University of Pretoria were asked to sort the image cards on their own according to the sorting instructions and record their choices on a score card. The pre-test took place in the laboratory of the Department of Consumer Science, Hatfield Campus, University of Pretoria. The purpose of the pilot study was to smooth out any problems with the actual Q-sort procedure as well as to make any changes regarding the food images, the instructions, the actual sorting process and the data collection procedure as advocated in the literature (Dewar *et al.* 2007: 6). It was deemed appropriate to use students of the Consumer Science Department at the University of Pretoria as these students had been trained and practical experience in basic plate presentation and some knowledge of what constitutes visually appealing food. Considering the opinion of other scholars like Davies and Hodge (2007: 326) it was not deemed possible to make inferences about the wider population with this data.

Lastly, the pilot study participants were requested to indicate on a Likert-type scale how persuasive their particularly chosen 'Most Agree' cards were. Data was then captured on an Excel spreadsheet that was subsequently inverted and factors



determined. Data was then factorised with input from a statistician and some adjustments were made to the stimuli. In addition, as mentioned in the literature (Bracken and Fischel 2006: 421), feedback collected from the Q-participants regarding the instructions and material, specifically the presentation, comprehensibility and comprehensiveness of the items and instructions was incorporated. The following changes were then made:

During the pilot study, Q-participants were asked to write down reasons for placing cards on the 'Most Agree' pile in their own words. This proved to be cumbersome and tedious. The second action during the data collection process was therefore refined. The pilot study Q-participants' reason statements were content analysed, tabulated and coherent groups were formed much like the work of Blijlevens, Creusen and Schoormans (2009: 27) when they generated descriptors of appearance in a free categorisation task. Seven specific descriptors were generated as choices for the actual Q-sort procedure, with an additional 'other' eighth option.

A decision was made not to print a comprehensive aesthetic statement (question) on each card, but instead to have only one word on each card together with an accompanying explanatory card (Addendum 3) on which a full definition of all the relevant aesthetic dimensions was provided.

Three images (Images 1, 2 and 3) for which the data analysis proved to be functional were kept for the final Q-sort; for the remaining three images (Images 4, 5 and 6), more representative images were sought. A further decision was made to use only South African-styled and published food images, to minimise the occurrence of any cultural misinterpretation since internationally published food images may have slightly different stylistic content, and because the sample of respondents and food stylists were all South African.

The Likert-type scale was changed to 11 options ranging from 0 to 10.



Reference cards to explain the aesthetic indicators and images were developed to accompany the data collection pack for the Q-sorting procedure. A short description of each image was provided on the reference card that was given to sampled consumers, and these read as follows:

- An Asian inspired sliced roast duck breast and litchi dish
- Spaghetti with tomato, basil and crumbled cheese
- A marzipan covered cake and cupcakes, meant to resemble the Louis
 Vuitton luggage brand
- A double beef patty burger with all the trimmings
- Fresh Adams fig, pistachio nut, white and dark chocolate fruit salad
- Baked chocolate soufflé served hot in a pretty white cup

• Stage 5 - The final Q-sample

Following the pilot study, recommendations and alterations to the Q-sample were made. The final Q-cards were completed by verifying the suitability and appropriateness of the image and aesthetic indicator matches through consultation with the food stylists previously interviewed. A draft version of the newly selected images was distributed to the previously interviewed South African food stylists (LaRocca and Kromrey 1999: 926 suggest this be done). Food stylists were asked to match the provided cognitive and emotional indicators with the food images. The results from six willing food stylists' were calculated and accepted as the final match between food images and aesthetic indicators. The final six images selected are portrayed in Figure 4.5:

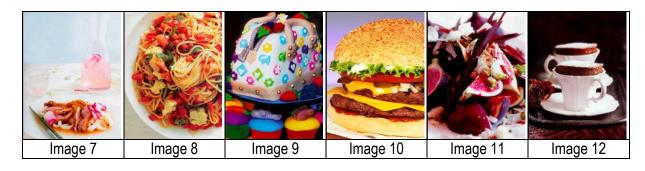


FIGURE 4.5: FINAL FOOD IMAGES



The six aesthetic indicators were described as follows on a separate reference card that participants could consult during the sorting process:

REALITY - such as the REAL world. Nothing out of the ordinary, nothing unusual, nothing strange - just plain straight forward reality. A representation of the world "as it is". The world as experienced and lived by people in their daily lives; living from day-to-day.

FANTASY - not the world as it is - the world as it MAY be, what COULD be. An alternative existence – a world of dreams, desires and hopes in people's imaginations.

ENTERTAINMENT - such as when people are seeking something new, something unusual or unexpected, perhaps even a challenge for the mind. When creativity comes to the front. Amusement, intrigue, something special, experiencing a special occasion, feeling spoiled and indulgent.

AROUSAL - such as when going from neutral to frantic excitement. Bright, rich and intense stimulation of desires or energy levels. Something that will arouse people - an effect of evoking feelings or desires.

DOMINANCE - such as in unrestricted, complete control of the situation, being in command. Showing off one's skills with confidence, perhaps even arrogance; the opposite of being overwhelmed. Being able to wield command over others.

PLEASURE - straight forward FEELING GOOD. A positive, likable enjoyment, experiencing good emotions such as happiness, delight and satisfaction. A source of joy and good, multi-sensory feelings.

Each image was then matched with all the different aesthetic dimensions, as suggested by the food stylists as per Figure 4.6. This resulted in 36 food images. Previous studies using photographs and Q-sort have shown that a modest number between 25 and 35 works best. The number of food images in the final selection was 36, because all the food images needed to be matched with an aesthetic indicator.



This represented a diverse set of possible aesthetic messages and this was the key objective.



FIGURE 4.6: FINAL DATA COLLECTION TOOL

4.4.2.3 Step 3 – P-set development – the Q-participants

The development of the P-set (Van Exel and De Graaf 2005) or the sample design was done in line with recommendations made by Eden *et al.* (2008), that is, to select a comprehensive and diverse sample rather than a large (a big quantity) or representative sample. The unit of analysis involved consumers who actively read food articles in local magazines and who considered themselves to be visually influenced by the appearance of food. The convenient or non-random sampling method of quota or proportional sampling was used, as no definitive list of food image viewers exists. The readership statistics obtained from AMPS (SAARF 2011) of the two most prominent South African food magazines, the Food and Home and the Taste magazines, were used as basis for the proportional quota design. A final sample size of 270 was used to ensure a statistical significance level of 90% and a maximum error margin of 5%. The sample therefore included consumers who regularly look at food images and who would be able to interpret what they saw, such as indicated in Figure 4.7.

The interview-facilitators consisted of a team of 23 trainees in the Hospitality business who underwent rigorous training regarding ethical collection of data. They subsequently signed a declaration of authenticity to verify the correctness of the data collected during the Q-sorting procedure.



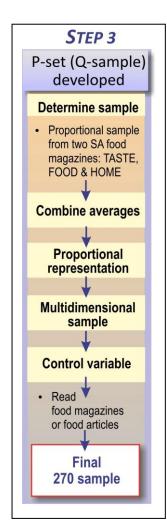


FIGURE 4.7: STEP 3 OF Q-METHODOLOGY

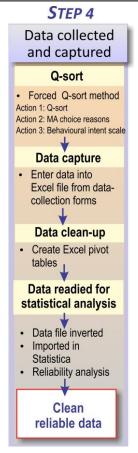
4.4.2.4 Step 4 – Q-sorting: the procedure

Step 4 involved the Q-sorting exercise that involved 270 individual participants in line with the sampling requirements determined in Step 3, (the P-set development), where cognitive and emotional aesthetic indicators were tested against pre-selected food images, as advocated in the literature (Eden, *et al.* 2008: 625) – refer to the following Figure 4.8.

FIGURE 4.8: STEP 4 OF Q-METHODOLOGY

The Q-sorting exercise required Qparticipants to sort food images in a predetermined way and to note how

the food styling content of the images affected their behavioural intent. Q-sorting is done to understand which aesthetic dimensions communicate better with and/or are interpreted more easily by the consumer than others. This depends on the senses, underlying attitudes and values and is achieved through factor analysis of the items of the specific sorting selections based on Q-participants' reaction to food images (Fairweather and Swaffield 2002: 286). A Q-participant models points of view subjectively by interpreting aesthetics indicators through the operational medium of Q-sort



(McKeown and Thomas 1988: 12). The 'modelling' involves a systematic ranking of a purposively selected sample of stimuli (also known as the Q-sample) according to specific instructions. Even though Q-methodology is traditionally used where statements are ranked, of late it has also become popular to have pictures sorted in this way (Eden *et al.* 2008: 626). In this study, images and single aesthetic indicators



as words, were printed on cards that participants had to sort to best reflect their viewpoint.

In many studies that use the Q-methodology, it is suggested that a fixed distribution, sometimes called a forced distribution (Jacobsen 2007: 243), is preferable to a free or unforced distribution where Q-participants were allowed to place as many cards as they wished into each position (Bracken and Fischel 2006: 421). Forced or fixed distribution was chosen for this study. However, it also has limitations and, in order to avert objections, an open rank-sort was preferred for this study. One limitation that remained was that a free distribution might have allowed Q-participants to rank more positive than negative choices.

Sorting Q-sample items relies on the nature of the instructions such as simple requests for agreement and disagreement, or operationalisation of theoretical constructs (McKeown and Thomas 1988: 30). This depends on the pattern of the findings revealed in the factor structure. Guideline for instructions regarding the Q-sorting procedure are provided in literature (McKeown and Thomas 1988: 31), ranging from recommendations about the space required by Q-participants to spread out distribution markers, to instructions before the commencement with the sorting.

Interview facilitators who collected data for this study using the Q-sort method were given thorough training. Verbal instructions on exactly how the Q-sort should be conducted were accompanied by a handout with explicit written instructions (Addendum 4), together with a complete set of all the materials needed (Q-sort card deck, sorting aids such as distribution marker page, the score card with a table in the prepared format (Addendum 5), envelopes and additional explanation pages for notes). The 270 participants were allocated to the facilitators. A collection time frame of two months was allowed for facilitators to locate the specific participants assigned them and make appointments with them to conduct the Q-sort. The facilitators arranged to meet the Q-participants personally and in most cases the Q-sort was performed at the participant's home or office. The Q-sorting procedure and additional data collection took on average half an hour. Facilitators could reach the researcher telephonically when necessary to ask questions should any queries arise during the completion of the Q-sort exercise, a point noted by Bracken and Fischel (2006: 420)



too. Card scores for the completed Q-sort were recorded by writing the item numbers on a score card that replicated the Q-sort distribution. This was done after each Q-sorting.

Once Q-participants had completed their Q-sort, they were asked to explain their top choices by choosing from a list of content word choices given to them and which could be appropriately coded. Jacobsen (2007: 246) also recommended using this technique. Lastly they were asked to indicate, on a Likert-type scale from 0 – 10, how much they thought the content of each image had influenced their evaluation of their most agree choices. The initial Q-sort data as well as the two additional tasks were all captured on the data collection record in tabular format.

Using a combination of the Q-sort methods of Dewar *et al.* (2007: 37) and that of Pitt and Zube (1979: 230), the following sorting procedure was followed and used almost exactly as was done in the pilot study involving the 60 Hospitality trainees. Qparticipants were asked to sort the deck of food image cards in a distribution based on the aesthetic message content associated with the styled content depicted in each image. Three actions were involved.

Action 1 involved sorting the pile of cards to distinguish cards that the Q-participants allocated 'Most Agreed' to and 'Most Disagreed' creating five separate piles. Specific sorting positions were allocated for the five piles, namely

1	3	5	4	2
	_	_		

The following sorting instructions were followed:

- 1st SORT: sort through the pile and immediately remove all the images that you
 MOST AGREE with. Place these on the first pile, completely to your left.
- 2nd SORT: sort through the remaining images and remove all the images that you
 MOST DISAGREE with. Place these on the second pile, completely to your right.
- 3rd SORT: sort through the remaining images and remove all the images that you
 AGREE with. Place these in position 3, on the left.
- 4th SORT: sort through the remaining images and remove all the images that you
 DISAGREE with. Place these in position 4, on the right.



• Place all the remaining images in position 5 – NEITHER/NOR.

Action 2 was to indicate on the data collection form which of the following descriptors best described the image of the cards placed on 'Most Agree' pile – use ONLY the images in the MOST AGREE pile. Q-participants had only to provide the letter chosen from the following list:

a. Fun

(childlike/celebrate/colourful/enjoyment/happiness/postitive/reward/play-fulness)

b. Control

(structured/ordered/balanced/organised)

c. Exotic

(different/unusual/unique/surreal/interesting/unexpected)

d. Chaos

(messy/confusing/disorganised/informal)

e. Comfort

(wholesomeness/homey/peaceful/calming/familiar/traditional/serenity/contentment)

f. Enticing

(delicious/appetising/attractive/appealing/attention)

g. Refreshing

(healthy/new/fresh/sophisticated/trendy/future/rejuvenating)

h. Other

- please state what.

Action 3 was to indicate on a scale from 0 - 10 how much they believed the stylistic content of the image was persuasive – that is, to persuade to make the recipe, to persuade to buy the ingredients to make the dish, file the image, remember it, etc. – use ONLY the images in the MOST AGREE pile.

Very few participants had problems completing the sort. Only one respondent's results were not usable. Even though the sample size may seem small for such an extensive technique, the sample size sufficed and was adequate for this more intensive Q-methodology technique that "seeks to identify and compare the main



viewpoints on a particular issue, rather than to measure the spread of viewpoints across a population" (Eden *et al.* 2008: 627). Afterwards the data was prepared for analysis, whereby the cards for each rank were given the same value. The cards were placed in a continuum ranging from 1 to 5, where each card placed on the 'Most Agree' pile received a score of 5, those placed on the 'Agree' pile received a value of 4, and so forth to 'Most Disagree', which represented a score of 1. Values were assigned to the piles along the continuum of lowest aesthetic message (value = 1) to highest aesthetic message (value = 5). The values assigned to each food image were summed up across Q-participants and a mean aesthetic message value was calculated for each food image similar to the procedure detailed in the work of Pitt and Zube (1979: 231).

4.4.2.5 Step 4 – Q-sorting: data preparation

Both factor analysis and the Q-methodology approach were important aspects of this study's methodology as they provided the statistical means by which food image viewers could be grouped, or more accurately, grouped themselves, after the actual Q-sort had been completed. It afforded statistical clarity to the behavioural order implicit in the matrix of Q-participants by way of similarity or dissimilarity, and thus simplified the interpretive task substantially and brought to attention the typological nature of the food image viewers while determining the internal consistency of group categories (McKeown and Thomas, 1988: 49).

Refer to Figure 4.8 to establish the final activities in **STEP 4** of the Q-Sort. The first activity was to calculate the correlation matrix of all the Q-sorts. These were then subjected to factor analysis, the objective of which was to identify the number of natural groupings of Q-sorts by virtue of being similar or dissimilar to one another, a procedure documented by Van Exel and De Graaf (2005: 8). The factor loadings obtained through the Q-sort are in effect correlation coefficients and therefore indicate the extent to which each Q-sort is similar or dissimilar to the composite factor array for that type. McKeown and Thomas (1988: 51) cautions that it is not so simple to determine if a factor (opposed to a loading on a factor) is significant, and suggests the use of a combination of statistical and theoretical criteria. In this study the statistical method that employed the Eigen value criterion was used, whereby a factor's significance is estimated by calculating the sum of its squared factor



loadings. It is accepted that Eigen values greater than 1.00 are considered significant, as those with lesser magnitude are too weak to warrant any serious attention.

The data was cleaned up to establish data integrity as part of the quality assurance process. It is important to note that this was not a standardised scale, since Q-sorting does not provide standardised scales. The whole deck of cards contained some 'incorrect' cards that were cards where the food image and aesthetic indicator did not match the food stylists' recommendation. Thus, through factor analysis, very specific results were obtained. This action meant greater reliability regarded as extremely important in this particular investigation since, when Q-participants chose 'incorrect' cards, and all the other participants did the same, a better factor solution resulted.

Data was captured by recording the results on an Excel worksheet. The Q-participants' names and contact phone numbers were entered in columns one and two respectively followed by the responses in each of the next five columns. Thus a data matrix of 36 x 5 rows and columns was created for each of the Q-participants. Each column was given a heading – so that there were columns 1-36 for MA (Most Agree), for A (Agree), 1-36 for N/N (Neither/Nor), D (Disagree) and MD (Most Disagree). Data was then captured according to the specific card numbers that were placed on each pile (MA, A, N/N, D, MD), as sorted by the Q-participants – that is the card printed with the particular food image matched with a specific aesthetic indicator. These were recorded on the data recording document (score card), so that the rows and columns represented many more dimensions with which multivariate analyses could be done. The actual card numbers (food image and aesthetic indicator cards) were entered in each column. Excel Pivot Tables were used to check for errors. Errors were mostly due to incorrect typing and these were changed using the original data collection tables as illustrated (Table 4.1).

After data clean-up, the data had to be prepared for statistical analysis. A new Excel file, called a flat-file was created so that the rows and columns would represent all dimensions in preparation for multivariate analysis. The data-file was then inverted in order to correctly reflect the card sorts as scale values along a 1 to 5 scale (Table 4.2). This was done by giving the Q-sorted cards, as done by the Q-participants, a



value from 1 to 5. The scale represented MA (Most Agree) as having a value 5 to MD (Most Disagree) a value of 1. In the flat-file, instead then of viewing each Q-participant's particular card numbers under one value, for example Most Agree, the entire range of cards was displayed, each with the particular value assigned to that card as shown in the example below. This was done for all 270 Q-participants.

TABLE 4.1: DATA ERRORS AND CORRECTIONS MADE

MA 4	Respondent 081	Card 4	Two card 25s on the data collection table – make one card a N/N
MA 7	Respondent 210	Card 7	Typing error, 17 instead of 7
MA 7	Respondent 043	Card 7	Typing error, 17 instead of 7
MA 10	Respondent 122	Card 10	Card 10 in agree, not captured
MA 12	Respondent 111	Card 12	Typing error, two cards 13, instead of 12 and 13
MA 14	Respondent 258	Card 14	Typing error, Two cards 16, instead of 14 and 16
MA 16	Respondent 205	Card 16	Two card 9s on the data collection table – make one card a N/N
MA 18	Respondent 195	Card 18	Typing error, 17 instead of 18
MA 18	Respondent 070	Card 18	Typing error, 12 instead of 18
MA 19	Respondent 178	Card 19	Typing error, 17 instead of 19
MA 19	Respondent 147	Card 19	Typing error, 17 instead of 19
MA 19	Respondent 145	Card 19	Typing error, 17 instead of 19
MA 21	Respondent 218	Card 21	Two card 22s on the data collection table – make one card a N/N
MA 21	Respondent 130	Card 21	Wrongly written on data collection document, 12 instead of 21
MA 22	Respondent 268	Card 22	Typing error, 32 instead of 22
MA 23	Respondent 044	Card 23	Typing error, 23 that looks like a 27
MA 25	Respondent 111	Card 25	Respondent's handwriting, 29 looks like a 25
MA 27	Respondent 056	Card 27	Typing error, 47 instead of 27
MA 28	Respondent 149	Card 28	Typing error, 29 instead of 28
MA 29	Respondent 202	Card 29	Typing error, 24 instead of 29
MA 29	Respondent 175	Card 29	Typing error, 28 instead of 29
MA 29	Respondent 156	Card 29	Typing error, 39 instead of 29
MA 30	Respondent 066	Card 30	Card 30 not captured
MA 33	Respondent 186	Card 33	Two card 30s on the data collection table – change to 33
MA 33	Respondent 169	Card 33	Typing error, 36 instead of 33
MA 33	Respondent 004	Card 33	Typing error, 3 instead of 33
MA 34	Respondent 167	Card 34	Typing error, 36 instead of 34
MA 36	Respondent 190	Card 36	Typing error, 35 instead of 36

TABLE 4.2: EXAMPLE OF THE INVERTED DATA SET

Qno	MA-Label	Row	Name	Card1	Card2	Card3	Card4	Card5
001		0	Q Respondent nr 1	1	1	3	5	5
002		1	Q Respondent nr 2	1	5	5	1	4

The next step was to perform normal statistical analysis to determine the reliability of the data. In Statistica, a computer software package, this was done with a multivariate technique called Cronbach Alpha. The first round of reliability analysis



resulted in a Cronbach Alpha coefficient of 0.64, which was lower than the Nunnely norm of 0.7. This indicates that there were internal stability challenges within some of the attributes, in this study represented by the cards. The repetitive procedure of reliability analysis as proposed by Churchill (1979: 65) was then followed to obtain internal stability. This particular process entailed identifying the attributes with lower Alpha-values and low item-to-total correlation, and detecting omissions in subsequent steps of the process. This process was repeated several more times resulting in a final Cronbach coefficient of 0.73.

According to Churchill's (1979) methodology a factor analysis was performed after the "item-reduction" phase since data stability had been reached. It is important to note that three cards that were in fact 'correct' cards – cards of which the food image and the aesthetic indicator were grouped together by the food stylists – were removed during the data stability checks; the cards were 3, 10 and 19. A decision was taken to continue with the factor analysis regardless of the fact that these 'correct' cards had been removed. The factor analysis revealed as much of the shared common interest irrespective of whether the cards were 'correct' or 'incorrect' – much like the way Previte *et al.* (2007: 140) explain that automation does not negate the importance of research analysis.

Hereafter the second set of data was captured, which was to only refer to the cards that the Q-participants placed on the MA (Most Agree) pile. Q-participants were asked to select one reason from a given list of words that represented the particular reason why they placed a specific card on the MA pile. Again the specific card numbers were entered in columns on an Excel worksheet, with a semicolon followed by an alphabetic character that represented the reason for their choice.

The last data set to capture also only referred to the cards that were placed on the Most Agree pile by the Q-participants. These cards were rated on a Likert-type scale from 0-10 according to how much the participant thought the aesthetics of the food image would alter their behavioural intent. The actual value was captured in Excel columns.



Data analysis occurs with the inter-correlations of all the Q-sorts as variables and factor analysis of the n x n correlation matrix (McKeown and Thomas 1988: 13). "Resulting factors represent points of view, and the association of each respondent with each point of view is indicated by the magnitude of his or her loading on that factor" (McKeown and Thomas, 1988: 13). In this study applying factor analysis and Q-methodology facilitated the grouping of the food image viewers statistically or, more accurately, as they grouped themselves, via the actual Q-sort. Statistical clarity has confirmed that similarity or dissimilarity guides the order in which Q-participants make their decisions, and the results can be recorded in a matrix format. This greatly simplifies interpretation and draws attention to the fact that food image viewers can be readily classified.

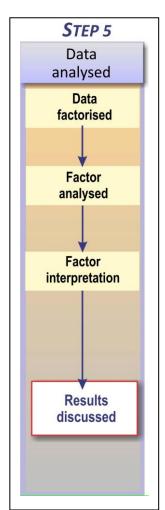
Exploratory factor analysis was performed using the end result of the reliability process – these were the variables that were stable after the reliability process was completed. The first step was to determine how many factors could be foreseen, and whether the factor loading that would determined for each Q-sort, expresses the extent to which each Q-sort is associated with each of the other factors. As Brown (sine anno) advises, the number of Eigen values above 1 produced at the correlation matrix stage, can be used as heuristics to inform the number of factors. Since there were six aesthetic indicators as represented by food image cards, it was decided to have a test for a minimum of six plus two more, therefore eight were chosen. This strategy is also suggested by Van Exel and De Graaf (2005: 1). The program was run and six factors were indeed identified with an Eigen value > 1. The cumulative explained variance was 55%.

4.4.2.6 Step 5 – Data analysis and interpretation

The analysis of the data for this study is presented in Chapter 5. During Step 1 of the applied five-step Q-methodology - the concourse development of this study - interviews with South African food stylists yielded data that was analysed through content analysis. It is understood that content analysis may be applied to almost any form of communication, such as paintings (Babbie and Mouton 2004: 383). In this study photographs or food images were used.



Figure 4.9 illustrates the actions followed as the data was analysed through the identification of patterns and themes, so that certain conclusions could be drawn. The



reasoning mode was inductive and new thoughts could be added after summarising the data. When induction is used to interpret data it is possible that the conclusion may not be completely certain or sure, and that it may be only tentatively possible.

FIGURE 4.9: STEP 5 OF Q-METHODOLOGY

During Step 4, the Q-sort part of this study, individual Q-participants' viewpoints or rankings (the Q-sorting results) were factor analysed. Normally a large number of Q-participants are given a small number of tests, but with Q-methodology a small number of people are given a large number of test items. As a result, the inversion of conventional factor analysis sees Q-methodology correlating Q-participants instead of tests; by doing so, information about similarities and differences in terms of different Q-

participants' viewpoints about food images are derived. Enough clusters of correlation have to be factorised to describe common viewpoints, and individuals are thus measured with respect to them (Van Exel and De Graaf 2005: 1). During Q-analysis, the resulting factors denote clusters of subjectivity that represent functionality rather than mere logical distinctions (Van Exel and De Graaf 2005: 1). Data analysis occurs with the inter-correlations of the n Q-sorts as variables and factor analysis of the n x n correlation matrix (McKeown and Thomas 1988: 13). "Resulting factors represent points of view, and the association of each respondent with each point of view is indicated by the magnitude of his or her loading on that factor" (McKeown and Thomas 1988: 13).



4.5 QUALITY OF DATA

A very important type of reliability factor for Q-methodology is that the results can be replicated so that the same instruction conditions will result in factors that are schematically reliable, thus, representing similar viewpoints on the same topic, with similar structured, although different Q-samples when performed on a different set of Q-participants. So much so that the normal type of statistical reliability, where sample results are generalised to the general population, is not of great concern, but rather the distinct subjectivities about a topic that adhere to it, and not the percentage of the sample that does not (Van Exel and De Graaf 2005: 3).

The main problem is how to select between certain items for the Q-sample, whilst excluding others. A solution is offered by McKeown and Thomas (1988: 28) who provide two possible design principles, namely unstructured or structured samples. Unstructured sampling involves items presumed to be relevant to the topic and found without undue effort, but with the associated problem that certain items may be under- or oversampled, resulting in bias in the Q-sample. In this study structured sampling was therefore used as it has a more systematic design principle of factorial experimentation assigned Q-samples than to experimental conditions. This inductive application results in designs that emerge from patterns that were observed as samples were collected (McKeown and Thomas 1988: 28).

There may also be some negative opinions regarding Q-participants' cognitive ability to perform sorting of such magnitude. In this study, Q-participants were required to sort through the deck of cards five times. Some critics of the Q-sort method express the opinion that the "Q-sort continuum has too many categories and requires that subjects make too many and too fine distinctions amongst items" (McKeown and Thomas 1988: 34).

To eliminate the possibility of any error, reliability and validity checks were done through conceptualisation with the focus is the validity of the theory and operationalisation as related to the constructs.



4.5.1 Conceptualisation - Theoretical Validity

Theoretical validity through conceptualisation comes from the underlying theoretical framework that guides and directs the research. Strauss and Corbin (1990: 52) maintain that technical literature in the form of reports on research studies validates the accuracy of findings. Even though there may be a lack of published material available on the subject of food styling, it has been stated that other areas where the visual appeal of an object may be important to the consumer have been used as points of reference. In order to enhance the theoretical validity of this study, the key concepts were identified through the existing literature, and were further confirmed during Step 1, the concourse development phase, where food stylists as industry specialists were interviewed.

4.5.2 Operationalisation – Construct Validity

Validity ensures that the scale used measures what it is supposed to measure, or more specifically the degree of fit between a construct and its indicators, as explained by Neuman (1997: 141). It shows how well the conceptual and operational definitions interlock each other; the better the fit the greater the measurement validity. This study followed the five Q-methodological steps in order to ensure construct validity. As previously mentioned, the lack of theoretical definitions for concepts meant that it was necessary to first establish a generally accepted industry language and terminology so that definitions could be clearly explicated and understood. Thereafter, in the Q-sort part of the study during which Q-participants were asked to rank their viewpoints, construct validity were ensured. Construct validity hinges on the relationship of the scale that is used to other measures. In this study, Oppenheim's (2004: 152) view that validity depended on the Q-participants' candour and willingness to cooperate, and the absence of stereotyped answers or 'façade' responses, was indeed substantiated in that the data collection was effected sincerely and in a relationship of mutual respect and collegiality.

The interview schedule (used in Step 1, the concourse development of the study) was tested beforehand to ensure that the instructions were clear, questions not too long and the content relevant. Colleagues and friends (people who would fit the initial



criteria for the unit of analysis) were asked to answer some of the questions to ensure reliability, validity and that the questionnaire functioned in the way it was meant to. An attempt was made to ensure that questions and categories used in the interviews were clear-cut and mutually exclusive, so that Q-participants would interpret the statements and questions as intended by the researcher; by so doing, the measurement of the relevant construct was measured.

4.5.3 Sampling – Representativeness

It is understood from the literature that representative reliability ensures that indicators would deliver the same answers when applied to different groups (Neuman 1997: 139). Equivalence reliability was also achieved in this study because multiple indicators were used in the operationalisation of constructs. During Step 1, the concourse development phase of this study, a broad section of industry specialists was consulted, with emphasis on food stylists in the print media world.

Q-participants participating in Step 4, the Q-sort section of this study, were selected on the basis of their confirmation of the fact that they read food magazines or magazines which feature food articles. A large sample should produce a smaller sample of error. To ensure that the sample provided valid information that is representative of the target population, logistically satisfactory selection of the participants was done on the basis of convenience, particularly with regard to accessibility, but strictly according to pre-determined criteria. Eager and willing participants were seen to be sure to ensure truthful responses.

4.5.4 Data Collection – Reliability

To ensure reliability, only willing participants were included. Reliability was achieved by ensuring that the data collected was free from measuring errors and that, if necessary, the same test could be repeated on other subjects and the same results obtained. Even the environment in which the questionnaires were completed could impact on the reliability level and this too was carefully considered.



4.5.5 Data Analysis - Inferential Validity

A professional statistician was employed to ensure that data analysis was done correctly and produced valid results. Both descriptive statistics and inferential statistics were used and verified.

4.6 ETHICAL CONSIDERATIONS

The researcher strove to accommodate interviewees and Q-participants in every way possible to ensure they were treated with the utmost respect and consideration in terms of time and effort. All information with regard to interviewees and Q-participants was treated confidentially. Both interviewees and Q-participants were thoroughly informed beforehand about the extent of the study and briefed about what was required of them. Informed consent was obtained from all parties, and ensured "the full knowledge and cooperation of subjects, while also resolving or at least relieving any possible tension, aggression, resistance or insecurity of the subjects" (De Vos et al. 1998: 27). Institutional approval was obtained via the Ethics Committee of the University of Pretoria.



Chapter 5 (contents)

Results and Discussions

5.1	INTRODUCTION	93
5.2	THE FOOD STYLIST	94
5.2.1	Food Styling	94
5.2.2	Demographic profile of participating food stylists	95
5.2.3	Qualifications, training and experience	95
5.2.4	Food styling in South Africa at present	98
5.2.5	Food stylists' sources of inspiration	
	(Objective 1.1)	98
5.2.6	Food stylists' conceptualisation of their source of inspiration	
	(Objective 1.2)	100
5.2.7	Food stylists' work methodology	
	(Objective 1.3)	103
5.2.8	Feedback from the consumer	
	(Objective 1.4)	105
5.2.9	Conclusion	105
5.3	THE FOOD IMAGE CONSUMER	106
5.3.1	Consumers' view of aesthetic indicator and visual image matches	
	(Objective 2.1)	106
5.3.2	Extraction and specification of factors	109
5.3.3	Rationale for Q-participants' Most Agree card choices	
	(Objective 2.2)	114
5.3.4	The influence on consumers' behavioural intent	
	(Objective 2.3)	121
5.4	CONCLUSION	123



Chapter 5

Results and Discussions

This chapter presents the results from two data sets: first, relevant demographic data, followed by the results of the application of descriptive and inferential statistics, in accord with the research objectives.

5.1 INTRODUCTION

Research was done following the five Q-methodology steps and results are presented accordingly. The process involved the following five steps:

- Step 1, the concourse under investigation was established South African food stylists were interviewed, making use of an interview schedule to obtain some background, demographic data and information about their education, training and work experience
- Step 2, where the discourse was developed more specifically the Q-sample involved the identification and construction of appropriate aesthetic indicators
 and visual imagery that were used as the data collection tool that took place in
 step 4
- Step 3, the development of the P-set involved a decision in terms of the Q-participants completing the Q-sort
- Step 4, the actual Q-sort that is, the data collection process whereby the selected Q-participants (the P-set) completed the Q-sort
- **Step 5**, where the results obtained from the Q-sort are presented and discussed, i.e. the way consumers view food images and their responses to the six selected aesthetic indicators.



5.2 THE FOOD STYLIST

Step 1 of Q-methodology required the identification of the concourse, determined through rigorous interviewing of informed individuals, the food stylists. The concourse of a text contains expressions of all the perspectives on that topic (Webler *et al.* 2009: 8). In this study this comprised the information required to formulate the aesthetic indicators and to choose the appropriate visual images that were used in the Q-sort, in order to establish how consumers responded to food images with particular aesthetic indicators. Results are accordingly presented, highlighting some demographic results (section 5.2.2), food styling as a profession in South Africa at present (section 5.2.3 and 5.2.4), food stylists' creativity and sources of inspiration (section 5.2.5), conceptualisation of the inspiration involved (section 5.2.6), work methodology (section 5.2.7) and feedback from consumers (paragraph 5.2.8).

5.2.1 Food styling

Evidence obtained from the comments given by the South African food stylists' shows that they concur about the theoretical definition of food styling, agreeing that food styling is the creation of edible art in image format, with the purpose of enticing the end user. Food styling is used as a visual communication tool and done by combining colours, textures, settings, props and lighting to create compositions that inspire the soul, whilst satisfying the mind. Food styling is defined as the all-inclusive career or specialist field that requires the food stylist to prepare and style food that feeds the eyes and the imagination of the viewer (Custer 2010: 7).

Participating food stylists said that the following were personality qualities that would stand a food stylist in good stead in the industry: *curiosity, flexibility, anticipatory ability, not ditsy and aware of current trends*. This list is a great deal like the thirteen distinctive personality traits of a culinary artist identified by Horng and Lee (2006: 11) that ranged from highly imaginative, curious, passionate and confident to having a broad array of interests and a huge appetite for the arts, to name but a few. Even though it may be thought of as glamorous work, food styling is "meticulous, precise work that demands patience" says Carafoli (2007: 9).



5.2.2 Demographic profile of participating food stylists

A total of 16 food stylists were interviewed for this study and included only one male person. This is not unusual, as Custer (2010: 4) points out, two thirds of all food stylists today are still women Their ages ranged from 24 to 60 years (mean = 39). The average age of respondents from the American electronic responses was approximately 12 years older. In all likelihood this could be explained by assuming that food styling is a relatively new trade in South Africa, thus the younger average age. Custer (2010:3 47) mentions that food styling in America was a post-war '50s result of renewed economic growth and vitality and this could explain the observed average age difference between South African and American food stylists.

South African food stylists are predominantly based in the Western Cape (80%) and Gauteng (20%) provinces in South Africa. The majority of magazine publications' head offices are based in Cape Town and they employ mostly food stylists or food editors who are on the permanent payroll of magazines, being close to the centre of action. Stylists based in Gauteng are mainly employed by food production businesses in the province and work principally as freelance food stylists.

5.2.3 Qualifications, training and experience

Of the 16 South African food stylists, seven were university graduates, even though only one of these had a degree in a food-related field, namely Home Economics. A further three food stylists completed diplomas in disciplines ranging from graphic design to marketing and photography. Only two of the respondents had had any formal food preparation or chef training, excluding the male respondent who has an illustrious cooking and professional chefs training career in South Africa, but is completely self-taught. This is very much on par with the replies received from the American food stylists, where only 15% had had formal food training. Only one South African food stylist had completed a certificate in food styling, namely, *Art through Food*, the rest of the food stylists were all self-taught or had learnt through apprenticeships. The importance of this result concurs with Cox's (2006: 149) observation that a B-degree in Food Science, Nutrition or Home Economics is an excellent background for food styling and that even a Bachelor of Arts in Design Art



can provide an excellent foundation in this profession. She emphasises that culinary training from a culinary school or apprenticeships offers hands-on experience in working with food. On the same topic Custer (2010: 4) avers that pre-1950s and even into the 1960s no official title existed for the food stylists. Most of the food prepared for camera was done by home economists, "women with university degrees who worked in the test kitchens of women's magazines and major food companies". It is important though to note that it seems to be very much an industry in which people choose this career because they enjoy doing food styling on a day-to-day basis, to the extent, that one would "be hard-pressed to find a professional food photographer [stylist] who is unappreciative of fine cuisine" (Peake 2009: 50).

Both South African and American food stylists agreed, with one exception, that there is a need and a place for formal food styling education but that a varied background of expertise is also helpful. No disagreement whatsoever was recorded that a solid culinary training (formal or informal) is essential for food styling to the extent that a food stylist needs to be *an expert cook* who is able to understand how food will appear through the lens, an opinion shared by Suthering (2004: 19). These results are confirmed by Cox (2006: 149) when she explains that even though formal food styling training appears to be still in a growing phase, "there seem to be more resources available and stylists willing to share them". Figure 5.1 depicts South African food stylists' educational training.

Participating food stylist's work experience ranged from 1 to 30+ years, with the average number of years between 7 and 10 years. Again American food stylists on average had about 5 years more working experience. Less typical would be the author of one of the few rare food styling books published to date, Linda Bellingham (Bellingham and Bybee 2008: xix) who has 30 years of commercial food styling experience, a bachelor's degree in Education and Home Economics and many years spent in commercial kitchens. Physical ability was one of the personal requirements of food stylists that stood out as particularly important, and it would appear that age in this case would only be important in this sense and that the industry itself has no age concerns, but rather looks for work experience and skill. Figure 5.2 illustrates the work experience of interviewed South African food stylists (n = 16).



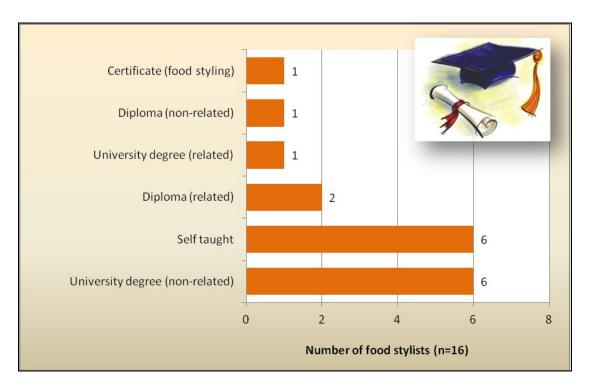


FIGURE 5.1: FOOD STYLISTS' QUALIFICATIONS

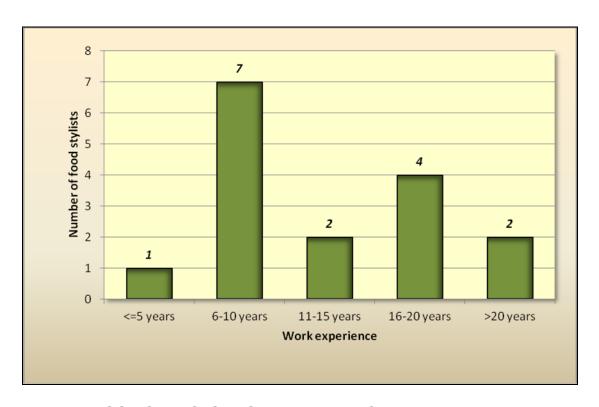


FIGURE 5.2: FOOD STYLISTS' WORK EXPERIENCE

Figure 5.3 illustrates examples of magazine publications and brand names for which the majority of the interviewed food stylists regularly provide stylists services, indicating that food styling assignments vary across all types of publications and print



media. It appears though that the South African industry is not yet in such an advanced stage that food stylists can specialise in a particular area of food styling, such as only commercial packaging work, but need to be flexible and work on a variety of food styling assignments that Custer (2010:23) sees as a common trend in the industry. One important difference between South African food stylists and their international counterparts is that of using a prop stylist who sources "dishes, utensils, linens, and background", as noted by one of the South African food stylists who regularly works in Amsterdam, as well as by Cox (2006: 147).



FIGURE 5.3: MAGAZINE AND PRODUCT BRANDS USING FOOD STYLISTS'
SERVICES

5.2.4 Food Styling in South Africa at present

South African food stylists were unanimous in their belief that food styling in South Africa at present is on par, if not perhaps even slightly better than what is being done internationally. A quick review of a well-known South African food magazine, *Taste*, will reveal a more contemporary offering of food images when compared to some international publications clearly having the edge on them.



In the world of print media, it appeared from these results and electronic replies that most food styling work can be classified as either 'editorial' or 'advertorial' and that even packaging ('pack-shots') or other printed work such as billboards and catalogues are classified as advertorial work. From the initial results obtained from food stylists of whom by far the dominant majority came from the Western Cape, it appeared that food stylists preferred doing editorial work, with some of the food stylists indicating they do not like the rigidness of advertorial work or disliked having to work within such structured briefs. On the other hand, the food stylists from Gauteng were less averse to performing corporate advertorial work which can be explained by the fact that these stylists live close to the type of work on offer in Gauteng whereas most magazines that offer editorial work operate from the Western Cape. This type of corporate work can be distinguished by using different names such as 'advertising', 'commercial food styling' or "working for marketing firms" as suggested in the literature (Custer 2010: 25; Cox 2006: 142). For example, editorial work often includes food styling work done for cookery books. A third separate field of work is that of the motion picture industry. Figure 5.4 illustrates South African food stylists' work in different sectors.

The purpose behind presenting the food stylists demographic profile in a previous section (5.2.2) and background details (5.2.3) was to establish a sense of who the South African food stylists are and how they compare to their international contemporaries as well as to unearth a general impression of the trade in the country at present. **Step 1** of the Q Methodology, the development of the concourse, aimed to collect the raw material for the Q-sample as Van Exel and De Graaf (2005: 4) describe it, thereby demonstrating that is more of an art than a science. It was necessary to identify concepts that could be used in the development of the Q-sample. Even though no specific mention was made of aesthetics as a concept during the interviews with the food stylists, it became clear that aesthetics was actually incorporated in a far more natural and subtle way. Often, ideas such as 'homely' or 'country-ish', were expressed in words used during briefing sessions with the food stylists' clients, such as the advertising agencies or food marketing companies. These words related in some way to the six aesthetic indicators that were used in the development of the Q-sample.



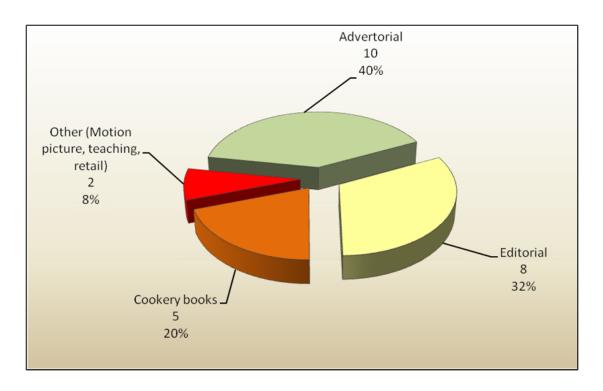


FIGURE 5.4: FOOD STYLISTS' WORK CATEGORIES

5.2.5 Food Stylists' creativity and sources of inspiration (Objective 1.1)

In line with stated objective 1.1, this section of the results deals with the identification and description of the sources of inspiration used by food stylists, i.e. where do they get new ideas from? what points of reference do they use - man-made or natural? in their daily work procedures do they exploit opportunities that offer inspiration, creativity and new ideas? The results that follow therefore concern the creative persona of the food stylists as well as their inspirational sources. These are seen to have contributed only minimally to determining the aesthetic indicators and food images used in the development of the Q-sample used in the Q-sort, but ensured a supportive background understanding of their creativity and inspirational sources.

Food stylists offered three telling opinions regarding how avant garde they thought they were when styling. Some stylists said that they were not daring at all, and liked the brief from the client to "be as tight as possible", while others said it depended to a great extent on the client. The third group of responses thought that they were much more daring in the beginning but have grown to be far more "sedate" over the years. Their opinions were on par with what the American food stylists suggested in that



some said "their clients don't like daring", whilst others said that they like being challenged or "breaking the mould of convention".

Magazines and books appear to be the major sources of inspiration. As many as 85% of both the South African and American food stylists indicated that they consult such material from which to find inspiration with many adding that their sources were not necessarily food-related. Nature, film, table props, décor, seasons, fashion, travels, markets and many more specific sources served as inspiration. Only one food stylist referred to consulting the internet as a source of inspiration. In an attempt to understand how food stylists move from the requirements of a job that gives particular descriptions through to finding inspiration, the researcher collected data about their way of storing or filing inspirational ideas – a place that they can go back to and consult when searching for ideas and to get inspiration. Stylists had their own personal way of doing this, ranging from photographs of ideas in an electronic catalogue, to written ideas, collections or folders with clippings, props and fabric swatches. Figure 5.5 specifies the number of people or publications that food stylists say they derive inspiration from or consult for ideas.

Two local food stylists, Abigail Donnelly, the editor of Taste magazine and Phillippa Cheifits seems to be all-round South African favourites. It is, however, the Australian magazine and Donna Hay as a person that appear to be the favourite of all the interviewed food stylists, so much so that her food styling in the magazine is considered to have "revolutionized the food industry", a fact also document by Custer (2010: 355).

5.2.6 Food stylists' conceptualisation of their sources of inspiration (Objective 1.2)

The data collected from this part of the study aimed to establish how food stylists conceptualised their inspiration (Objective 1.2) – how do they actually encode messages through their stylistic abilities?



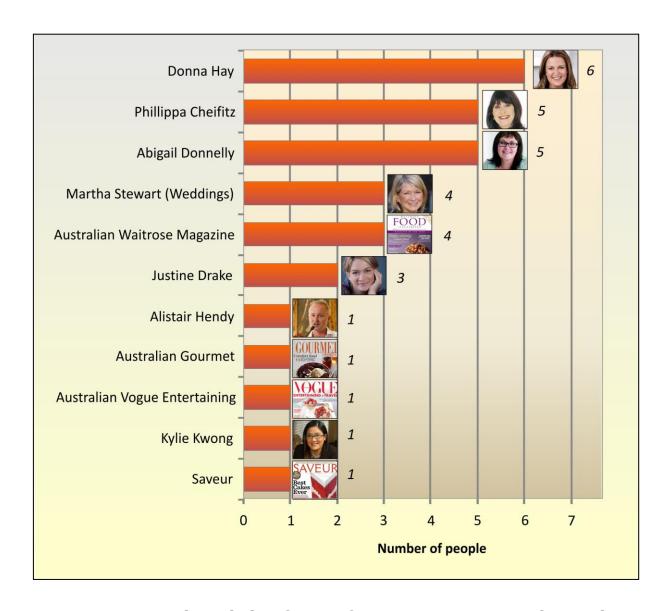


FIGURE 5.5: FOOD STYLISTS' INSPIRATION: PEOPLE AND PUBLICATIONS

Findings reveal that once food stylists are approached for a particular job and briefing meetings with the different role-players (e.g. marketing company, advertising company, photographer etc.) have been conducted, they explore their own internal and external resources to find appropriate inspiration to communicate the required messages to the consumer through particularly styled image content. Consumers decode messages and behave accordingly. It is unclear though how food stylists actually transform their ideas into styled content.

Food stylists agreed that the stylistic content should not be too "abstract", that it should be "do-able and practical" – that it should be kept in mind that consumers may



want to actually make the food and therefore it must not be seen to be overly ambitious. Many of them also indicated that "trial and error" have shown them ways of making their ideas a reality. Through the careful selection and use of props, lighting, colours and even "stepping into the consumers' shoes" are statements of ways food stylists encode messages into styled food image content. Other statements about encoding made by the food stylists are:

- Use lots of visual references do not lose creative freedom
- My target markets places certain restrictions on my ingredient choices. I aim for accessible rather than pie-in-the-sky
- One has to be daring to get a unique image at the end of the day
- Food must be the hero. Clever stylists will be able to break away from the familiar, but in a new way

Many of the food stylists referred to very detailed pre-production meetings to discuss the tone or flavour of the photo-shoot in meticulous detail, even suggesting that it be kept as simple as possible so as not to confuse consumers, and the point that the consumer should be able to feel the message during their decoding process.

Once again it became evident that food stylists are generally unaware of the way aesthetics influences consumers' behavioural intent when viewing food images with a specific styled content. There appeared to be some agreement between their responses and some of the aesthetic indicators identified earlier in non-subject specific literature (e.g. fashion) that also dealt with aesthetics. Even though this part of the data collection process aimed at establishing specifics in terms of stylists' ability to conceptualise their images in order to ultimately develop the Q-sample in **Step 2**, it appeared that the majority of stylists conceptualised images in a free, artistic way.

5.2.7 Food stylists' work methodology (Objective 1.3)

This section examines the food stylist's work methodology to identify any anomalies in terms of how food styling is done in South Africa compared to procedures adopted in the field internationally. The aim of objective 1.3 within the larger picture was to



continue determining the concourse under investigation within the Q-methodology approach to establish the context within which the world of food styling could contribute to **Step 2**, where the Q-Sample was developed.

Results showed hardly any differences, even though South African food stylists offered the following specifics.

- *Mock-ups* food stylists had a 50/50 opinion about pre-planning the content layout of a food image and the extent to which they styled a mock-up. Six of the 12 food stylists said emphatically no, and were of opinion that they never pre-plan and that they like the "natural creative process". Others did some sort of pre-planning, often doing test-shoots, or at least made a mock-up of the props and background. In her book on food styling Custer (2010: 310) discusses a term called "testing", but does not use it in the sense that it is time spent to pre-practise a shoot. According to this source, all members of the food styling team spend a day working on practice photographs for their portfolios.
- **Specialised techniques** again here food stylists have two distinctly different opinions. Some preferred a natural look and admitted that they never used any non-food special techniques to enhance the image content and more specifically the food. Others admitted to using boot-polish on meat for good colour and even sand to assign to it the visual appeal of crunchiness.
- **Toolbox** in terms of special tools, the South African food stylists did not provide anything noteworthy that is not already found in manuals on food styling. As documented in most published material, they used an array of tools such as paint-stripper, dental floss and fish gut for food styling purposes.
- **Studio etiquette** teamwork seems to be a major factor in terms of special studio etiquette for food shoots. In all probability this has to do with the fact that the food stylist is working with a product that has a specific lifespan as food items do not sit around indefinitely.



5.2.8 Feedback from the consumer (Objective 1.4)

This part of the study deals with the issue expressed in objective 1.4 that proposes to ascertain whether food stylists received and used feedback from consumers, directly or indirectly. Of course, feedback completes the communication process in that food stylists could benefit from knowledge of consumers' behaviour when they view their food images as they could then possibly alter their work methodology accordingly. Even though there were a few food stylists who indicated that they had received some feedback, most of it was very vague, unscientific and generally only limited to congratulations. Little or no data regarding consumers' reactions to food images or how they influence their buying behaviour could be found. Feedback was sometimes received via the media and advertising or product agencies, but it is not clear how much of this related to consumer behaviour after viewing food images. What was a resounding and positive response from all food stylists, including the American food stylists, was the fact that they would all like to receive more feedback. With regard to their opinion of whether "food images affect consumers behavioural intent", one magazine editor who also does food styling, said: "pictures sell food - our best pictures have the most call-backs, queries and compliments".

5.2.9 Conclusion

Food stylists appeared to be indifferent to the role aesthetics plays in food images and consumers' behavioural intent with regard to such images. However, food stylists felt strongly that they would benefit from feedback from consumers and consumers' behavioural intent after viewing food images. Food stylists stressed that their work should not be totally over-conceptualised as consumers might not then be able to interpret them and the intended communication would be lost. This in itself would not be unusual, as consumers are often only involved on a sensory, emotional and/or cognitive level with the final product, and not involved with the process of the creation of the image. The results therefore confirmed that food stylists believed that consumer participation in terms of feedback is essential for their work, and that the results obtained from **Step 4**, the actual Q-sorting and the resultant influence that aesthetics had on consumer behavioural intent, is of essence in both the food stylist's and the marketer's ability to manipulate such intent.



5.3 THE FOOD IMAGE CONSUMER

Step 4 of the Q-methodology involves the findings from the actual Q-sort. The food image consumer, those people who acknowledge that they viewed food magazines and therefore thought that they would be able to express an opinion through the underlying psychometrical results obtained by way of the Q-sort, are presented in three sections as per the objectives of this study. The investigation was conducted in line with normal Q practices in which the correlation and factoring of persons (patterns across individuals) was done, as opposed to the R-Factor Analysis, that correlates tests, traits etc. (McKeown and Thomas 1988: 46) and determining patterns across variables (Previte *et al.* 2007: 139). The following results are presented:

- consumers' view of six specific aesthetic indicators matched with six food images (Objective 2.1)
- consumers' reasoning behind specific choices (Objective 2.2)
- consumers' opinion regarding the effect of food styling, and therefore the specific aesthetics of food images, on their behavioural intent (Objective 2.2)

5.3.1 Consumers' view of aesthetic indicator and visual image matches (Objective 2.1)

This section deals with the results of the first part of the Q-sort (**Step 4** of the Q-methodology). The 270 participants who were sampled in accordance with the readership statistics of two exclusively food related South African magazines (Taste, and Food and Home), were asked to sort 36 unique cards along a Most Agree to Most Disagree continuum. The following seven factors showed the common shared interests discussed here. The seven factors (each with their factor loading), where food image consumers showed a notable correlation between the food image and the aesthetic indicators are presented in Table 5.1 as shaded areas indicating a defining sort in terms of the specific factor.



TABLE 5.1: FACTORS IDENTIFIED DURING FACTOR ANALYSIS

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Card12	0.801						
Card18	0.631	0.241		0.377			
Card30	0.554	0.254			0.325		
Card17		0.667	0.336				-0.244
Card11	0.283	0.594		-0.220	0.236		
Card29		0.544				0.242	
Card24	0.293		0.764				
Card23			0.739				
Card20			0.726				
Card14				0.822			
Card8	0.323	-0.246		<mark>0.411</mark>	0.339		
Card25					0.725	0.250	
Card26	0.209			0.347	0.675		
Card13				0.252		0.709	
Card31						0.696	0.340
Card7					0.230	0.616	
Card32				<mark>0.421</mark>			0.667
Card36	0.456						0.643
Card35		0.534					0.543
Eigen value	3.37	2.04	1.56	1.36	1.22	1.03	0.98
Cumulative Percent explained	17.7%	28.5%	36.7%	43.8%	50.3%	55.7%	60.9%
Cronbach alpha	0.714	0.721	0.724	0.723	0.719	0.725	0.722

The seven factors explained more than 60% of the variance, although the first factor continued to dominate, across the participants' sorts it explained 17.7 % of the variance. In fact, the first six factors may have sufficed, but including the seventh factor offered a more complete Q-sort (in view of the 60% margin aimed for as an objective). Items in Factor 7 cross-loaded on other factors as well but were not coherent to the content and were retained in Factor 7. Hair, Black, Babin, Anderson and Tatham (2006: 130) explain that this is possible.

It is, however, important to note that three of the cards (3, 10 and 19) were removed during the reliability process and were cards considered to be 'correct', as they represented three cards where the food stylists matched the particular aesthetic indicator with a particular styled food image.



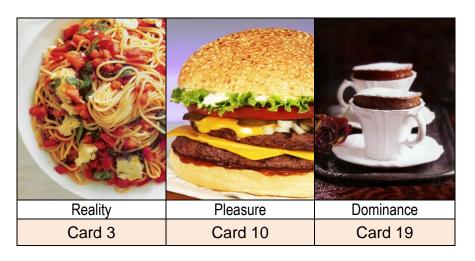


FIGURE 5.6: THE THREE 'CORRECT' CARDS REMOVED DURING THE RELIABILITY PROCESS

Even though the three cards in Figure 5.6 were considered unreliable during the data stability process, they could still offer some insight into consumers' reasoning for particular choices. For both cards 3 and 10, 'comfort' was the stylistic aspect Qparticipants provided as reason why they chose these cards as their Most Agree choices. Almost 37% of the Q-participants offered this reason for their choice. For card 10, a further 33% Q-participants provided the same reason for their choice. Other words provided as synonyms for the word 'comfort' were wholesomeness, homey, peaceful, calming, familiar, traditional, serenity and contentment. Looking at these words one can understand why a bowl of pasta with sauce, that is meant to signify reality to the viewer, can be considered comforting or familiar. Similarly, a hamburger that is represented by the aesthetic indicator of pleasure would equally be considered comforting or offer a serene, calming, contented feeling. The accuracy of matching the food image with the aesthetic indicator becomes far more evident when consumers viewed the food image with card 19. The food stylists indicated that the emotional aesthetic indicator of 'dominance' best represented the chocolate soufflé in the teacups. Here the viewers thought the stylistic aspect of 'enticement' offered the best description as the best reason for their Most Agree choice, with almost 30% of the Q-participants giving this reason. It is possible that the image, which will have an unnoticed emotional feeling of dominance, would appear delicious or appetising or attractive to the consumer, and it may well come from the fact that it is a rather complicated dish that is appealing and therefore will draw more attention.



5.3.2 Extraction and specification of factors

Factor 1

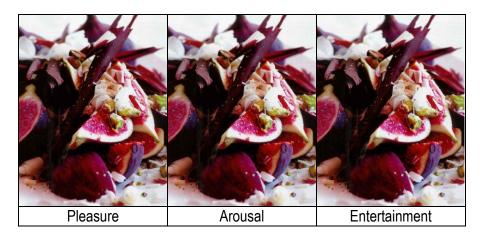


FIGURE 5.7: FACTOR 1: THREE CARDS (12, 18 AND 30)

For Factor 1 there was a 17% declaration of variance in the data. Cards 12, 18 and 30 had some common denominator. It is immediately obvious from the three cards that represent Factor 1 (see Figure 5.7) that it is the food image and not any of the aesthetic indicators that dominated. There was such a high correlation between three cards with different aesthetic indicators for the same food image and this confirms the importance of food images with a specific visual content. The stylistic content of this particular food image - the combination of fresh figs (an unusually luxurious item in South Africa at present) together with pistachio nuts and white and dark chocolate - represented to the food image viewers all three of the aesthetic indicators, namely, pleasure, arousal, entertainment. The richness of colour, the composition of the individual ingredients and the unusual nature of the food ingredients could provide an answer to the response that three particular aesthetic indicators were present. The aesthetic indicators 'pleasure' and 'arousal' were classified as emotional aesthetic indicators and that of 'entertainment' a cognitive aesthetic indicator.

In terms of the particular aesthetic indicators, the emotional indicator of 'pleasure' might have been one of the less complicated sorts, because of its very straightforward 'feel good' description. It is therefore not clear why it showed such a high Q-sorting value when matched with the relatively complex food image of Adams



figs, chocolate and pistachio nut salad. Possible experiences of good emotions, happiness, delight and satisfaction may have resulted in such an outcome.

A theoretical description of the emotional aesthetic indicator of arousal is given as 'bright, rich and intense stimulation'. Much in the way that "photographs are the focus of intense emotional engagement" (Edwards 2008: 241) the rich colour of the fig and chocolate salad could be the reasons why this image communicated to viewers on an emotional level.

Factor 2

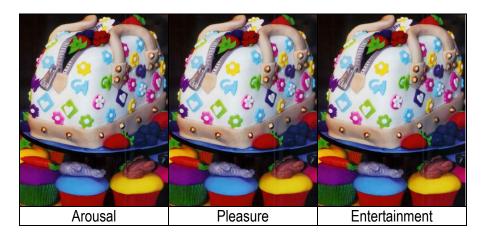


FIGURE 5.8: FACTOR 2: THREE CARDS (17, 11 AND 29)

For Factor 2, there was a 10.7% declaration of the variance in the data. Cards 17, 11 and 29 had some common denominator. It was once again instantly obvious from the three cards representing Factor 2 that the visual image and not the aesthetic indicator dominates and this observation further substantiates the importance of images with a specific stylistic context and content for consumers who view food images and make decisions based on such imagery. In the case of Factor 2, a large cake decorated to resemble a handbag from the luxury luggage brand Louis Vuitton, together with some smaller cupcakes, illustrates some or other underlying connectivity for viewers. Not only the bright colours, but also possibly the hue of the particular colouring - the light blues and gold that may indicate luxury and quality - may have prompted Q-participants to make these selections. It was particularly the bright colours in association with the aesthetic indicator of arousal, that is defined as 'frantic excitement', that could give us a tiny glimpse of the reason why consumers



reacted emotionally to these images. Louis Vuitton, of course, offers a bag exactly like this cake, with pale light cream leather and multi-coloured lettering and logo. The obvious association with the very famous and recognizable brand logo could also have drawn participants, while the quirkiness or tongue-in-cheek fun that this image represents might well have prompted associations with the 'entertainment' or 'pleasure' aesthetic indicators.

Factor 3



FIGURE 5.9: FACTOR 3: THREE CARDS (24, 23 AND 20)

For Factor 3, there was an 8% declaration of the variance in the data. Cards 24, 23 and 20 had some common denominator, and it is noteworthy that, for the first time, the aesthetic indicator dominated at this point. Contrary to the two previous factors, Factor 3 is represented by three different visual food images, grouped together by the common denominator of the aesthetic indicator 'dominance'. Dominance is defined as being unrestricted, but at the same time in complete control of a situation – being in command, showing off one's skills with confidence, perhaps even a bit of arrogance – most certainly the opposite of overwhelmed. The three food images that resulted in such a high declaration amongst Q-participants could have all had some association with such command. The Asian-inspired sliced duck breast and litchi dish initially looks relatively simple and uncomplicated, but in all likelihood, because of its specific cultural association and unusual ingredients, it communicated to viewers a measure of command or skill. Both the fig salad and the Louis Vuitton look-a-like cake speaks of nothing else than pure confidence and perhaps even a bit of arrogance.



Factor 4

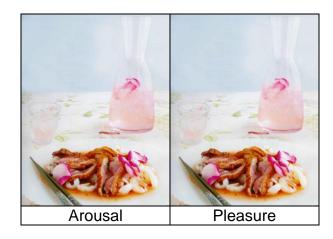


FIGURE 5.10: FACTOR 4: TWO CARDS (14 AND 8)

Of all the factors extracted in this study, Factor 4 proved the most complex in terms of interpretation and offering possible insights into the way consumers were affected by the visual imagery and aesthetic indicators of these two cards. Together they declared a variance of 7% in the data. 'Arousal' and 'pleasure' are both emotional aesthetic indicators, and are associated with good emotions of happiness, delight and satisfaction as well as feelings of desire. It could be possible that, because of the fact that the sample included rather sophisticated food image viewers, Q-participants thought this Asian salad to be just that: 'good, multi-sensory feelings of joy'.

Factor 5



FIGURE 5.11: FACTOR 5: TWO CARDS (25 AND 26)



For Factor 5, there was a 6.4% declaration of the variance in the data. Cards 25 and 26 had some common denominator. The baked chocolate mousse could have communicated with the viewers on many levels as was the case with Factor 6 where an additional three aesthetic indicators were associated with this image. However, the aesthetic indicator of entertainment, a cognitive indicator, speaks clearly of people who seek something new, something unusual or unexpected, perhaps even with a challenge in mind. Baked soufflés are still today considered by people to be at the top end of their culinary repertoire and reserved for special occasions. On the other hand, the Asian duck and litchi dish, of course, too shows real unusualness.

Factor 6



FIGURE 5.12: FACTOR 6: THREE CARDS (13, 31 AND 7)

Even though 'fantasy' is a cognitive aesthetic indicator and 'arousal' and 'pleasure' are defined as communicating on an emotional level, they have definite aspects of dreaminess, desires, hopes and imagination in common. The image communicates a sense of excitement that correlates with a fantasy world of 'may be' and 'could be', but also of positive enjoyment, delight and satisfaction.

Even though Factor 7 (Figure 5.13) could be disregarded because it has a significance of more than one loading, i.e. cross-loading, it is clear from the predominance of the aesthetic indicator of 'fantasy' that the three different images will have communicated complex messages to viewers. As stated previously, the Asian duck and litchi dish may initially appear to be a simple dish, but perhaps because of its unusual ingredients it could communicate messages of an alternative existence to



viewers. In a similar way the black Adam's fig salad and the Louis Vuitton cake may also communicate messages of hopes, desires and dreams.

Factor 7



FIGURE 5.13: FACTOR 7: THREE CARDS (32, 36 AND 35)

5.3.3 Rationale for Q-participants' Most Agree card choices (Objective 2.2)

Potential reasons for the Q-participant's choices of food images with a particular stylistic content are presented in this section of the discussion. In the previous section (section 5.3.2), their selection of certain food images that embodied particular emotional or cognitive indicators were presented with notable psychometric correlations of consumer behaviour. No reasons for such Most Agree choices were required at that stage, hence insights into the ambiguity of consumer food images choices are presented in this section. Section 4.4.2.4 (Methodology chapter 4) gives a detailed explanation of the data collection process that followed after consumers had made their Most Agree card choices and who were then asked to provide reasons for their choices from a list of reasons. Table 5.2 provides the actual counts of Q-participant's reasons made from this predetermined list for all the cards in the deck regarding their Most Agree choices.

As can be determined from Table 5.2, all the cards in the deck of 36 cards were in one way or another placed on the Most Agree pile during the Q-sort done as part of the data collection process. There are cards for which none of the Q-participants used any of the provided reasons why they made those Most Agree card selections,



similarly that none of the participants used the 'other' choice 'h', where they were could provide their own reason should any of the provided reasons not suffice. Table 5.3 offers percentages of the same data as in the previous table (Table 5.2), expressed as row percentages.

TABLE 5.2: REASONS Q-PARTICIPANTS' MOST AGREE CHOICES

	I I								
	Fun	Control	Exotic	Chaos	Comfort	Enticing	Refreshing	Other	Grand Total
Count of MA1	4	6	6	2	19	17	11	0	65
Count of MA2	0	6	13	2	4	8	4	0	37
Count of MA3	11	13	8	26	54	22	14	0	148
Count of MA4	29	18	2	10	54	35	6	0	154
Count of MA5	18	2	4	1	1	2	2	0	30
Count of MA6	4	6	13	6	1	10	8	0	48
Count of MA7	12	19	26	1	22	53	14	0	147
Count of MA8	6	6	26	0	9	10	12	0	69
Count of MA9	12	9	4	17	50	25	13	0	130
Count of MA10	31	17	5	5	48	34	4	0	144
Count of MA11	62	1	17	2	3	10	2	0	97
Count of MA12	7	3	34	4	5	23	14	0	90
Count of MA13	2	3	18	0	13	25	9	0	70
Count of MA14	4	5	13	2	1	14	5	0	44
Count of MA15	3	2	7	9	15	13	8	0	57
Count of MA16	11	3	3	1	20	24	2	0	64
Count of MA17	32	3	9	1	5	3	2	0	55
Count of MA18	4	2	31	8	2	23	21	0	91
Count of MA19	0	11	13	0	7	17	9	0	57
Count of MA20	3	9	10	1	0	8	4	0	35
Count of MA21	2	6	4	8	13	7	3	0	43
Count of MA22	9	12	3	5	21	10	3	0	63
Count of MA23	20	5	7	0	3	4	1	0	40
Count of MA24	7	5	13	3	1	12	5	0	46
Count of MA25	15	12	17	1	18	35	27	0	125
Count of MA26	3	5	41	5	6	19	18	0	97
Count of MA27	8	3	10	10	19	20	4	0	74
Count of MA28	23	7	2	5	20	17	7	0	81
Count of MA29	99	7	19	3	4	9	4	0	145
Count of MA30	9	7	49	12	3	20	24	0	124
Count of MA31	8	10	22	2	15	26	5	0	88
Count of MA32	3	7	34	4	2	15	18	0	83
Count of MA33	1	1	3	7	9	14	1	0	36
Count of MA34	15	7	0	1	7	4	2	0	36
Count of MA35	94	11	19	5	5	6	3	0	143
Count of MA36	10	1	38	11	2	27	10	0	99



TABLE 5.3: REASONS FOR MOST AGREE CARDS: ROW PERCENTAGES

Reliable cards	Cards	Fun	Control	Exotic	Chaos	Comfort	Enticing	Refreshing	Total of Rows
Row Percent	tages								
	Card1	6.2%	9.2%	9.2%	3.1%	29.2%	26.2%	16.9%	100.0%
	Card2	0.0%	16.2%	35.1%	5.4%	10.8%	21.6%	10.8%	100.0%
	Card3	7.4%	8.8%	5.4%	17.6%	36.5%	14.9%	9.5%	100.0%
	Card4	18.8%	11.7%	1.3%	6.5%	35.1%	22.7%	3.9%	100.0%
	Card5	60.0%	6.7%	13.3%	3.3%	3.3%	6.7%	6.7%	100.0%
	Card6	8.3%	12.5%	27.1%	12.5%	2.1%	20.8%	16.7%	100.0%
Reliable	Card7	8.2%	12.9%	17.7%	0.7%	15.0%	36.1%	9.5%	100.0%
Reliable	Card8	8.7%	8.7%	37.7%	0.0%	13.0%	14.5%	17.4%	100.0%
	Card9	9.2%	6.9%	3.1%	13.1%	38.5%	19.2%	10.0%	100.0%
	Card10	21.5%	11.8%	3.5%	3.5%	33.3%	23.6%	2.8%	100.0%
Reliable	Card11	63.9%	1.0%	17.5%	2.1%	3.1%	10.3%	2.1%	100.0%
Reliable	Card12	7.8%	3.3%	37.8%	4.4%	5.6%	25.6%	15.6%	100.0%
Reliable	Card13	2.9%	4.3%	25.7%	0.0%	18.6%	35.7%	12.9%	100.0%
Reliable	Card14	9.1%	11.4%	29.5%	4.5%	2.3%	31.8%	11.4%	100.0%
	Card15	5.3%	3.5%	12.3%	15.8%	26.3%	22.8%	14.0%	100.0%
	Card16	17.2%	4.7%	4.7%	1.6%	31.3%	37.5%	3.1%	100.0%
Reliable	Card17	58.2%	5.5%	16.4%	1.8%	9.1%	5.5%	3.6%	100.0%
Reliable	Card18	4.4%	2.2%	34.1%	8.8%	2.2%	25.3%	23.1%	100.0%
	Card19	0.0%	19.3%	22.8%	0.0%	12.3%	29.8%	15.8%	100.0%
Reliable	Card20	8.6%	25.7%	28.6%	2.9%	0.0%	22.9%	11.4%	100.0%
	Card21	4.7%	14.0%	9.3%	18.6%	30.2%	16.3%	7.0%	100.0%
	Card22	14.3%	19.0%	4.8%	7.9%	33.3%	15.9%	4.8%	100.0%
Reliable	Card23	50.0%	12.5%	17.5%	0.0%	7.5%	10.0%	2.5%	100.0%
Reliable	Card24	15.2%	10.9%	28.3%	6.5%	2.2%	26.1%	10.9%	100.0%
Reliable	Card25	12.0%	9.6%	13.6%	0.8%	14.4%	28.0%	21.6%	100.0%
Reliable	Card26	3.1%	5.2%	42.3%	5.2%	6.2%	19.6%	18.6%	100.0%
	Card27	10.8%	4.1%	13.5%	13.5%	25.7%	27.0%	5.4%	100.0%
	Card28	28.4%	8.6%	2.5%	6.2%	24.7%	21.0%	8.6%	100.0%
Reliable	Card29	68.3%	4.8%	13.1%	2.1%	2.8%	6.2%	2.8%	100.0%
Reliable	Card30	7.3%	5.6%	39.5%	9.7%	2.4%	16.1%	19.4%	100.0%
Reliable	Card31	9.1%	11.4%	25.0%	2.3%	17.0%	29.5%	5.7%	100.0%
Reliable	Card32	3.6%	8.4%	41.0%	4.8%	2.4%	18.1%	21.7%	100.0%
	Card33	2.8%	2.8%	8.3%	19.4%	25.0%	38.9%	2.8%	100.0%
	Card34	41.7%	19.4%	0.0%	2.8%	19.4%	11.1%	5.6%	100.0%
Reliable	Card35	65.7%	7.7%	13.3%	3.5%	3.5%	4.2%	2.1%	100.0%
Reliable	Card36	10.1%	1.0%	38.4%	11.1%	2.0%	27.3%	10.1%	100.0%



The following discussion is limited to those cards found to be reliable during the statistical analysis – see Table 5.3 for cards in grey shade. Refer to section 4.4.2.5 for detailed discussion of how reliability was determined by using the multivariate technique of Cronbach Alpha until internal stability of data was reached.

By drawing on the highest percentage for each reliable card (indicated in light blue shade) only the reasons 'Fun', 'Exotic' and 'Enticing' came up as seen from Table 5.3. This is interesting from a food styling point of view, as it could have been thought that an image such as the Fig and Chocolate salad would more likely have represented a sense of 'chaos' to the consumers, and that the reason of 'refreshing' might have seemed a far more apt reason for choosing a dish such as the Asian duck and litchi salad.



FIGURE 5.14: FUN AS A REASON: FIVE CARDS

It is obvious from the five images in Figure 5.14 that consumers were unanimous in their belief that the word 'Fun' best describes the image of the Louis Vuitton cake and cupcakes, even though they were matched with five totally different aesthetic indicators. It is true that the image represents something childlike or colourful, that it looks playful, positive and has a feeling of enjoyment or happiness and clearly a sentiment shared as a reason for choices by consumers. This may well indicate that the visual aspect of an image performs more convincingly in consumer choices. It is also noteworthy to mention that only card 29 was in fact the 'correct' card where the food stylists matched the aesthetic indicator with the image.



Dis	scussion on th	e 'Exotic' reas	on as Most A	gree card choi	ice:
WIS.			NIE!		W.
Pleasure	Pleasure	Arousal	Dominance	Dominance	Entertainment
Card 8	Card 12	Card 18	Card 20	Card 24	Card 26
Oal a o	Jaiu 12	Oara 10	Caru 20	Caru 24	Card 20
our o	Said 12	Sara 15	Gard 20	Calu 24	Card 20
Entertainment	Fantasy	Fantasy	Gard 20	Galu 24	Card 20

FIGURE 5.15: EXOTIC AS A REASON: NINE CARDS

Figure 5.15 comprises nine cards each with the highest percentage that Q-participants chose as the reason 'exotic' for their Most Agree choice. Important is that the set of nine cards comprise only two food images – those of the Adams fig and chocolate salad and the duck and litchi salad. It may be concluded that these food images were indeed different or unusual or unique for viewers. They may also have found them interesting or unexpected, even surreal. What is important though, is to notice the consistent powerful reasoning this provides in terms of food image viewers' choices for particular images.

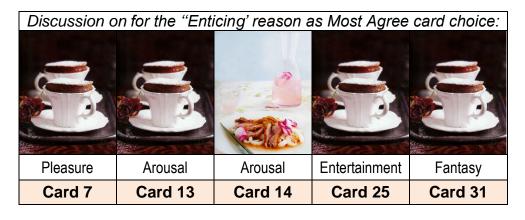


FIGURE 5.16: ENTICING AS A REASON: FIVE CARDS



In Figure 5.16, card 14 seems to be the odd one out, but looking at the data in Table 5.5, one can immediately see that even though 31.8% was the highest selection for that card, another 29.5% chose that same card for another stylistic reason, namely that of "exotic" as shown in Figure 5.15. The percentage difference between the two cards is low. They could thus be sorted together. The description detail 'enticing' may also mean delicious, appetizing, attractive, appealing or attracting attention. Even though the 'correct' card, namely card 19, with the aesthetic indicator of dominance, that is perfectly in harmony with attracting attention, was taken out of discussion during the data reliability process, it is very evident that consumers offered a good reason for their choice of Most Agree cards.

The data in Table 5.4 that presents column percentages of the total for each column, comprises the reasons consumers could choose for placing certain cards on the Most Agree pile and which determined the highest percentage per column that are highlighted and the shaded cells are those from the reliable cards.



FIGURE 5.17: CARDS REPRESENTING CONSUMERS' MAIN REASONS

Confusingly, 'control', 'enticing' and 'refreshing' received the highest percentage as reasons for the consumers' main choices according to data for Most Agree cards. In a way one could understand 'control' as a reason for choosing the chocolate soufflé image, and possibly understand 'enticing', but that the image looks 'refreshing' is not very likely. The image of the Louise Vuitton handbag cake and the Adams fig and chocolate salads are probably better described in terms of 'fun' and 'exotic'.

TABLE 5.4: MOST AGREED CARD CHOICES: REASONS AS PERCENTAGES

									1
Reliable	Card	Fun	Control	Exotic	Chaos	Comfort	Enticing	Refreshing	
	Card1	0.7%	2.4%	1.1%	1.1%	4.0%	2.7%	3.7%	
	Card2	0.0%	2.4%	2.4%	1.1%	0.8%	1.3%	1.3%	
	Card3	1.9%	5.2%	1.5%	14.4%	11.2%	3.5%	4.7%	
	Card4	5.0%	7.2%	0.4%	5.6%	11.2%	5.6%	2.0%	
	Card5	3.1%	0.8%	0.7%	0.6%	0.2%	0.3%	0.7%	
	Card6	0.7%	2.4%	2.4%	3.3%	0.2%	1.6%	2.7%	
Reliable	Card7	2.1%	7.6%	4.8%	0.6%	4.6%	8.5%	4.7%	
Reliable	Card8	1.0%	2.4%	4.8%	0.0%	1.9%	1.6%	4.0%	
	Card9	2.1%	3.6%	0.7%	9.4%	10.4%	4.0%	4.3%	
	Card10	5.3%	6.8%	0.9%	2.8%	10.0%	5.5%	1.3%	
Reliable	Card11	10.7%	0.4%	3.1%	1.1%	0.6%	1.6%	0.7%	
Reliable	Card12	1.2%	1.2%	6.3%	2.2%	1.0%	3.7%	4.7%	
Reliable	Card13	0.3%	1.2%	3.3%	0.0%	2.7%	4.0%	3.0%	
Reliable	Card14	0.7%	2.0%	2.4%	1.1%	0.2%	2.3%	1.7%	
	Card15	0.5%	0.8%	1.3%	5.0%	3.1%	2.1%	2.7%	
	Card16	1.9%	1.2%	0.6%	0.6%	4.2%	3.9%	0.7%	
Reliable	Card17	5.5%	1.2%	1.7%	0.6%	1.0%	0.5%	0.7%	
Reliable	Card18	0.7%	0.8%	5.7%	4.4%	0.4%	3.7%	7.0%	
	Card19	0.0%	4.4%	2.4%	0.0%	1.5%	2.7%	3.0%	
Reliable	Card20	0.5%	3.6%	1.8%	0.6%	0.0%	1.3%	1.3%	
	Card21	0.3%	2.4%	0.7%	4.4%	2.7%	1.1%	1.0%	
	Card22	1.5%	4.8%	0.6%	2.8%	4.4%	1.6%	1.0%	
Reliable	Card23	3.4%	2.0%	1.3%	0.0%	0.6%	0.6%	0.3%	
Reliable	Card24	1.2%	2.0%	2.4%	1.7%	0.2%	1.9%	1.7%	
	Card25	2.6%	4.8%	3.1%	0.6%	3.7%	5.6%	9.0%	
Reliable	Card26	0.5%	2.0%	7.6%	2.8%	1.2%	3.1%	6.0%	
	Card27	1.4%	1.2%	1.8%	5.6%	4.0%	3.2%	1.3%	
	Card28	4.0%	2.8%	0.4%	2.8%	4.2%	2.7%	2.3%	
Reliable	Card29	17.0%	2.8%	3.5%	1.7%	0.8%	1.4%	1.3%	
Reliable	Card30	1.5%	2.8%	9.0%	6.7%	0.6%	3.2%	8.0%	
Reliable	Card31	1.4%	4.0%	4.1%	1.1%	3.1%	4.2%	1.7%	
Reliable	Card32	0.5%	2.8%	6.3%	2.2%	0.4%	2.4%	6.0%	
	Card33	0.2%	0.4%	0.6%	3.9%	1.9%	2.3%	0.3%	
	Card34	2.6%	2.8%	0.0%	0.6%	1.5%	0.6%	0.7%	les
	Card35	16.2%	4.4%	3.5%	2.8%	1.0%	1.0%	1.0%	Itag
Reliable	Card36	1.7%	0.4%	7.0%	6.1%	0.4%	4.3%	3.3%	cen
	Column Totals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	ι per
	Highest	17.0%	7.6%	9.0%	14.4%	11.2%	8.5%	9.0%	Column percentages



5.3.4 The influence on consumers' behavioural intent (Objective 2.3)

Table 5.5 offers percentages of the likelihood that consumers could change their behavioural intent for each card in descending percentage order.

TABLE 5.5: LIKELIHOOD THAT CONSUMERS' BEHAVIOURAL INTENT COULD CHANGE (%)

Reliable	Card	Likelihood %
	Card21	82.1
	Card10	80.4
	Card9	80.2
	Card28	80.0
	Card15	78.9
	Card33	78.6
	Card34	78.4
	Card27	78.3
	Card16	77.3
	Card3	75.3
	Card4	75.3
	Card22	75.3
Reliable	Card13	72.8
Reliable	Card7	71.9
Reliable	Card25	69.8
	Card19	69.3
Reliable	Card18	69.0
	Card1	68.6
Reliable	Card31	65.3
Reliable	Card12	63.1
	Card6	60.0
Reliable	Card24	58.9
Reliable	Card26	56.7
Reliable	Card8	56.7
	Card5	56.5
Reliable	Card17	56.1
Reliable	Card36	55.7
Reliable	Card30	55.6
Reliable	Card23	53.5
Reliable	Card14	53.2
Reliable	Card20	53.1
Reliable	Card35	51.8
Reliable	Card32	50.6
Reliable	Card29	50.0
Reliable	Card11	49.5
	Card2	47.8



Table 5.5 shows that the first 12 cards with percentages ranging from 75.3% to 82.1% suggest that the consumers believed that a food image would alter their behavioural intent yet these cards that were not found reliable during the reliability process.



FIGURE 5.18: THREE CARDS WITH PERCENTAGES OF 70% AND ABOVE TO CHANGE BEHAVIOURAL INTENT

The images of the three cards, 13, 7 and 25 shown in Figure 5.18 are those that consumers believed would have a 70% or higher influence in altering their behavioural intent. That this is not one of the more obvious images to have such a high percentage of likelihood for behavioural intent change is interesting. The image is rather devoid of colour and is also rather complex in the sense that the viewer may not immediately know what the actual dish is. The Q-participants were, however, informed that it was chocolate soufflé. The styling is rather simplistic, and apart from the textured background and the little tray, there is just a rose in the image as prop. It could well be the fact that this is a rather complex dish to create that would make consumers think that the images are worthy of altering their behavioural intent. The monochrome colouring used by the stylist could also have played a role.

It is also worth mentioning that in terms of all 19 cards that were considered reliable, 50% or more of the consumers believed that the image would alter their behavioural intent.



5.4 CONCLUSION

Results from this study suggest that food images are important. Their creation affects marketing strategies, food stylists' involvement in their creation, feedback from consumers, the way consumers react to visual images and their subsequent behavioural intent. The research suggests that food marketers can influence the behavioural intent of consumers with specific knowledge of the role of aesthetics in food image creation. Results from the data collected were offered regarding food stylists, food styling in South Africa and South African food stylists' work methodology that was seen to be in line with the way their American contemporaries too go about their work. Furthermore, the research offers evidence that a sample of consumers all of whom had an informed opinion of food images used in print media, shared a common shared interest in six specific aesthetic indicators and six food images, despite their diverse demographic and professional backgrounds. Finally reasons for consumers' particular choices were given, as well as the number of consumers who believed a food image could alter their behavioural intent.



Chapter 6 (contents)

Conclusions, implications and recommendations

6.1	INTRODUCTION	125
6.2	SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND IMPLICATIONS BASED ON THE MAIN FINDINGS (PRESENTED ALONG THE 5 STEPS OF	
	Q-METHODOLOGY)	125
6.2.1	•	
	with food stylists	126
	6.2.1.1 The food stylists6.2.1.2 Food stylists' work methodologies	126 127
	6.2.1.3 Food stylists' sources of inspiration	127
	6.2.1.4 Conceptualisation of food stylists' inspirations	129
	6.2.1.5 Consumer accountability during the food styling process	130
6.2.2	Step 2: Development of the discourse – the Q-Sample	131
	Step 3: Development of the P-set, the sample	133
	Step 4: The Q-sorting	133
6.2.5	Step 5: Data analysis, interpretation and discussion of results	133
	6.2.5.1 Consumer's choices of food image and aesthetic	
	dimension matches	134
	6.2.5.2 Consumer's reasons for food image choices	135
	6.2.5.3 Effect of selected food images on consumers'	406
	behavioural intent	136
6.3	EVALUATION OF THE RESEARCH	138
6.3.1	Quality of the results	138
	6.3.1.1 Validity	138
	6.3.1.2 Reliability	138
	6.3.1.3 Generalisation	139
	6.3.1.4 Ethics	139
6.3.2	Q-methodology limitations	139
6.4	PROPOSITION OUTCOMES	140
6.5	CONCLUSIONS ABOUT RESEARCH PROBLEM	141
6.6	IMPLICATIONS FOR THEORY	142
6.7	IMPLICATIONS FOR POLICY AND PRACTICE	143
6.8	IMPLICATIONS FOR METHODOLOGY	144
6.9	RECOMMENDATIONS FOR FUTURE RESEARCH	144
6.10	SUMMARY	145



Chapter 6

Conclusions, implications and recommendations

This chapter offers the conclusions for the study, the implications of the findings, limitations of the study and suggestions for further research.

6.1 INTRODUCTION

In the previous chapter of this study the results were given and the major findings reported on. In this chapter conclusions and implications of these major findings are presented. A section offers an evaluation of the research and the chapter ends with recommendations for future research.

6.2 SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND IMPLICATIONS BASED ON THE MAIN FINDINGS (PRESENTED ALONG THE 5 STEPS OF Q-METHODOLOGY)

The core aim of this study as presented in previous chapters was to determine whether food stylists create food images that knowingly communicate with consumers in such a way that behavioural intent would be affected. In an attempt to offer food stylists, and therefore the marketing and advertising industry as a whole, a glimpse into the unexplored world of consumer aesthetic experience with regard to visual food consumption, this study investigated three emotional dimensions and three cognitive dimensions matched with appropriate food images using Q-methodology's Q-sort technique.

The literature review and empirical research lead to some conclusions and implications that could be drawn based on these research results and findings. In this section, conclusions from the findings are discussed and implications provided based on the five Steps associated with Q-methodology research.



6.2.1 Step 1: Development of the concourse - interviews with food stylists

During Step 1 of the Q-methodology the concourse was developed. Food stylists were interviewed and conclusions drawn from these findings are offered, together with implications these might hold.

Very little empirical evidence could be found that shows the link between particularly styled food images and consumer behavioural intent. Some scientific research did draw theoretical connections between food presented in a visual format and the manner in which consumers responded to them, but these were limited to specific contexts such as dietetic and nutritional studies. Investigating how viewing food images in print format could influence consumers' behavioural intent was totally neglected. Hence the conclusions from this study's focus on the higher-order food stylistic processes will make a significant contribution to the body of knowledge of this field of Consumer Studies.

This confirms the need to explore this topic further.

6.2.1.1 The food stylist

Renowned stylebook author Susan L Cox (2006: 141) writes that food styling is the one type of styling that is not invisible to the general public and that the public are mostly unaware that specialised people style the food that is portrayed in photographs. She also says that people just do not know how much experience and training is actually required to excel in this field. What Cox omits to say is that food stylists are rarely aware of how consumers react to their images. This study confirms that only a few food stylists receive some feedback on their work, and that they could benefit from more comment, particularly in terms of how consumers react when viewing their food images (section 5.2.8).

Food stylists are commissioned, amongst others by magazine publications, advertising agencies or food marketing companies to style what will be captured on film for a food image. This involves assembling the content for an image that consists of food items, prepared food dishes and props, such as crockery and cutlery, background and, together with the photographer, possible lighting effects. It is



evident from the main finding (section 5.2.6) that food stylists mostly assemble their images intuitively. It came to light that food stylists all seem to follow similar work methodologies that start with briefing meetings (often also referred to as preproduction meetings) where new food images are discussed in terms of suggested feel, atmosphere or look. The findings from this study revealed, without a doubt, that the intended mode of communication between the food image and the consumer is rarely discussed as this aspect is left entirely to the food stylist's intuition. Food stylists draw on their natural artistic abilities, training and experience to communicate a message to the consumer. Evidence showed that consumers are almost never involved in this process, even though food stylists agreed that they would benefit from such direct feedback.

The implication therefore is that even though food styling as performed by the food stylists appears to be an intuitive, creative process, communication between food images and the consumer would be far more successful if thorough research were to be done with regard to consumer responses and their behavioural intent.

6.2.1.2 Food stylists' work methodologies

Step 1 in Q-methodological research involves the determination of the 'concourse', to "cover all of the ground" of a particular topic (Grix 2010: 461). This was done in this research study (section 5.2.5) as was the investigation into the working methods of food stylists (section 5.2.7). Findings with regard to the work methodologies of the interviewed South African food stylists were successfully compared with those of contemporary American food stylists (section 5.2.7) and were seen to be consistent with examples from the existing literature which Custer (2010: 310) suggests is a good idea.

The derived conclusion was that South African food stylists apparently follow work methodologies that are similar to those of their international counterparts. The most noteworthy difference was that, on some international food styling projects, a separate prop stylist might be employed leaving the food stylist to concentrate on the preparation and presentation of the food only. South African food stylists are more likely to perform both these stylist duties. The findings of this study thus imply that the food stylists work methodologies may be considered as internationally equivalent, as



South African food stylists appear to operate in the same way as their international equivalents, possibly even on a slightly higher level.

6.2.1.3 Food stylists' sources of inspiration

Continuing to determine the 'concourse' as prescribed by Step 1 of Q-methodology, the second research objective set out to ascertain the sources of inspiration used by food stylists. The purpose of determining the 'concourse' is to collect a set of relevant ideas, beliefs and opinions concerning the research object (Ten Klooster *et al.* 2008: 512) and, as extant literature about food styling proved to be insufficient in this regard, this study aimed to make a contribution to the food styling corpus.

Food stylists are creative individuals who prepare visually attractive food for the camera (Custer 2010: 4) and are at the input part of visual food creation. Their sources of inspiration are therefore crucial in determining how they create complex visual images that aim to communicate sensorially, emotionally and cognitively with the viewer on multiple levels. Delores Custer (2010: 355) provides an account of how the trendy food magazine Donna Hay's styling "revolutionised the food industry", a fact collaborated by the finding (section 5.2.5) that Donna Hay was identified as the one person whom most interviewees greatly admired.

During this qualitative part of this study (Step 1 of the Q-methodology) findings are discerned from the responses given when attempting to ascertain food stylists' ideas and concepts when asked about their sources of inspiration. The findings as described in section 5.2.5 offer magazines and books as some of the main sources of inspiration for food stylists. Such varied places to find inspiration from are substantiated when dual photographer/stylist Nicole Young (2012: 48) says that "my inspiration for the food photograph comes from a lot of different places, including the grocery store".

In conclusion it seems that food stylists find inspiration from almost all aspects of life around them and from people from all walks of life, with print media being top of their list. The implications are therefore that food stylists have an innate ability to draw from their immediate environment and their own creativity and inspiration to develop their own style and ways of communicating with the consumer. Therefore we might



be able to better understand how and what consumers are able to decode when viewing messages if we have useful and accurate information about how consumers react when viewing food images. This study found that this was unfortunately not currently the case and clearly needed rectifying.

6.2.1.4 Conceptualisation of food stylists' inspirations

Determining the source of food stylists' inspiration (section 6.2.1.3) can be seen as the intellectually creative part of food styling that is followed by mentally developing those ideas and inspirations to conceptualise them into photographable images. This process is right at the beginning of the food styling process that takes place after the idea is transformed into a small set comprising the background, the actual food or prepared dish(es) and any additional props. This aspect of food styling appears to be vague and insufficient evidence could be found about how food stylists convey their ideas, that are mostly situated in their minds, into a styled group of items that can be captured by the camera to create a photograph that portrays a particular message. Even when Young (2012: 9) tries to give an explanation of the concept of 'white balance' in the composition of a food styling-set, she explains it "without going too geeky" – so the technical explanation remains indistinct.

Food stylists conceptualise the image, drawing from their entire internal and external sources. As a group and as individuals, they have varied educational and culinary training that range from advertising, marketing and even photography as well as diverse work experience, favourite professionals, preferred publications and number of years in the trade (section 5.2.3), with the result that they all seem to work different mentally, even though the final product is often coherent as would be the case where different food stylists work on one magazine that has a distinctive feel or look. Their ability to think practically, artistically and have an idea of season, fashion, trends and sensitivity to what their brief prescribes all come into play (section 5.2.7), much like Watz' (2008: 103) explanation that the entirety of a meal is much greater and more meaningful than its component parts – a notion that too would apply to a food image.

During this entire rational process the food stylist ideally should also bear in mind how the image viewer would best decode the intended message and understand the underlining communication (section 2.2.4.3 and 3.3).



As minimal literature exists that ventures into this realm of the subconscious processes of food styling, there is scant extant literature to confirm or negate. In conclusion it therefore appears that food stylists mostly act on their innate abilities and their judgements about how consumers will react to the food images, and whether they will respond in the expected way when viewing the image, having internalised the intended communication.

The implications therefore are that food stylists would be able to conceptualise their inspirations far better if they had empirical research to draw from about how consumers react when viewing food images. They would be able to accurately communicate visually, knowing how consumers could react and behave when viewing images.

6.2.1.5 Consumer accountability during the food styling process

Food marketing and food advertising is one of the largest marketing industries in the world today, yet when it comes to scientific evidence of how consumers view food images and how they react to such images, data is almost non-existent. The entire food styling/consumer viewing process (Figure 3.2) may be far more successful if consumers were to be involved in the process. Currently consumers have minimal input in the food styling process. Many research studies are conducted about how consumers view food in certain situations such as obesity studies or food science research, but hardly anything has been done about food images and how these affect the viewer on a sensory, emotional and/or cognitive level. Their behavioural intent and ultimate purchasing patterns are therefore not directly linked in any way to food image viewing.

In conclusion therefore, no extant literature could be found that referred to consumers ever being accounted for during the food styling process. The survey conducted for this study confirms that food stylists agreed that consumers are not involved in the process much, even though, without exception, they were in total agreement expressing the opinion that they thought they could all benefit from more direct feedback from the consumer.



The implications are therefore that food marketers, advertising agencies, magazine publications and any other institutions that employ food stylists should investigate ways of obtaining direct feedback from consumers when viewing food images. This could result in a better understanding of how particularly styled food images speak to consumers, that is, how the communication and message cues (the inputs with regard to the communications process) are transformed (or interpreted) into outputs (the behavioural responses of consumers). Or put differently, that the intended encoded message is correctly communicated via the food image that the consumer has to decode and then they behave accordingly – do consumers react as the food marketing world intended them to after viewing the food image?

6.2.2 Step 2: Development of the discourse – the Q-Sample

After completion of Step 1, the discourse was developed during Step 2. Together with a rigorous study of the prevailing literature, a stimulus in the form of a data collection tool was developed.

As dwellers on the planet, modern humans rarely eat for the basic need of sustaining our bodies, providing us rather with pleasure than nutrition and survival (Adema 2000: 114). We attach many sociological, emotional and other higher order needs to food, which is a multisensory experience (Perriseau 1995: 54). "One of the things that happens when one ceases to feast on dead bodies is immediate and almost complete exclusion from the aesthetics of food. In restaurants, cookery books and colour supplements, honey-glazed racks of lamb and pan-seared swordfish steaks are treated as erotica of a highly stimulating order" (Ross 1999: 25). Humans are therefore very aware of the appearance of food and how it affects their attraction to it.

A new marketing theoretical perspective for aesthetics was proposed by Professor Krittinee Nuttavuthisit of the Sasin Graduate Institute of Business Administration at the Chulalongkorn University, Bangkok in her doctoral thesis (Nuttavuthisit, 2003: 192). Her work on aesthetics is predominantly from a philosophical point of view and as such fills a gap in the literature since most other accounts of aesthetics to date have ignored such an approach. This new perspective on marketing-orientated aesthetic experiences suggests that studies of consumers' aesthetic



experiences this far have all been limited to those associated with the consumption of artistic products, such as paintings or cultural contexts, as in visiting the theatre, whereas now aesthetics is seen to involve many more elements of our everyday lives, like the aesthetics of food images. In marketing it is more and more evident that attention is being given to aesthetic influences and that aesthetics is an "amalgam of inner pleasure and emotions that individuals experience when they enjoy objects in the world for their own intrinsic value and for whatever personal meaning that the experience evokes in the observer" (Nuttavuthisit 2003: 192).

In reviewing the literature, very little evidence could be found on the aesthetics of food per se and even less that specifically dealt with the aesthetic experiences of consumers when viewing food. Some literature deals with aesthetics in the everyday presentation of a plate of food and general restaurant food aesthetics. Never before has the old adage rung as true as it does now, that we eat with our eyes first. On the other hand some recently published material provides technical aspects and processes on food styling as a profession and even some advice on photographing food, but again there is almost nothing on the actual aesthetic experience of consumers' visual food consumption.

An initial pilot study was conducted to pre-test the data collection tool, and some adjustments were made. The data collection tool consisted of six South African food images, each printed with a one-word aesthetic indicator at the bottom. This resulted in a deck of 36 cards. During the pilot study it was also noticed that the second stage of the data collection was cumbersome (to provide a reason why consumers chose Most Agree cards). The reasons provided during the pilot study were content analysed and eight simplified one-word options were devised for use in the main data collection activity.

The development of this particular data collection tool can be seen as a big step forward in the area of visual research. Q-methodology is a relatively inexpensive way of collecting data, and in terms of food image research the implication is that it could be extensively used.



6.2.3 Step 3: Development of the P-set, the sample

During Step 3 of the Q-methodology, the P-set or the Q-participant sample was determined. A multi-dimensional sample of the combined average representational proportion of the readership statistics of two of South Africa's most prominent food magazines were determined to represent the P-set. These sampled Q-participants, each with their own biographic description as far as age, sex, race and average household income were concerned, were asked to perform the Q-sort and engage in the two subsequent data collection steps.

This procedure implies that the findings of this study cannot be transferred to the general population, however, at the same time it immediately opens the doors for further research where the same technique could be applied to ensure applicability to the general population.

6.2.4 Step 4: The Q-sorting

Step 4 of the Q-methodology entailed the actual Q-sorting exercise using the developed data collection tool. The data was collected, captured in a spreadsheet and prepared for analysis.

Testing the Q-methodology during this step that provided reliable results implied the suitable use of this methodology within the world of food styling.

6.2.5 Step 5: Data analysis, interpretation and discussion of results

During step 5 of the Q-methodology, the data was analysed, results interpreted and discussed. The data obtained through the qualitative part of this study, the food stylist interviews, not only provided results as discussed in Chapter 5, but were also used in Step 1 where the concourse was developed that led to the development of the discourse and the data collection tool. The conclusions and implications of findings obtained in Step 1 have been discussed (section 6.2.1.1-6.2.1.5).



The remaining section of Step 5 was the analysis of the data that involved the factorisation of the data, the interpretation of the factors and the discussion of the results. The following conclusions and implications are presented in accordance with the study's objectives.

6.2.5.1 Consumer's choices of food image and aesthetic dimension matches

Extant literature regarding consumer's responses when viewing food images matched to aesthetics indicators, particularly the six emotional and cognitive dimensions and their subsequent reactions are however limited. Little evaluative analysis of potential photographic images for marketing purposes in electronic and hard copy travel literature has been undertaken (Dewar et al. 2007: 38). The analyses conducted were very much a first step in mapping out the significant perceptual variations (Davies and Hodge 2006: 331), particularly the consumers' actual viewing of the food image. However, that pictorial communication is a particularly powerful way of conveying messages is indisputable, as is evident from an advertising study regarding images that confirmed the prevalence of the visual and the body copy in print advertisements.

This study further reveals that the use of pictures is especially effective in attracting consumers and arousing buying intentions. This is in line with findings from existing studies that the visual component of advertisements affects both beliefs and attitudes and may lead to both cognitive and affective responses. The visual component of advertisements helps in building an image through the formation and modification of beliefs thereby differentiating the market offering (Decrop 2007: 521). Not much other literature regarding the visual power of images, even on something as basic as the influence of colour in advertising (Lichtlé 2007: 37), could be found yet confirming that colour, for instance, is hugely successful as a marketing tool to influence individuals. This particular work proved that the dominance of colour used in print advertisements would affect an individual's emotional reaction to an advertisement and the attitude it engendered.

An aim of this study was to fill this void by analysing consumers' reactions when viewing images, and subsequently selecting from a set of 36 cards made up of six pre-selected food images matched with six aesthetic indicators (three emotional:



pleasure, arousal, dominance; and three cognitive: reality, fantasy, entertainment). The final set of seven factors derived from the factor analysis performed during Step 4 of the Q-methodology, as illustrated in Table 5.3, provided useful results. Findings of consumers' selection of their Most Agree choices (section 5.3.3) are significant and consistent with the literature on other non-food fields.

It is important to mention that this study was explorative, and that the conclusions drawn can only be applied to the particular sample, but particular behavioural similarities were revealed. Moreover, the conclusions are tentative, as people's emotional and cognitive responses, or the conditions that underlie these, and therefore the beliefs or expectations of food images, and again the choices made, are consequently not stationary (Desmet and Schifferstein 2008: 299). When viewing food images consumers may behave in a particular way one moment, and very differently the next.

The implications of the results and the conclusions drawn from the correspondence of consumer's choices of food images and the aesthetic dimension are significant and considerable. The reliable factors obtained show, without any doubt, that, when viewing food images consumers' responses are both on an emotional and a cognitive level and this is an important finding. Were the food marketing and food advertising industries to heed such information they would better understand how food stylists could improve their stylistic abilities to enhance communication with consumers.

6.2.5.2 Consumer's reasons for food image choices

In this section, and in line with objective 2.2 (section 5.3.3), this study has attempted to ascertain why consumers chose certain images above others. The detailed explanation (section 4.4.2.4) in the data collection section, regarding Action 2 that took place during the actual Q-sorting procedure applies. The results as presented (section 5.3.3) are varied and might not be conclusive. However, it appears that the descriptors such as the words 'fun', 'exotic' and 'enticing' were the preferred reasons as to why consumers made certain food image choices. During the Q-sort, consumers had to only look through the cards and act on their immediate first reaction on the assumption that this directive would yield their best choices. In this action they had to think about their choices and provide an answer for each choice.



It could be postulated that the results from the Q-sort would be of a higher quality as they required only a reaction, without any mental effort to explicate further. Nonetheless something may well be learnt from this, in that it seems as though consumers are happy to provide very positive reasons for their choices, as all three the words, fun, exotic and enticing, have a positive connotation. On the other hand, the second highest percentage for a reason was chaos, and it was given for the card choice of a bowl of spaghetti with tomato, basil and crumbed cheese. It may well be that the bowl of pasta looks dishevelled, but should it be described as chaotic?

The composition of an image is the interrelated skill the food stylist has to put the elements of a food image together. Being able to code a message into that image, and having the consumer decode that message is what the food stylist aims for, but it would appear from the results presented in this section that consumers are not all that able to provide forceful reasons for their choices. Young (2012: 115) explains how important composition abilities are, but again says nothing of understanding how to build into the image the underlying emotions or cognition that would enable consumers to decode and then behave accordingly in terms of their judgement. Just something as simple as colour generated considerable comment in a study on visual merchandising (Kerfoot *et al.* 2003: 147) and the assumption can be made that colour may well be important in the composition of food images.

The implications regarding the conclusions drawn from these results are varied. On the one hand there seems to be some element of agreement among consumers about the reasons they provided for their Most Agree choices. Furthermore it suggests that the consumers even had similar feelings about and reasons for their choice options when choosing specific cards as their Most Agree options. On the other hand, the reasons might not have been distinctly dissimilar enough and clarity about them was elusive.

6.2.5.3 Effect of selected food images on consumer's behavioural intent

It is an indisputable fact that consumers can make purchase decisions based on the influence of images (Bolan and Williams 2008: 382). Behavioural intent, simplified within the food image arena to imply that food images are generally created with the



sole purpose of encouraging consumers to react positively, to notice the image, to perhaps take a second glance and to "make people salivate" (Young 2012: 79), to let them hover a while, and to ultimately place a post-it note in the page of a magazine for future use, or to rush out to the store and immediately purchase such an item. "Your goal is to make food stand out and look its best" (Young 2012: 45), "...to elicit the same mouth-watering reaction as the smell of freshly baked bread or the taste of a perfectly grilled steak" (Peake 2009: 50). "You need your audience to say, 'I would like to be there, and I would love to be eating that food'" (McGlynn 1993: 1), "tantalising enough to make you phone for a delivery from your favourite take-out joint" (Lee 1999: 1).

The results presented in section 5.3.4, confirm that existing literature about behavioural intent is limited when seen as the "intention to buy more", as it is described by Schaffner *et al.* (1998: 52). Whether or not consumers' behaviour is classified as "variety-seeking", "complex", "dissonant" or "habitual" buying behaviour (Baker 2003: 134), the aim is always the same, to make consumers react positively towards a food image and fork out their money! The results show a positive belief amongst consumers (more than 50%) that the images they selected as their most agreed choices would positively alter their behavioural intent.

Implications resulting from these conclusions are far-reaching. The food marketing world, as well as the current trend in the world regarding ethical living and environmental concerns especially concerning food production, could change dramatically if consumers' purchasing behaviour could be influenced by knowledge of how consumers behave emotionally and cognitively. In this study consumers were merely asked to indicate the extent to which they thought an image representing a particular aesthetic indicator would possibly make them reconsider what the food image actually portrays and also to possibly want to attempt to prepare such a dish or perhaps order it from a menu sometime in the future. No direct correlations between food images with specific aesthetic attributes and purchasing behaviour were investigated. Considering the food marketing industry and its monumental expenditure to convince consumers to buy, the impact of knowledge about how consumers behave is substantial.



6.3 EVALUATION OF THE RESEARCH

The quality of the research is evaluated in terms of the validity and reliability of the methodology used and the extent to which the findings can be generalised and seen as relevant when considered in a broader context.

6.3.1 Quality of the results

6.3.1.1 Validity

Even though very little empirical evidence on the topic of food styling with regard to the communication ability of food images could be found, theoretical validity was maintained through a rigorous review of literature that related to similar visual consumption. Furthermore key concepts were validated through the identification of key concepts found in the literature. The initial aim was to find key concepts through interviews with the food stylists, but this seemed less successful, as it appeared that food stylists do not generally pay much attention to the aesthetic qualities and their influence when consumers view their images. Ranking images matched with particular emotional and cognitive aesthetic indicators thus ensured and endorsed construct validity. Q-participants were indeed willing to cooperate and this affected their responses positively. The fact that hardly any new evidence was found when the initial interview process was broadened to include some American food stylists' responses suggests the validity of South African responses. Inferential validity was ensured by making use of a qualified statistician who, through the process of calculating Cronbach Alpha values, attended to the inferential validity of the data and internal consistency of the factors.

6.3.1.2 Reliability

Only willing participants were included. Even though no unwilling participants were found, one food stylist requested not being mentioned by name (for professional reasons), even though she was happy to provide her opinion. Data collected from the Q-participants during the Q-sort was tested for errors and pivot tables used to eradicate mistakes that were mostly typing errors (Table 5.1). The sample profile of Q-participants was carefully constructed statistically using the combined averages of the two magazine readership samples to obtain a proportional sample that was



multidimensional in terms of the Q-participants' ages, sex, race and household income. A control variable was also applied in that possible Q-participants were first asked if they read food magazines or perused food articles in magazines.

6.3.1.3 Generalisation

Results from the qualitative part of the study, the interviews with food stylists cannot be generalised and applied to a larger population. Triangulation through comparison with responses from American food stylists did, however, further enhance the general applicability of these research results and findings. On the other hand, the results and findings extracted from the Q-sorting only applied to the sample case of Q-participants.

6.3.1.4 Ethics

All possible considerations were taken into account to accommodate the interviewees and Q-participants to ensure respect and ethical considerations. Only food stylists and Q-participants who were willing to participate were included and institutional approval ensured ethical research procedures were followed. Compliance with all requirements as set out for institutional approval was guaranteed.

6.3.2 Q-methodology limitations

Q-methodology is widely implemented in the social sciences today (Jacobsen 2007: 242) and the results obtained from the Q-method used in this study show how well this type of methodology befits research that focuses on the relationship between food images and consumer behaviour. It is a reliable and sophisticated method that is particularly well-suited for judgements about visual materials that is not highly dependent on verbal or linguistic interpretations (McCoy and Evans 2002: 412). Like other methods exploring subjectivity, Q-methodology is self-referential, implying that consumers respond to visual images using internal benchmarks, with the result that responses can be directly compared in a consistent manner, as everyone reacts to the same food images (Webler *et al.* 2009: 5) and is therefore appropriate when seeking to explore the variety of accounts the consumers provide and not necessarily aiming to obtain the truth (Cross 2005: 209).



The limitations of this study are acknowledged but do not detract from the findings. First, one of the potential limitations of the Q-method using visual food images, is the richness of data it provides, for example, the Louise Vuitton handbag cake in this study that could create difficulties in analysis (Fairweather and Swaffield 2002: 285). A solution to this limitation, as was done in the case of this study, was to limit the sample size of Q-participants.

Second, during the second part of the Q-sort procedure, where Q-participants were asked to provide a reason for the Most Agree choices, better results might have been obtained if the combined technique used had been supported by a short qualitative in-depth interview instead of Q-participants only choosing from a predetermined list of reasons. "In other studies conducted with the Q-sort method, such a combination also proved to be highly useful: the interviews may serve as additional qualitative information that helps uncover the thoughts respondents had about the image object" (Ten Klooster *et al.* 2008: 516).

Third, the nature of the sample constituted for this study, and therefore the factors derived, were diverse in age, gender, race and household income. Hence it could be inferred that the responses were only characteristic of the given sample and that the findings were therefore not necessarily transferable to the wider population. A special effort was made to ensure all Q-participants fitted the demographic requirements as determined by the sample specifications. As happened in this other studies using food images, and also in this particular Q-sorting procedure, results were turned out that are not only just interesting in their own right, but could also be used for further development of other survey instruments, for example, for larger samples and the use of questionnaires with food images (Jacobsen 2007: 248).

6.4 PROPOSITION OUTCOMES

Outcomes derived from this work made a significant contribution to the body of knowledge in the field of food styling since they:

 provided demographic data and established typical work methodologies of South African food stylists



- examined the demographic data and work methodologies of South African food stylists compared them with American contemporaries
- · provided sources of inspiration for food stylists
- revealed conceptualisations of food stylists inspirations
- confirmed that consumers were not accounted or acknowledged during the food styling process
- proved the useful results from the Q-sorting technique that had never before been used with food images
- were based on the application of the Q-methodological technique using specific food images and aesthetic dimensions in South Africa
- helped to bring consumer food image consumption to the fore
- represented the interpretation of a sample of two of South Africa's food magazine readerships and indentified food image choices employing a specific food image and aesthetic indicator matches
- presented reasons for consumers' choice of food image
- presented statistics of how much consumers believed food images would alter their behavioural intent.

From these suggestions it too can be seen that research can be either qualitative or quantitative.

6.5 CONCLUSIONS ABOUT RESEARCH PROBLEM

The research problem of this study stated that it aimed to carry out an exploratory investigation of food image creation by food stylists for print media and to explore how consumers interpret them. "Behind almost every picture-perfect plate of food in a magazine or a cookery book is a food stylist" (Baga-Reyes, 2006:1), but none of the five subject specific published books about food styling (Young 2012; Custer 2010; Belingham and Bybee 2008; Carafoli 2007; Cox 2006) in any way even remotely touched on the subject of the consumers' interpretation of food images. These authors strongly agree that food images are created to illicit a positive response from viewers, and concur that food images are made with the solitary purpose of attracting. To say the least, that consumers are in no way accounted for is startling.



Food marketing spends huge amounts of money and is the second largest advertiser in the American economy (Gallo 1999: 173) and that so little research has been conducted about the way consumers view food images is quite astonishing. This researcher had at heart the desire to explore and investigate the actual creation of food images by food stylists and then to determine consumers' behaviour when viewing such images. The data and subsequent results from the Q-sort data collection show confidently how a unified group of consumers behave when viewing particular images that represent specific aesthetic indicators. The qualitative part of the study, where food stylists were interviewed, brought very clearly to light that food stylists thought they could benefit from receiving more feedback from consumers. Food stylists themselves contributed significantly to the research by making the food image and aesthetic indicator matches. Even though this process was performed by professionals, it still resulted in three of the initial images falling out during the reliability process. This could indicate that food stylists are not really aware of what happens when consumers view their images, which makes one wonder whether they are conscious of the effect of their created food image has: does the decoding of their intended message occur as intended?

Much of this study was exploratory and therefore warrants more detailed research. The Q-methodology used has never before been applied to food images, even though it has had remarkable success in other fields such as tourism advertising (Dewar *et al.* 2007), environmental studies (McCoy and Evans 2002) and landscape perception (Jacobsen, 2007; Fairweather and Swaffield 2002). Their results though showed the successful use of Q-methodology for food image studies.

6.6 IMPLICATIONS FOR THEORY

Wider application of the findings of this study is possible as the results are also transferable to areas such as adverting and marketing, consumer behaviour, food choice studies, visual consumption and consumer perception research apart from food styling as a specialist field. Advertisers and marketers are in general the people who provide the food stylist with work (Custer 2010: 32) and the food industry as a whole would benefit the most if it had a clearer view of how consumers behaved when viewing food images. What was it that actually spoke to them? How did the



images influence them on a cognitive or emotional level, or both, to better understand what the food stylist had intended and therefore would make them react positively? Theoretically it is perhaps a major step in understanding how little is understood about the manner in which consumers view food images. This very fact justifies much more research being done in this field. In terms of the application of the Q-methodology, the results definitely contribute positively to theory building.

A number of theoretical conclusions can be made, particularly the finding that food stylists in South Africa appear to follow similar working methodologies as their international contemporaries. Moreover South African food stylists believe food styling in South Africa is of a very high standard (section 5.2.4). The explorative results in this study show that the process between the food stylist and the final production of the image is mostly done intuitively and not based on correctly researched facts. The major problem is that very little research has in fact been done about consumers' reactions to food images and that they do not react very similarly even though, as pointed out in one particular documented instance (Ten Klooster, *et al.* 2008: 516), the factor score arrays obtained in section 5.3.1 and the representative sorts are not exact figures, but more or less ideal and therefore useful in theoretical construction.

6.7 IMPLICATIONS FOR POLICY AND PRACTICE

This section has been provided for the benefit of managers and executives as for them comprehension of the content of this study would be valuable. Marketing companies, advertising agencies, production companies, food companies and publishing houses would all profit from using the results of this study and possible future research concerning consumer behaviour when viewing food images. This information would enhance the value of using food images in their marketing endeavours especially if these were sure to have the desired effect. Knowledge of consumer behaviour would streamline the way stylists conceive and interpret the brief received from the people for whom they work. They would be able to tap into grounded theory and use their own creative abilities, expertise, experience and intuition in combination with these new results that specifically provide positive



information about the emotional and cognitive reactions of consumers when viewing food images.

6.8 IMPLICATIONS FOR METHODOLOGY

Q-methodology was used throughout this study, and was particularly successful in the determination of consumers' options in choosing particular food images with particular aesthetic indicators. The seven factors revealed some significant groupings of preferred consumer food images choices.

6.9 RECOMMENDATIONS FOR FUTURE RESEARCH

Literature suggests that an abundant amount of money and effort is spent annually on the promotion of food and products of the food industry and food marketing world. This theory building research contributes significantly to having the knowledge regarding consumers' behaviour when viewing food images, but it makes good sense for future researchers to extend these discoveries to find direct correlations between the way consumers view food images and purchasing behaviour.

The research methodology could be adapted in order for findings to be generalised. Similar research could be conducted involving international Q-participants.

The following specific suggestions for future research directions are worth mentioning:

In terms of the food stylist

- Determining how communication takes place between the food stylist's encoding and consumer decoding of food image messages
- Understanding what makes a food image "editorial" or "advertorial"?

In terms of the consumer



- Adapting the Q-sorting procedure so that the sort can be done electronically in order to simplify the collection of data process, even perhaps doing so via the internet
- Asking: do consumers react differently to editorial or advertorial styled food images?
- Investigating: does prior knowledge of food preparation affect consumers' visual experience of food images?
- Considering how different ethnicities in South Africa view food images
- o Finding out whether men and women view food images differently
- Ascertaining whether a consumer's age influences their food image viewing
- Determining post-food image viewing buying behavioural patterns of consumers
- Enquiring: how much does the satiety level of consumers affect their visual experience of food images?
- o Developing a new set of visual food indicators for food aesthetics.

6.10 SUMMARY

In conclusion, this study has presented the relatively new field of food styling as a field ripe for research endeavours that would enhance its development. Some demographic information regarding food stylists was offered, along with detailed exposure of their work methodologies, sources of their inspiration and its conceptualisation and consideration of feedback from consumers. Furthermore, the research presented consumers' choices of particular food images as matched with specific aesthetic emotional and cognitive indicators, reasons why consumers made such choices and lastly how much they believed it altered their behavioural intent.

The theoretical advances are significant for both theory and practice. The theory shows definite correlations between consumer behaviour and their viewing food images with specific aesthetic appeal, while the food marketing world would be able to fine tune the data collection tool in order to obtain exact information regarding consumer purchasing behaviour when viewing food images with a specific intended styled content.



Reference List

Adema, P. 2000. Vicarious Comsumption: Food, Television and the Ambiguity of Modernity. *Journal of American and Comparative Cultures*, 23(3): 113-123.

Adorno, T.W. 1997. Aesthetic Theory. In Adorno, G. & Tiedemann, R. eds. *Theory and History of Literature*. Minneapolis, University of Minnesota Press.

Advertising of Food. *Sine Anno.* Available from http://www.answers.com/advertising%20of%20food [Accessed: 10 April 2012].

Alfranca, O., Rama, R. & Von Tunzelmann, N. 2003. Competitive behaviour, design and technical innovation in food and beverage multinationals. *International Journal of Biotechnology*, 6(3/4): 1-36.

Alter, S. 2007. Customer-Centric Systems: A Multi-Dimensional View. Paper presented at *Americas Conference on Information Systems*. Available from http://scholar.google.co.za/scholar?q=customer-centric+systems+a+multidimensional+view&hl=en&as_sdt=0&as_vis=1&oi=scholart&sa=X&ei=vQrnT4aVGoPRhAfXh5nOCQ&ved=0CAUQgQMwAA [Accessed: 25 June 2012].

Assael, H. 1995. Consumer Behavior and Marketing Action. Ohio, South-Western College Publishing.

Babbie, E. & Mouton, J. 2004. *The practice of Social Research*. Oxford, Oxford University Press.

Baga-Reyes, V. 2006. If it looks good, it may be the styling. *Philippine Daily Inquirer*, 16 March 2006.

Bagozzi, R.P., Gopinath, M. & Nyer, P.U. 1999. The role of emotions in marketing. Journal of the Academy of Marketing Science, 27(2): 184-206.



Bajek, R. & Okada, N. 2006. Characterization of People's Attitudes towards Furniture Fastening Among "Professionals": Case study of Kishiwada, Osaka. *Annuals of Disaster Prevention Research Institute*, 49.

Baker, M.J. 2003. The Marketing Book. Oxford, Butterworth Heinemann.

Bal, M. 2005. Food, Form, & Visibility: Glub and the Aesthetics of Everyday Life. *Postcolonial Studies*, 8(1): 51-73.

Barnes, J. 2003. The Pedant in the Kitchen. London, Atlantic Books.

Bell, A., Joyce, M. & Rivers, D. 2004. *Advanced Level Media*. London, Hodder and Stoughton.

Bellingham, L. & Bybee, J.A. 2008. Food Styling for Photographers. USA, Focal Press.

Bhoovraghan, S., Vasuedevan, A. & Chandran, R. 1996. Resolving the Process vs. Product Innovation Dilemma: A Consumer Choice Theoretic Approach. *Management Science*, 42(2): 232-246.

Blijlevens, J., Creusen, M.E.H. & Schoormans, J.P.L. 2009. How Consumers Perceive Product Appearance: The Identification of Three Product Appearance Attributes. *International Journal of Design*, 3(3): 27-35.

Bloch, P.H., Brunel, F.F. & Arnold, T.J. 2003. Individual Differences in the Centrality of Visual Product Aesthetics: Concept and Measurement. *Journal of Consumer Research*, 29(4): 551-556.

Bloch, P.H. 1995. Seeking the Ideal Form: Product Design and Consumer Response. *Journal of Marketing*, 69(3): 16-29.



Bolan, P. & Williams, L. 2008. The role of image in service promotion: focusing on the influence of film on consumer choice within tourism. *International Journal of Consumer Studies*, 32(4): 382-390.

Bon Appétit. 2007. Our Spring Veggie Team. Bon Appétit, April 2007, 24.

Bowen, J.T. & Morris, A.J. 1995. Menu design: can menus sell. *International Journal of Contemporary Hospitality Management*, 7(4): 4-9.

Bracken, S.S. & Fischel, J.E. 2006. Assessment of preschool classroom practices: Application of Q-sort methodology. *Early Childhood Research Quarterly*, 21(4): 417-430.

Brown, A. 2004. *Understanding Food Principles and Preparation*. USA, Thomson Wadsworth.

Brown, S.R. *Sine Anno*. The History and Principles of Q Methodology in Psychology and the Social Sciences. Available from http://facstaff.uww.edu/cottlec/QArchive/Bps.htm [Accessed: 07 July 2011].

Bruns, G.L. 2008. On the Conundrum of Form and Material in Adorno's Aesthetic Theory. *The Journal of Aesthetics and Art Criticism*, 66(3): 225-235.

Bruseberg, A. & Mcdonagh, D. 2002. Product handling and visual product evaluation to support new product development. In McCabe, P.T. ed. *Contemporary Ergonomics*. London, Taylor & Francis.

Bruseberg, A., Mcdonagh, D. & Wormald, P. 2004. The use of images to elicit user needs for the design of playground equipment. In McDonagh, D. *et al.* eds. *Design and Emotion: The Experience of Everyday Things*. London, Taylor & Francis.

Buford, B. 2006. Heat. London, Jonathan Cape.



Burton, G. 2002. More than Meets the Eye, An introduction to Media Studies. London, Arnold.

Callow, J. 2003. *Talking about visual texts with students*. Available from http://www.readingonline.org/articles/callow/ [Accessed: 25 June 2012].

Caranfa, A. 2001. Art and Science: The Aesthetic Education of the Emotions and Reason. *Journal of Art and Design Education*, 20(2): 151-160.

Carafoli, J.F. 2007. Food Photography and Styling. New York, John F Carafoli.

Carafoli, J.F. 2003. Tempting the Palate, The Food Stylist's Art. *Gastronomica – The Journal of Food and Culture*, 3(2): 94-97.

Cardello A.V. 1994. Consumer expectations and their role in food acceptance. In MacFie, J.H.J & Thomson, D.M.H. eds. *Measurement of Food Preferences*. Glasgow, Blackie Academic & Professional.

Cardello, A.V. 1996. The role of the human senses in food acceptance. In Meiselman, H.L. & MacFie H.J.H. ed. *Food choice, acceptance and consumption*. London, Blackie Academic & Professional.

Cardello, A.V. & Wise, P.M. 2008. Product Experience: Taste, smell and chemesthesis in product experience. In Schifferstein, H.N.J. & Hekkert, P. eds. *Product Experience*. San Diego, Elsevier.

Chang, W. & Wu, T. 2007. Exploring Types and Characteristics of product Form. International Journal of Design, 1(1): 3-14.

Charley, H. 1982. Food Science. New York, Macmillan.

Choice – Australian Consumers' Association. 2002. *Food Styling*. Available from http://www.choice.com.au/viewArticle.aspx?id=102996&catID=100406&tid=1000 08 [Accessed: 10 August 2006].



Chuang, Y. & Chen, L. 2008. How to Rate 100 Visual Stimuli Efficiently. *International Journal of Design*, 2(1): 31-43.

Churchill, G.A. 1979. A Paradigm for Developing Better Measures of marketing Constructs. *Journal of Marketing Research*, *16(1)*: 64-73.

Civitello, L. 2008. *Cuisine and Culture: A History of Food and People.* New Jersey, Wiley.

Clark, J.E. 1998. Taste and flavour: their importance in food choice and acceptance. *Proceedings of the Nutrition Society*, 57: 639-643.

Collins Concise Dictionary. 2001. Glasgow, HarperCollins Publishers.

Condoor, S. & Quijano, J. 2003. Consumer Product Design. Paper presented at the ASEE/IEEE Frontiers in Education Conference, 6-8 November 2003, Boulders, CO.

Cox, S.L. 2006. *Photo Styling How to Build Your Career and Succeed.* New York, Allworth Press.

Cross, R.M. 2005. Exploring attitudes: the case for Q methodology. *Health Education Research*, 20(2): 206-213.

Custer, D. 2003. What Are You Selling? Understanding the role of the Food Stylist in producing the Look of a Shot. *The Tweezer Times*. Available from foodesigns.com http://www.tweezer-times.com2003-ql/page4.html [Accessed: 02 November 2006].

Custer, D. 2010. Food Styling. New Jersey, Wiley.

Danto, A.C. 1993. A Future for Aesthetics. *The Journal of Aesthetics and Art Criticims*, 51(2): 271-277.

Davies, B.B. & Hodge, I.D. 2007. Exploring environmental perspectives in lowland agriculture: A Q methodology study in East Anglia, UK. *Ecological Economics*, 61(2/3): 323-333.



Decrop, A. 2007. The influence of message format on the effectiveness of print advertisements for tourism destinations. *International Journal of Advertising*, 26(4): 505-525.

DeFleur, M.L. & Ball-Rokeach, S.J. 1989. *Theories of Mass Communication*. New York, Longman.

De Klerk, H.M. & Lubbe, S. 2008. Female consumers' evaluation of apparel quality: exploring the importance of aesthetics. *Journal of fashion marketing and management*, 12(1): 36-50.

Desmet, P. & Hekkert, P. 2007. Framework of product Experience. *International Journal of Design*, 1(1): 57-66.

Desmet, P.M.A. & Schifferstein, H.N.J. 2008. Sources of positive and negative emotions in food experience. *Appetite*, 50(2/3): 290-301.

De Vos, A.S., Strydom, H., Fouche, C.B., Poggenpoel, M. & Schurink, E.W. 1998. *Research at grass roots.* Pretoria, JL van Schaik.

Dewar, K., Mei, L.I.W. & Davis, C.H. 2007. Photographic Images, Culture, and Perception in Tourism Advertising: a Q methodology Study of Canadian and Chinese University Students. *Journal of Travel & Tourism Marketing*, 22(2): 35-44.

Dickie, G. 1974. Beardsley's Theory of Aesthetic Experience. *Journal of Aesthetic Education*, 8(2): 13-23.

Dorenburg, A. & Page, K. 2006. Culinary Artistry. New York, John Wiley & Sons.

Durham, S. 2004. A fresh focus on food. Consumer Sciences Today, 6(1).

Du Plessis, P.J. & Rousseau, G.G. 2003. *Buyer Behaviour – A Multi-cultural Approach*. Oxford, Oxford University Press.



Eden, S., Bear, C. & Walker, G. 2008. The sceptical consumer? Exploring views about food assurance. *Food Policy*, 33(6): 624-630.

Edwards, E. 2008. Photographs, Orality and History. In Edwards, E. & Bhaumik, K. eds. *Visual Sense a cultural reader*. Oxford, Berg.

Evans, M., Jamal, A. & Foxall, G. 2009. Consumer Behaviour. West Sussex, Wiley.

Fairweather, J.R. & Swaffield, S.R. 2002. Visitors' and Locals' Experiences of Rotorua, New Zealand: An Interpretative Study Using Photography of Landscapes and Q Method. *International Journal of Tourism Research*, 4(4): 283-297.

Fauconnier, G. 1986. Aspects of the theory of communication. Pretoria, Academica.

Fedorovskaya, E., Neustaedter, C. & Hao, W. 2008. Image Harmony for Consumer Images. Paper presented at 15th International Conference on Image Processing ICIP2008.

Fenner, D.E.W. 2003. Aesthetic Experience and Aesthetic Analysis. *Journal of Aesthetic Education*, 37(1): 40-53.

Fiore, A.E. 2010. *Understanding Aesthetics for the Merchandising and Design Professional*. USA, Fairchild Books.

Fiore, A.E. & Kimle, P.A. 1997. *Understanding Aesthetics for the Merchandising & Design Professional.* New York, Fairchild.

Fine, G.A. 1992. The Culture of Production: Aesthetic Choices and Constraints in Culinary Work. *The American Journal of Sociology*. 97(5): 1268-1294.

Fisher, H.J., Du Rand, G.E. & Erasmus, A.C. 2012. The power of food images to communicate important information to consumers. *International Journal of Consumer Studies*. 36(4): 440-450.



Fletcher, C.B., Pine, K.J., Woodbridge, Z. & Nash, A. 2007. How visual images of chocolate affect the craving and guilt of female dieters. *Appetite*, 48(2): 211-217.

Franke, G.R., Huhmann, B.A. & Mothersbaugh, D.L. 2004. Information Content and Consumer Readership of Print Ads: A Comparison of Search and Experience Products. *Journal of the Academy of Marketing Science*, 32(1): 20-31.

Gallo, A.E. 1999. Food Advertising in the United States. In Frazao, E. ed. *America's Eating Habits: Changes and Consequences. United States Department of Agriculture, Economic Research Service, Food and Rural Economics Division. Agriculture Information Bulletin.* AIB750, May.

Global Food Survey 2012–2013: Market Trends, Marketing Spend and Sales Strategies in the Food Industry

Available from http://www.just-food.com/market-research/global-food-survey-20122013-market-trends-marketing-spend-and-sales-strategies-in-the-food-industry_id138979.aspx?lk=pcl [Accessed 19 May 2012].

Green, K. 1996. You're a what? Food Stylist. *Occupational Outlook Quarterly*, 4(2): 48-62.

Griffith, S. *Sine Anno*. Ready for Your Closeup? Food Styling Transforms Everyday Foods. *Sauce Magazine*. Available from http://www.saucemagazine.com/article/1/6/1 [Accessed: 25 June 2012].

Grix, J. 2010. Introducing 'hard' interpretivism and 'Q' methodology: notes from a project on 'country sport partnerships and governance'. *Leisure Studies*, 29(4): 457-467.

Gross, S.W. 2002. The Neglected Programme of Aesthetics. *British Journal of Aesthetics*, 42(4): 403-414.

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. & Tatham, R.L. 2006. *Multivariate Data Analysis*, New Jersey, Pearson.



Hem, L.E., Iverson, N.M. & Grønhaug, K. 2003. Advertising Effects of Photos Used to Portray Nature-Based Tourism Attractions. *Scandinavian Journal of Hospitality and Tourism*, 3(1): 48-70.

Hesser, A. 2009. *Eat, Memory – Great writers at the Table.* New York, WW Norton & Company.

Heylighen, F., Cilliers, P. & Gershenson, C. 2007. Complexity and Philosophy. In Bogg, J. & Geyer, R. eds. *Complexity, Science and Society.* Oxford, Radcliff Publishing.

Heylighen, F. & Joslyn, C. 1992. What are Cybernetics and Systems Science? Available from http://www.isss.org/primer/002whats.htm [Accessed: 10 Augustus 2011].

Horng, J.S. & Lee, Y.C. 2006. What Does It Take to Be a Creative Culinary Artist? *Journal of Culinary Science and Technology*, 5(2/3): 5-22.

Hutchings, J.B. 2003. *Expectations and the Food Industry, The impact of colour and appearance*. New York, Kluwer Academic/Plenum Publishers.

Imram, N. 1999. The role of visual cues in consumer perception and acceptance of food product. *Nutrition and Food Science*, 99(5): 224-228, September/October.

Indiatimes - Learning. 2002. *Food Styling*. Available from http://learning.indiatimes.com/career/focus/careerbits/car_bits_food.html [Accessed: 10 August 2006].

Jacobsen, J.K.S. 2007. Use of Landscape Perception Methods in Tourism Studies: A Review of Photo-Based Research Approaches. *Tourism Geographies*, 9(3): 234-253.

Jensen, M. 2011. *The Urban Cook – Cooking and eating for a sustainable future.*Australia, Murdoch Books.



Johnston, K.L., White, K.M. & Norman, P. 2004. An Examination of the Individual-Difference Approach to the Role of Norms in the Theory of Reasoned Action. *Journal of Applied Social Psychology*, 34(12): 2524-2549.

Jun, S.H. & Holland, S. 2012. Information-Processing Strategies: A Focus on Pictorial Information Roles. *Journal of Travel Research*, 51(2): 205-218.

Kalwani, M.U. & Silk, A.J. 1982. On the reliability and predictive validity of purchase intention measures. *Marketing Science*, 1(3): 243-286.

Ketchum, C. 2005. The Essence of Cooking Shows: How the Food Network Constructs Consumer Fantasies. *Journal of Communication Inquiry*, 29(3): 217-234.

Kerfoot, S, Davies, B & Ward, P. 2003. Visual merchandising and the creation of discernible retail brands. *International Journal of Retail and Distribution Management*, 31(3): 143-152.

Kleiman, D. 1990. Food Styling: The Art Of Making the Basil Blush. *New York Times,* 7 November 1990.

Konradt, U., Wandke, H., Balazs, B. & Christophersen, T. 2003. Usability in online shops: scale construction, validation and the influence on the buyers' intention and decision. *Behaviour and Information Technology*, 22(3): 166-174.

Kover, A.J. 1995. Copywriters' Implicit Theories of Communication: An Exploration. *Journal of Consumer Research*, 21(4): 596-611.

Lannon, J. 1986. How People Choose Food: The role of advertising and packaging. In Ritson, C., Gofton, L. & McKenzie J. eds. *The Food Consumer*. Chichester, John Wiley & Sons.

Lansing, J.S. 2002. "Artificial Societies" and the Social Sciences. *Artificial Life*, 8(3): 279-292.



LaRocca, M.A. & Kromrey, J.D. 1999. The Perception of Sexual Harassment in Higher Education: Impact of Gender Attractiveness. *Sex Roles*, 40(11/12): 921-940.

Laros, F.J.M. & Steenkamp, J.B.E.M. 2005. Emotions in consumer behaviour: a hierarchical approach. *Journal of Business Research*, 58(10): 1437-1445.

Lea-Greenwood, G. 1998. Visual merchandising: a neglected area in UK fashion marketing? *International Journal of Retail and Distribution Management*, 26(8): 324-329.

Lee, D.T. 1999. Food by Design – styling foods for advertising. *American Visions*. February 1. Available from http://www.highbeam.com/doc/1G1-53930050.html [Accessed: 10 April 2012].

Leedy, P.D. & Ormrod, J.E. 2005. Practical Research. 8th ed. New Jersey, Pearson.

Lester, P.M. 2000. *Communication, Images with Messages*. California, Wadsworth/Thompson.

Lichtle, M.C. 2007. The effect of an advertisement's colour on emotions evoked by an ad and attitude towards the ad – The moderating role of the optimal stimulation level. *International Journal of Advertising*, 26(1): 37-62.

Long, D. 2006. *Food Styling and Photography By Design*. Seminar notes, 11 – 14 May 2006, Minneapolis, Minnesota.

Locht, P. *Sine Anno.* Full-colour space image analysis of food products using the WinGrain System. Available from http://www.google.co.uk/url?sa=t&source=web&cd=1&ved=0CBYQFjAA&url=http%3A%2F%2Fciteseerx.ist.psu.edu%2Fviewdoc%2Fdownload%3Bjsessionid%3DCEF7C94418FECA82806EA1FFAFFB934A%3Fdoi%3D10.1.1.129.3104%26rep%3Drep1%26type%3Dpdf&rct=j&q=Full-color%20Space%20Image%20Analysis%20of%20Food%20Products%20Using%20the%20WinGrain%20System&ei=PgF1TbSINoqShAeJvLA9&usg=AFQjCNHK91a4a9P_tkKW1fiFgDfTsO39wg&sig2=z5_7H8CziBXY9HHd38sE9A [Accessed: 25 June 2012].



Lock, G. 2003. Being international, local and Chinese: advertisements on the Hong Kong Mass Transit Railway. *Visual Communication*, 2(2): 195-214.

Mann, T., Reeve, W.G. & Creed, P.G. 2002. A comparison of the acceptability to student consumers of three food products retailed at three 'quality' levels. *Food Service Technology*, 2(1): 13-18.

Manghani, S. & Fukukawa, K. 2007. The Business of Visual Culture. *Electronic Journal of Radical Organization Theory*,10(1): 1-16.

Mattilla, A.S. 2002. The use of Narrative Appeals in Promoting Restaurant Experiences. *Journal of Hospitality and Tourism Research*, 26(4): 379-396.

McCarthy, M.S., Heath, T.B. & Milberg, S.J. 2001. New Brands versus Extensions, Attitudes versus Choice: Experimental Evidence for Theory and Practice. *Marketing Letters*, 12(1): 75-90.

McCoy, J.M. & Evans, G.W. 2002. The Potential Role of the Physical Environment in Fostering Creativity. *Creativity Research Journal*, 14(3): 409-426.

McGonigal, A. 2006. The Autonomy of Aesthetic Judgement. *British Journal of Aesthetics*, 46(4): 331-348.

McGlynn, C. 1993. *Clickin Cordon Blue: The fine art of food photography. Eye Weekly*. Available from http://www.eyeweekly.com/eye/issue/issue_12.16.93/foodanddrink/fo1216.php [Accessed: 10 August 2006].

McKeown, B. & Thomas, D. 1988. Q Methodology. Newbury Park, Sage Publications.

Mcnutt, K. 2008. The role of consumer magazines in communicating innovations in food choices. *Innovation: Management, Policy and Practice*, 10(1): 96-108.



Mela, D.J. 2001. Development and Acquisition of Food Likes. In Frewer, L.J., Risvik, E. & Schifferstein, H. eds. *Food, People and Society – A European Perspective of Consumers Food Choices*. Germany, Springer-Verlag.

Messaris, P. 1997. Visual Persuasions – The Role of Images in Advertising. California, Sage Publishing.

Miele, M. & Murdoch, J. 2002. The Practical Aesthetics of Traditional Cuisines: Slow Food in Tuscany. *Sociologia Ruralis*, 42(4): 312-328.

Miele, M. & Murdoch, J. 2003. The aestheticisation of food: taste, time and typicality. Sociologia Ruralis. Available from www.thedepartmentofaesthetics.org [Accessed 25 June 2012].

Mirzoeff, N. 1999. An Introduction to Visual Culture. London, Routledge, Taylor & Francis Group.

Mitias, M.H. 1982. What Makes an Experience Aesthetic? *Journal of Aesthetic and Art Criticism*, 41(2): 157-169.

Miyazawa, S. & Iwasaki, S. 2009. Effect of negative emotion on visual attention: Automatic capture by fear-related stimuli. *Japanese Psychological research*, 51(1): 13-23.

Mora, M., Gelman, O., Forgionne, G., Petkov, D. & Cano, J. 2007. Integrating the Fragmented Pieces of IS Research Paradigms and Frameworks: A Systems Approach. *Information Resources Management Journal*, 20(2): 1-22.

Morgan, J. & Welton, P. 2009. See what I Mean, An introduction to visual communication. USA, Bloomsbury.

Moulton, S. 2005. Julia's Greatest Lesson, Get On with It! *Gastronomica: The Journal of Food and Culture*, 6(3): 18-20.



Mullet, G.M. & Karson, M.J. 1985. Analysis of purchase Intent Scales Weighted by Probability of actual Purchase. *Journal of Marketing Research*, 22(1): 93-96.

Murano, P.S. 2003. *Understanding Food Science and Technology*. USA, Thomson Wadworth.

Nelson, B.H. 1962. Seven principles in image formation. *Journal of Marketing*, 26(1): 67-71.

Neuman, W.L. 1997. Social Research Methods. USA, Allyn & Bacon.

Nuttavuthisit, K. 2003. The varieties of consumer aesthetic experience: a phenomenology of retail atmospherics. Doctorate dissertation. Northwestern University.

Okumus, B., Okumus, F. & McKercher, B. 2006. Incorporating local and international cuisines in marketing tourism destinations: The cases of Hong Kong and Turkey. *Toursim Management*, 28(1): 253-261.

Oppenheim, A.N. 2004. Questionnaire design, interviewing and attitude measurement. London, Continuim.

O'Shaughnessy, J. 1987. Why people buy. Oxford, Oxford University Press.

Ozeki, R.L. 1998. My year of meat. London, Picador.

Peake, F. 2009. Food Photography. PIX African Photo Journal, April/May.

Peracchio, L.A. & Meyer-Levy, J. 2005. Using Stylistic Properties of Ad Pictures to Communicate with Consumers. *Journal of Consumer Research*, 32(1): 29-40.

Petrova, P. & Cialdini, R. 2005. Fluency of Consumption Imagery Generation and the Reversed Effects of Imagery Appeals. *Advances in Consumer Research*, 32(1): 32-33.



Perriseau, J.J. 1995. Food, beautiful food: the pros share their secrets on how to make food look as good as it tastes. *Vegetarian Times*, 212: 54-62.

Peter, J.P. & Olson, J.C. 1994. *Understanding Consumer Behavior*. Illinois, Richard D. Irwin Inc.

Phillips, B.J. 1997. Thinking Into It: Consumer Interpretation of Complex Advertising Images. *The Journal of Advertising*, 26(2): 77-87.

Phillips, B.J. & McQuarrie, E.F. 2006. Pictures, More Pictures, Nothing But Pictures: Images as Genre. *Advances in Consumer Research*, 34: 231-232.

Pitt, D.G. & Zube, E.H. 1979. The Q-sort method: Use in Landscape Assessment Research and Landscape Planning. *Proceedings of Our National Landscape A Conference on Applied Techniques for Analysis and Management of the Visual Resource*, April 23-5.

Plimmer, C. 1988. Food in Focus. London, Headline book publishing.

Pracejus, J.W., Olsen, G.D. & O'Guinn, T.C.. 2006. How Nothing Became Something: White Space, Rhetoric, History, and Meaning. *Journal of Consumer Research*, 33(1): 82-90.

Previte, J., Pini, B. & Haslam-McKenzie, F. 2007. Q Methodology and Rural Research. Sociologia Ruralis Journal Compilation European Society for Rural Sociology, 2(47): 135-147.

Pullman, M.E. & Robson, S.K.A. 2007. Visual Methods – Using Photographs to Capture Customers' Experience with Design. *Cornell Hotel and Restaurant Quarterly*, 48(2): 121-144.

Pszczola, D.E. 2004. Portraits in Colour. Food Technology, 58(1): 42-52.



Raats, M., Daillant-Spinnler, B., Deliza, R. & Macvie, H. 1995. Are sensory properties relevant to consumer food choice? In Marshall, D. ed. *Food Choice and the Consumer*. London, Blackie Academic & Professional.

Richie, D. 1992. A taste of Japan. Tokyo, Kodansha International.

Risvik, E. 2001. The Food and I – Sensory Perception as Revealed by Multivariate Methods. In Frewer, L.J., Risvik, E. & Schifferstein, H. eds. *Food, People and Society – A European Perspective of Consumers Food Choices.* Germany, Springer-Verlag.

Robbins, T. 1990. Jitterbug Perfume. London, Bantam Books.

Rose, G. 2001. Visual Methodologies. London, Sage Publications.

Ross, M. 1999. Meat and tu. Sunday Times, October 24, London, England.

Rueger, A. 2009. Enjoying the Unbeautiful: From Mendelssohn's Theory of "mixed Sentiments" to Kant's Aesthetic Judgments of Reflection. *The Journal of Aesthetics and Art Criticism*, 67(2): 181-189.

Saarf. 2011. South African Advertising Research Foundation. Available from http://www.saarf.co.za/ [Accessed: 07 July 2011].

Sabatini, E., Della Penna, R., Franciotti, R., Ferretti, A., Zoccolotti, P., Rossini, P.M., Romani, G.L. & Gainotti, G. 2009. Brain structures activated by overt and covert emotional visual stimuli. *Brain Research Bulletin*, 79(5): 258-264.

Saito, Y. 2007. Everyday Aesthetics. Oxford, Oxford University Press.

Schaffner, D.J., Schroder, W.R. & Earle, M.D. 1998. *Food Marketing - An International Perspective.* Boston, McCraw Hill.

Schiffman, L.G. & Kanuk, L.L. 2000. Consumer Behaviour. London, Prentice-Hall.



Schoen, M. 1944. The social message of art. *The Journal of Aesthetics and Art Criticism*, 3(9/10): 118-127.

Schroeder, J.E. 2002. Visual Consumption. London, Routledge.

Schroeder, J.E. 2004. Visual Consumption in the Image Economy. In Ekström, K.M. & Brembeck, H. eds. *Elusive Consumption*. Oxford, Berg Publishers

Schroeder, J.E. & Dobers, P. 2007. Imagining Identity: Technology and the Body in Marketing Communications. *Advances in Consumer Research*, 34(1): 229-230.

Scott, L.M. & Vargas, P. 2007. Writing with Picture: Towards a Unifying Theory of Consumer Response to Images. *Journal of Consumer Research*, 34(3): 341-356.

Smith, B. 2004. Food fashion – Stylists can present food that looks good, even if its taste doesn't match its looks. Available from http://www.theage.com.au/news/Epicure/Food-fashion/2004/11/26/1101219740619.html [Accessed: 02 November 2006].

Sobal, J. & Wansink, B. 2007. Kitchenscapes, Tablescapes, Platescapes, and Foodscapes – Influences of Microscale Built Environments of Food Intake. *Environment and Behaviour*, 39(1): 124-142.

Spears, M.C. & Gregoire, M.B. 2007. *Foodservice Organization*. New Jersey, Pearson Publications.

Spears, M.C. & Vaden, A.G. 1985. Foodservice Organizations: A managerial and Systems Approach. New York, MacMillan.

Spitz, E.H. 1982. On the Uses of Aesthetic Theory. Art Education, 35(3): 30-32.

State of Colorado Department of Agriculture. 2003. *Markets: From Growing to Processing*. Available from http://www.ag.state.co.us/mkt/fgtp/chapter3.html [Accessed: 10 Augustus 2006].



Strauss, A. & Corbin, J. 1990. Basic Qualitative Research. California, Sage.

Stoeckel, L.E., Cox, J.E., Cook, E.W. & Weller, R.E. 2007. Motivational state modulates the hedonic value of food images differently in men and women. *Appetite*, 48(2): 139-144.

Suplee, P. 2008. Styling with One Eye on the Prize. Santé, Holiday Issue.

Suthering, J. 2004. A fresh focus on food. *Consumer Science Today*, 5(1): 19.

Taylor, B. 2001. *Theory of Reasoned Action.* Available from http://www.ciadvertising.org/student_account/fall_01/adv382j/brent/yes.html [Accessed: 25 June 2012].

Ten Klooster, P.M., Visser, M. & De Jong, M.D.T. 2008. Comparing two image research instruments: The Q-sort method versus the Likert attitude questionnaire. *Food Quality and Preference*, 19(5): 511-518.

Towey, G. 2006. In praise of photography. *Martha Stewart Living*, 187: 6.

Tsiotsou, R. 2006. The role of perceived product quality and overall satisfaction on purchase intentions. *International Journal of Consumer Studies*, 30(2): 207-217.

Van Exel, J. & De Graaf, G. 2005. Q-mehodology: A sneak preview. Available from http://www.qmethodology.net/PDF/Q-methodology%20-%20A%20sneak%20-preview.pdf [Accessed: 07 January 2011].

Van Trijp, H.C.M. & Meulenberg, M.T.G. 1996. Marketing and consumer behaviour with respect to foods. In Meiselman, H.L. & MacFie, H.J.H. eds. *Food Choice, Acceptance and Consumption*. London, Blackie Academic & Professional.



Venter, C.S., MacIntyre, U.E. & Vorster, H.H. 2000. The development and testing of a food portion photograph book for use in an African population. *Journal of Human Nutrition and Dietetics*, 13(3): 205-218.

Verbeke, W. & Viaene, J. 2001. Effect of Communication (Advertising or News) on Sales of Commodities. In Frewer, L.J., Risvik, E. & Schifferstein, H. eds. *Food, People and Society – A European Perspective of Consumers Food Choices*. Germany, Springer-Verlag.

Vivaldo, D. 2010. The Food Stylist's Handbook. Utah, Gibbs Smith.

Watz, B. 2008. The entirety of the meal: a designer's perspective. *Journal of Foodservice*, 19(1): 96-104.

Webler, T., Danielson, S. & Tuler, S. 2009. *Using Q Method to Reveal Social Perspectives in Environmental Research*. Available from: http://www.fairnessdiscourse.com/pdf/Webler%20-%20Using%20Q%20Method %20to%20Reveal%20Social%20Perspectives.pdf [Accessed: 10 April 2012].

Westphal, L. 1997. Food promotion – catching the consumer's attention. *Direct Marketing*, 69(10): 18-20.

Whitchurch, G.G. & Constantine, L.L. 1993. Systems Theory. In Boss, P., Doherty, W.J., LaRossa, R., Schumm, W.R. & Steinmetz, S.K. eds. *Sourcebook of Family Theories and Methods A Contextual Approach*. Germany, Springer.

Wolff, E. 2006. On the aesthetics of food and the art of cooking. *South African Journal of Philosophy*, 25(4): 290-304.

Woodruff, D.M. 2001. A Virtue Theory of Aesthetics. *Journal of Aesthetic Education*, 35(3): 23-36.

Young, N.S. 2012. Food Photography From Snapshots to Great Shots. Berkeley, Peachpit Press.



Young, S., Ott, L. & Feigin, B. 1978. Some Practical Considerations in Market Segmentation. *Journal of Marketing Research*, 15(3): 405-412.

Zellner, D.A., Lankford, M., Ambrose, L. & Lochner, P. 2010. Art on the plate: Effect of balance and colour on attractiveness of, willingness to try and liking for food. *Food Quality and Preference*, 21(5): 575-578.

Zikmund, W.G. & D'Amico, M. 2001. *The power of marketing*. 7th ed. USA, Southwestern Thomson Learning.

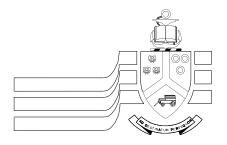


ADDENDUM 1: FOOD STYLISTS' INTERVIEW SCHEDULE

	Profile	
V 1	Contact details	
V	Age	
V 2	Tertiary education	
V 3	Formal FS training	
V 4	Professional cooking training	
V 5	Years practicing	
V 6	Brand names you have	
	worked for	
V 7	Admiring industry people,	
	publications	
	FS today	
V 8	Def of food styling	
V 9	Def of food stylist	
	FS process	
V 10	Characteristics of good	
	Food Stylist	
V 11	Place for formal FS training	
V 12	SA enough work for formal	
	FS training	
V 13	Part or one qualification	
V 14	Different FS jobs	
V 15	Your opinion of 'real' vs.	
	'fake'	
V 16	FS in SA today	
	Your FS process	
V 17	% of different jobs that you do	
V 18	Preference and why	
V 19	How 'daring' are you	
V 20	Any mockup	
V 21	Specialized techniques	
V 22	Tool box specials	
V 23	Studio etiquette	
24.04	FS & creativity	
V 24	Inspirational sources	
V 25	Filing system for inspirations	
V 26	Transformation of ideas into	
V 27	images Encoding of message in	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	image	
V 28	Provision made for	
	consumers' ability to decode	
	message	
	Feedback	
V 29	How much	
V 30	Prefer more	
V 31	Evidence of FS abilities to	
	affect consumers choice	



ADDENDUM 2: ADAPTED INTERVIEW SCHEDULE FOR USA FOOD STYLISTS



Dear

I refer to our telephonic conversation. My name is Hennie Fisher and I am currently in the final stages of my Masters degree with the Consumer Sciences Department (previously Home Economics) at the University of Pretoria. My dissertation topic focuses on the methodologies employed by food stylists, their inspirational ideas and creative processes, and the conceptualization of food images with regard to the way consumers view, interpret and respond to such food images. I was given your details by a fellow food stylist.

I would like to provide you with the contact details of my supervisor and co-supervisor for confirmation or additional information: Dr Gerrie du Rand, 012 420 3546 gerrie.durand@up.ac.za, and Professor Alet Erasmus, 012 420 2575 alet.erasmus@up.ac.za. Regarding copyright and confidentiality, I would like to give you the assurance that the university takes these matters very seriously; all studies have to be registered with the university's Ethics Committee to ensure total confidentiality. Questions in this regard may be addressed to ethics.nas@up.ac.za.

I attach a list of food stylists that I have included in my study, and ask you to please confirm that these are indeed all the people that you believe operate professionally in this field. Should you have any additional suggestions, it would be much appreciated if you could forward those names, e-mail addresses and telephone/cell phone numbers to me.

Could you please take a few moments out of your busy schedule to complete the following table electronically and e-mail back to me? Answers do not have to be in full sentences, but feel free to answer as you see fit.

The last request – would it be possible for you to provide me with a minimum of two images that you styled, where the particular image has a clear, intentional message? It would be great if these images have already been published, but not essential. It would be greatly appreciated if such images could be electronically available, as they will then be used in a Q-sort method with a predetermined audience. I would also be extremely grateful if you could supply me with a short description of the image, but more importantly, a couple of one-liner content messages that you intended to portray through your stylistic approach.

Please feel free to contact me at any time should you have any other queries regarding the above, and again I would like to say how grateful I am for your assistance.

Yours

Hennie Fisher 083 320 4915 henniefisher@riverestate.co.za



Food stylists currently included in this study:

Nikki Werner Abigail Donnely Vicky Sleet Justine Drake

Lisa Clark
Anke Roux
Brita du Plessis
Juletta Hirner
Justine Keegan
Garth Stroebel

Miranda Engelbrecht
Vanessa Burnette
Kim Hoepfle
Anna Montali
Natalie Bell
Annaleze Behr

Philippa Cheifitz Ingmar Niezen (Dutch)

B (1)	
Profile	
Contact details	
Age	
Tertiary education	
Formal FS training	
Professional cooking	
training	
Years practicing	
Brand names you have	
worked for	
Admiring industry people,	
publications	
FS today	
Def of food styling	
Def of food stylist	
FS process	
Characteristics of good	
Food Stylist	
Place for formal FS	
training	
Part or one qualification	
Different FS jobs	
Your opinion of 'real' vs.	
'fake'	
Your FS process	
% of dif jobs that you do	
Preference and why	
How 'daring' are you	
Any mockup	
Specialized techniques	
Tool box specials	
Studio etiquette	
FS & creativity	
•	
Inspirational sources	
Filing system for	
inspirations Transformation of ideas	
Transformation of ideas	
into images	
Encoding of message in	
image Provision made for	
consumers' ability to	
decode message	
Feedback	
How much	
Prefer more	
Evidence of FS abilities to	
affect consumers choice	



ADDENDUM 3: AESTHETIC INDICATOR AND FOOD IMAGE EXPLANATION CARD

REALITY - such as the REAL world. Nothing out of the ordinary, nothing unusual, nothing strange - just plain straight forward reality. A representation of the world "as it is". The world as experienced and lived by people in their daily lives; living from day-to-day.

FANTASY – not the world as it is - the world as it MAY be, what COULD be. An alternative existence – a world of dreams, desires and hopes in people's imaginations.

ENTERTAINMENT - such as when people are seeking something new, something unusual or unexpected, perhaps even a challenge for the mind. When creativity comes to the front. Amusement, intrigue, something special, experiencing a special occasion, feeling spoiled and indulgent.

AROUSAL – such as when going from neutral to frantic excitement. Bright, rich and intense stimulation of desires or energy levels. Something that will arouse people - an effect of evoking feelings or desires.

DOMINANCE – such as in unrestricted, complete control of the situation, being in command. Showing off one's skills with confidence, perhaps even arrogance; the opposite of being overwhelmed. Being able to wield command over others.

PLEASURE – straight forward FEELING GOOD. A positive, likable enjoyment, experiencing good emotions such as happiness, delight and satisfaction. A source of joy and good, multisensory feelings.

Baked chocolate soufflé served hot in a pretty white cup.

Spaghetti with tomato, basil and crumbled cheese.

A marzipan covered cake and cupcakes, meant to resemble the luggage brand Louis Vuitton.

A double beef patty burger with all the trimmings.

An Asian inspired sliced roast duck breast and litchi dish.

Fresh Adams fig, pistachio nut, white and dark chocolate fruit salad.



ADDENDUM 4: Q-SORT INSTRUCTIONS



Dear Consumer

Please accept our appreciation in affording this final year Consumer Science student from the University of Pretoria time to collect data through the collection method called Q-sort. Should you wish to have access to the final results, we will be gladly forward it to you.

The dissertation topic focuses on the methodologies employed by food stylists, their inspirational ideas and creative processes, and the conceptualization of food images with regard to the way consumers view, interpret and respond to such food images.

The lecturers for the subject Culinary Arts is Mr. Hennie Fisher, and for Recipe Development, Dr Gerrie du Rand, who is overseeing this project. They may be contacted on 012 420 3780, henniefisher@up.ac.za and 012 420 3546 gerrie.durand@up.ac.za.

Regarding copyright and confidentiality, the assurance is given that the university takes these matters very seriously; all studies have to be registered with the university's Ethics Committee to ensure total confidentiality. Questions in this regard may be addressed to ethics.nas@up.ac.za. The data will be kept confidential at all times, and will only be used for dissertation purposes in this department.

Please feel free to contact any of the project leaders at any time should you have any other queries regarding the above, and again we would like to say how grateful we are for your assistance.

Yours

Department of Consumer Science University of Pretoria



Q Sorting instruction manual:

- Make a firm appointment with the sample consumer who will be performing the Q Sort.
- Ensure that you have a distraction free environment to perform the Q Sorting in.
- Thank the consumer for giving up some of their time to perform the sorting.
- Explain to the consumer the background of the data collection and a short summary of what will be expected of them.
- Ask the member to fill in the demographical data on the data collection page.
- Hand over the images and ask the consumer to perform the Q Sort by sorting the pile of 36 shuffled images in the following manner:
 - 1st SORT: sort through the pile and immediately remove all the images that you COMPLETELY AGREE with. Place these on the first pile, completely to your left.
 - 2^M SORT: sort through the remaining images and remove all the images that you COMPLETELY DISAGREE with.
 Place these on the second pile, completely to your right.
 - 3" SORT: sort through the remaining images and remove all the images that you AGREE with. Place these in position 3, on the left.
 - 4^b SORT: sort through the remaining images and remove all the images that you DISAGREE with. Place these in position 4, on the right.
 - Place all the remaining images in position 5 NEITHER/NOR.

Sorting positions:

1 3 5 4 2

CAPTURE THE NUMBERS ON THE BACK OF THE CARD ON THE DATA COLLECTION PAGE

No deviations from the sorting procedure is allowed to happen – it is exactly this sorting procedure that captures the underlying psychometric measures – remember to shuffle the image pile AFTER each use (each time a new consumer has to perform the sorting).

- Now ask the consumer to indicate on the data collection page which stylistic aspects of the image content they believe best describes the aesthetic indicators attached – use ONLY the images in the MOST AGREE pile. Write ONLY the number of the stylistic aspect next to the number of the card.
 - Fun
 (childlike/ce/ebrate/colour/ful/enjoyment/happiness/postitive/reward/ playfulness/contentment)
 - b. Control (structured/ordered/balanced/organised)
 - Exotic (different/unusual/unique/surreal/interesting/unexpect ed)
 - d. Chaos (messy/confusing/disorganised/informal)
 - c. Comfort (wholesomeness/homey/peaceful/calming/familiar/tra ditional/serenity)
 - Enticing (deficious/appetising/attractive/appealing/attention)
 - Refreshing (healthylnew/fresh/sophisticated/trendy/future/rejuven atino)
 - h. Other please state what,
- Lastly ask the consumer to indicate on a scale from 0 10 how much they believe the stylistic content of the image would after their behaviour – that is: make the recipe, buy the ingredients to make the dish, file it, remember it etc. – use ONLY the images in the MOST AGREE pile. Capture the scaling on the data collection page.



ADDENDUM 5: SCORE CARD

Data Collection Page University of Pretoria

jeEthnic g come	roup (average)	Total Monthly Hou	Total Monthly Household					
Most Agree	Agree	Neither/Nor	Disagree	Most Disagree				

Indicate your reasons for placing your particular selection of cards in the "Most Agree" pile:

Card nr:	Letter of the stylistic reason	Card nr:	Letter of the stylistic reason						

Indicate on the following scales if you would change your eating habit because of the way the image "speaks" to you. Will you keep the recipe? Will you perhaps go out to the shop and buy the ingredients. You may even just keep it as reference for future use?

Card nr:	0 Not likely at all	1	2	3	4	5	6	7	8	9	10 Extremely likely
	i i		-								
			S.								
_										-	
-											
			15	v:	8				2		
				9							
-		-									
	L										



ADDENDUM 6: LANGUAGE EDITOR'S LETTER

TO WHOM IT MAY CONCERN

I have copy edited this thesis in terms of language use (grammar, spelling, clarifying meaning), using the "Track Changes" mode in MSWord. Recommended changes and explanations were given as comments. The edited manuscript was returned electronically. The edit includes suggesting changes to sentence structure, spelling (adopting the English (UK) spelling form and standardising on the form -ise-), vocabulary and word usage, punctuation and hyphenation (double vowel prefixes e.g. co-operate) without changing the meaning of the original text. The edit excluded paying attention to content, correctness or truth of information, spelling of specific technical terms, unfamiliar names and proper nouns, specific formulae, symbols or illustrations or references.

U J Fairhurst (Sent electronically, not signed)

U J Fairhurst (DPhil)
Professor Emeritus (University of Pretoria)
Academic Associate (University of South Africa)

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Full Member: Professional Editors' Group
Member: South African Translators' Institute