

INFANT FORMULA
MILK PROMOTION:
A MULTIMODAL
CRITICAL DISCOURSE
ANALYSIS OF
PACKAGING AND
HOMEPAGES

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Abstract

This thesis investigates the discourses evident in infant formula milk promotion in the UK. The data which are analysed comprise packaging of formula preparations for babies and toddlers, and the Internet homepages of infant milk formula manufacturers' online 'clubs' for parents. The study offers a new, interdisciplinary perspective through the application of a multimodal critical discourse analysis approach, drawing on sociological work on nutrition and food promotion. Representations of the child, which are embedded in infant formula promotional texts, are also interrogated; and the textual and visual realisations of an online, commercially motivated club 'community' for parents are analysed.

The critical stance, in relation to the data and their socio-cultural context, acknowledges that power and ideology are at work in discourses which are communicated by large, profit-driven organisations such as food manufacturers. The study examines how human participants are represented, linguistically and visually, in relation to the promotional texts which are in evidence in the packaging and the 'club' homepages. Are some participants and topics excluded or occluded, and how is this strategy put into effect? Furthermore, I question what relationship with the reader/viewer is built, through images and text, and how these positions or social roles are communicated.

The study has discovered that a reductive, quantifying discourse of nutrition is communicated on packaging, and that the text and graphic images on the packs can covertly enable health claims to be made. This discourse is less salient in the 'club' homepages. However, a form of communication which promotes the manufacturers' childcare expertise is in evidence in the 'club' homepages, alongside representations of parenthood and of a club 'community'. These representations are limiting and socially exclusive. The study extends existing knowledge about formula promotion used

by the large corporate entities and the larger discourses this form of marketing connects with, by applying multimodal analysis underpinned by sociological theorising of branding, health and nutrition. The implications of the findings for parents and carers are presented, and the multimodal communicative aspects of infant milk promotion which escape current regulation are highlighted.

Dedication
To Julie, 1956–2017

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1 Introduction

1.1 Infant formula in the UK, infant formula packaging, and infant formula manufacturers' 'club' homepages for parents

A political event demonstrates that the ideological is never far from the surface in marketing (Mayr, 2008), even of infant formula: in support of infant formula milk producer lobbyists, the Trump administration resisted the passage of a World Health Organisation (WHO) resolution on infant feeding in July 2018. The US administration went so far as placing pressure on Ecuador by threatening its trading relationship (Jacobs, 2018). The original wording of the WHO resolution would have brought negative attention to the promotional strategies used by the formula milk manufacturers. The aim of the research in this study is to analyse two major forms of promotion of infant formula milk, using a multimodal critical discourse approach within the discipline of linguistics. The study will critically examine two specific sets of data: verbal and visual texts on formula milk packaging, and the 'club' homepages which can be found on the formula milk manufacturers' websites aimed at parents and carers. The packaging for formula, while obviously containing milk in a powdered or liquid form, includes textual references to the homepages. These web addresses serve as public gateways to 'baby clubs', or online parents' magazines and chat forum sites which are hosted by the formula manufacturers. In this study, I aim to add to the small body of discourse analytic literature which focuses on infant formula promotion in the UK with a critical, multimodal approach. There is a place for focusing on the disparate discursive strategies, realized in the packaging and in 'club' homepages, which have received less attention in the literature, in order to analyse the language in relation to imagery used to promote infant milk formula.

Formula milk promotion is part of a huge, global business, dominated by a handful of food corporates (Crawley and Westland, 2018). The worldwide market for formula milk is worth in the region of \$47.5 billion per year, and there is a projection that this will

increase to \$62.5 billion by the end of 2020 (Euromonitor, 2017). In the UK, which is the focus of this study, the retail value of formula milk sales was £448 million in 2015 and it increased by £37 million during 2016 (Mintel, 2016), despite a fall in the birth rate in the UK in the same period (ONS, 2017). The packaging data comprise all the packaging of formula based on dairy cattle milk which was on the UK market at that time of collection in 2016. Special milks for pre-term babies were excluded because they can only be procured through a health professional's prescription. The infant formula milk producers' 'club' homepages were collected and downloaded as a dataset in July and August 2017. The homepages were selected as data because these were bounded, in the practical and ethical senses that viewing of the homepages is public and no online 'club' membership application has to be made by readers/viewers to see them.

The warrant for a critical linguistic analysis of the large food corporates' sales communication to parents, about milk formula, is threefold. First, the historical record of the mismarketing of formula milk in the global South (Kent, 2004) and in the West (Palmer, 2009) necessitates an up to date and systematic re-examination of promotional techniques. Second, international legislation recognises that formula milk marketing requires regulation to curb the direct marketing of 'first' infant formula, the milk which is made for babies who are bottle fed, or bottle and breast fed, from birth to six months (Hampson, 2013). The persuasive methods used by marketers through the packaging and 'club' homepages need to be monitored in detail because references to 'first' milk may be elided with the promotion of milks for older infants, and this contravention of the WHO Code on formula milk has been identified in North America (Abrahams, 2012). Third, scholars have acknowledged that corporate entities can influence ideas and behaviours through powerful marketing, including the circulation of discourses about health and well-being (Bury, 2005; Freudenberg and Galea, 2008). McKee and Stuckler (2018) have called for further research to challenge the corporate, commercial framing of discourses of health. This study of infant formula promotion is therefore timely.

Happe and Gambelli (2015) argue that:

[t]oday's infant formula is a multifaceted mixture of some 30 to 50 components and hundreds, if not thousands of different recipes exist worldwide. It is among the most complex foods around and often considered to be an interface between food and pharma. However, the basic composition of infant formula products is the same: a straightforward combination of five constituents: fat, protein, carbohydrates, vitamins, and minerals (2015: 292).

A basic foodstuff for infants who are not wholly breastfed is thus viewed by biochemists Happe and Gambelli as complex, and they observe that it has some qualities of a pharmaceutical preparation. The World Health Organisation (WHO) provided the following definition of infant formula milk:

...a breast-milk substitute formulated industrially in accordance with applicable Codex Alimentarius standards, to satisfy the normal nutritional requirements of infants up to between four and six months of age, and adapted to their physiological characteristics. Infant formula may also be prepared at home, in which case it is described as “home-prepared” (1981: 8).

Since the ‘Code of Marketing of Breast-milk Substitutes’, quoted in part above, was written, manufacturers have developed and marketed formulas called ‘follow on’ and ‘growing up’ milks, and UK legislators have not yet incorporated the WHO Code recommendations fully into law (UK Government, 2007; Thewliss and First Steps Nutrition Trust, 2018). The supply of formula is now wholly in the hands of large commercial entities, and the UK market for infant formula is currently dominated by two multinational, corporate producers: Nestlé and Danone. They, moreover, are leaders in the worldwide market for infant foods, while a smaller, privately owned company, Hipp, takes a smaller share (Euromonitor, 2017). The large, North American food and pharmaceutical corporation, Abbott, also marketed an infant formula milk product in the UK during 2016 alone, i.e. in the data collection period.

Coincidentally, the data collection period for this thesis, in 2016 and 2017, coincided with an increase in lobbying of the European Parliament and the European Commission by Nestlé and Danone, shown by entries in the European Union’s Transparency Register

of lobbying activity (Europa.eu and Danone, 2018; Europa.eu and HiPP Gruppe, 2018; Europa.eu and Nestlé, 2018). Formula promotion is therefore not an insignificant industry, with producers able to allocate generous resources to their communication with parents, carers, and health professionals.

Crawley and Westland (2018) calculate that '[c]ompanies spent about £21 for every baby born in the UK on marketing follow-on formula in 2015' (2018: 6). This demonstrates the importance to the companies of promotion, and packaging is a significant carrier of messaging (Stewart, 1995). Ambrose and Harris (2011) provide the following definition of packaging, which suggests a strong link with communication:

[p]ackaging and branding are sometimes treated as separate disciplines, with packaging being primarily about how a product is protected and contained, and branding about how a product's characteristics will be communicated to consumers. Yet, if we take a closer look, it quickly becomes obvious that these disciplines are in fact very much entwined....Packaging has become more sophisticated as a result and today plays a key part in the branding communication process; for many product groups, packaging has become a fundamental element of the brand statement, if not the defining one (2011: 7).

Packaging has thus got an important role in marketing products, over and above its function of preserving contents, as Ambrose and Harris point out. They argue that packs can work centrally in a promotional campaign, and it has been found that branding is a major influence on parents' choices of infant formula product (Intel, 2016; Crawley and Westland, 2018). This aspect of packaging can be salient on the supermarket shelf, at a time when, as Cook and O'Halloran (2000) argue, parents who are shopping may be tired and, possibly, feel harassed. Previous qualitatively oriented, linguistic studies of infant food packaging attend to the readability of textual features (Cook and O'Halloran, 2000; Vandenberg et al., 2000; Nyssönen and Cook, 2000; Cook and O'Halloran, 2008). My study also looks at the images and text used on the packaging, and thus extends the research into the discourses which producers use as part of their branding.

The digital genre of the manufacturers' homepages, introducing their 'clubs' for parents, is yet to be defined in the literature. Perhaps the closest approximation to a description of the phenomenon of the 'club' homepage is that it is a gateway to a brand community (Abrahams, 2012), hosted by the milk formula manufacturers. The 'club' homepages can be seen as digital versions of the paper 'baby club' magazines and advertisements. These promotional products have been given away to parents in maternity wards in the UK as part of 'Bounty packs', and include vouchers and offers. Bounty (UK) Ltd. operates in maternity wards by making agreements with hospital trusts which allow Bounty representatives to distribute free samples, information and vouchers. The trusts receive a sum of money from Bounty for access to the wards (Garner, 2013). The operation by Bounty is controversial, and is regulated, because sales representatives have approached mothers in hospital to offer the packs without the permission of the mothers (Gulland, 2013), and because the Bounty company has contravened data protection laws through brokering personal information they have collected from parents (Murgia, 2019). The manufacturers' homepages also constitute a form of direct marketing tool like the Bounty packs, and include invitations to join the online, interactive 'baby clubs'. The multimodal texts of the baby 'club' homepages have not been analysed previously, as far as can be ascertained. This gap in the research exists despite the accessibility of the data, and even though the reach and potential influence of corporate brand communities are reflected in the manufacturers' promotional budget and in the chequered history of infant formula marketing, as mentioned above. Direct marketing methods such as the homepages clearly have implications for the regulation of formula promotion (Abrahams, 2012), and the results of this multimodal analysis have the potential for informing future discussion about regulation. My study therefore contributes to the body of critical research concerned with digital, commercial, health and food promotional communication, while being practical and applicable to the real world.

The main purpose of this study, then, is to investigate and discuss the discourses evident in infant formula milk promotional texts in the UK, through the analysis of Nestlé, Danone, Hipp, and Abbott branded packaging collected in 2016 and the linked formula manufacturers' 'club' homepages which were online in 2017. In particular, food promotional and health promotional discourses are considered in relation to visual and written representations of infant nutrition and of parents, and to online 'communities'.

1.2 Social semiotics and communication about infant formula

The theoretical perspective that is used in this study, in outline, is multimodal and critical. This approach is appropriate for the task of the detailed analysis of the communication which is realized in the packaging data, and through visual and written texts that can be found online on the homepages. The critical stance in relation to the data acknowledges that power and ideology are at work in the discourses which are communicated by large, profit-driven organisations (Machin, 2013), even in such everyday media as food packs and website homepages. The interlinked concepts of power and ideology are, for the purposes of this study, seen as methods that are used in discourse to legitimise and naturalise, or make acceptable, certain social practices. The practices which are particularly pertinent to the research in this thesis are modes of knowledge about health and its relationship to food; and the representation of these ways of knowing in association with constructs about nutrients, and of infancy, parenthood, and childcare.

This research design builds on previous multimodal scholarship: it offers the opportunity for a discussion which elaborates on findings from the analysis of both sets of data. This study shows the usefulness of a multimodal approach in having a practical orientation to largely overlooked, everyday data in the ordinary consumer world which we occupy. Multimodal critical discourse analysis (MCDA) has largely developed from the work on multimodality by Kress and van Leeuwen (2001; 2006) and O'Toole (1994). MCDA also,

importantly, is committed to the consideration of the socio-cultural and political context of texts, in the Fairclough (2001) tradition of critical sociolinguistics (Machin, 2013; Ledin and Machin, 2018). To that end, this study offers a new perspective through the synthesis of sociological work on nutrition and food promotion (Kimura, 2013; Guthman, 2014; Scrinis, 2016) with linguistic findings. The insights of cultural historians (Urbancic, 1998; Matthews and Wexler, 2000), on the representation of the parent and of the child in the West in late capitalism, have also been employed in order to understand the roots, and possible meanings, of imagery in the data.

The thesis differs from previous studies in applying a multimodal, critical approach to infant milk packaging and online ‘club’ homepages, employing this framework to build on earlier research to look beyond readability, health claims and health promotion. Moreover, the ‘club’ homepage data will be analysed multimodally and critically for the first time. Large corporate entities market highly processed liquid and powder food which is produced in order to be consumed by infants who, as Cook and O’Halloran (2000) and Crawley and Westland (2018) observe, are amongst the most vulnerable people in society. The results of this study may be beneficial to parents, carers, and the regulators of the infant milk formula industry. There is a need to focus on the disparate discursive strategies which are realized in the packaging and ‘club’ homepage data, and which have received less attention in the literature, in order to critically analyse the language in relation to imagery used to promote infant milk formula.

1.3 Research questions and chapter outline

This study aims to explore the following research questions:

- How are health promotion and food promotion discourses presented, multimodally, on packaging for manufactured infant formula based on cow milk in

the UK, and in the associated baby ‘club’ homepages?

- How are human participants represented in the packaging and the homepages, linguistically and visually?
- What relationship with the reader/ viewer is built, through images and text?
- Are subject positions between the participants created? If so, how are these positions realised, multimodally?
- Are some participants and topics excluded or occluded, and how is this strategy realised?

The discourses which are circulated about food in the West can indicate attitudinal trends in, for example, anxieties about well-being (Naccarato and LeBesco, 2012). The research questions are addressed by examining promotional activities, including food marketing and branding, which disseminate discourses that can powerfully construct and maintain beliefs (Lupton, 1994), for instance, about health. Moreover, a communicative effect of discourses may be the subject positioning of readers/viewers as recipients of a form of ‘expert’ knowledge as represented by commercial entities (Jones, 2013: 21), when these discourses are used in a promotional campaign in which health and childcare are connected to food. Hence, the realisation of the relationship with the reader/viewer, which is built multimodally by formula food companies and their advertisers and promoters, is important to interrogate. This is especially so because the marketing of foods for infants aims to induce buying behaviour when parents may be susceptible to argumentation about the care of their vulnerable offspring, wishing to do the best for them (Cook and O’Halloran, 2008), and when, for reasons connected with over a decade of austerity in the UK, parents may be socially isolated from support networks who hitherto may have been available for advice (Wise, 2013; Torjesen, 2016). At the same time as well-being can be connected with certain infant formula milk products through marketing, less palatable aspects of the production and manufacturing of the formula milk may be omitted from, or minimised in, the selling campaigns. An increase in the understanding of very

well-funded promotional campaigns for products such as milk formula is pressing and needed, when the ‘means by which corporations exert power is increasingly unseen’ and ‘unchecked’ as McKee and Stuckler (2018: 1167) argue about the ‘corporate determinants of health’ (*ibid.*).

Following the introduction, chapter two considers the scholarly literature which motivates the research questions. Included in the chapter is an overview of the foundations of discourse analysis and its relationship with multimodal critical discourse analysis. The relevant scholarly work on digital communities is discussed, in order to position the multimodal texts of the ‘club’ homepages, which will be analysed later in the study. The chapter includes a consideration of the literature on health promotion discourses; and an appraisal of research about food promotion discourses which relates to this thesis, introducing the sociology of nutritionism and setting out its key concepts. In chapter three, contextual factors are briefly described. These include some relevant background information about the birth rate in the UK, and the regulations determining infant milk marketing. The packaging and ‘club’ homepages data are introduced, followed by short profiles of the manufacturing food companies which sell infant formula and formulations for toddlers in the UK. The critical, multimodal analytical approach of the study is then presented, and ethical aspects of the study are discussed.

Chapters 4, 5, and 6 in my study present the analysis of the multimodal texts on the packaging and in the ‘club’ homepages which comprise the data. Chapter 4 examines the packaging of infant formula for evidence of a discourse which foregrounds single nutrients and makes health claims. Such a discourse has been called ‘nutritionism’ (Kimura, 2013; Scrinis, 2016) and the chapter will be structured according to relevant aspects of nutritionism which are presented in Scrinis’ *Nutritionism: the science and politics of dietary advice* (2013) and laid out in section 2.6.3, below. Nutritionism is discussed further in chapter 4, in special relation to the language and images which are present on packaging for formula milks which is marketed for babies and toddlers. This line of

analysis is warranted because, as argued by Goldacre (2007) and by Clapp and Scrinis (2017), nutritionism can help to form and then circulate normative attitudes towards health and food. The analysis of packaging is pursued in chapter 5, in relation to the two discourses which are salient in the imagery present on the packaging, namely, representations of infancy, and of nature. These themes are focused on because of the emotional appeal with which they may be suffused. The analysis in this study employs critical, multimodal techniques to pinpoint how this appeal operates in real world infant formula data.

I also take into consideration the corporate communication in the data which can obscure unattractive features of dairy farming, an aspect of 'nature' which is absent from formula promotion. This interpretation is demonstrated through a systematic discussion of text and images, illustrated with photographs of examples from the packaging collection. The micro-analysis is given context by reference to theoretical literature, especially that which pertains to discourses of nutrition, and of branding. In chapter 6, findings from the 'club' homepages analysis are presented. The study breaks new ground by arguing that rather than projecting a discourse of health *per se*, the homepages are concerned with the commodifying of model 'mothers' and infants. Men are less frequently presented or appealed to. The framing of the pregnant woman through the use of traditional tropes on the homepages is discussed, and this is contextualised with reference to theoretical commentary on the construction of the brand community.

Chapter 7 includes an account of the findings, drawing together comparisons between the sets of data. The research questions are addressed in the same chapter. Discourses of reductionism, of 'well-being', of parenting and the 'clubs', each as evidenced in the data analysis, are discussed further in relation to notions of ideology and power. The positioning of the large corporates as invisible authors of the packaging and 'baby club' homepage texts is considered because their role as 'experts' is salient in the data. The representation of participants in the 'club' homepages, as well as on the packaging, is

considered to be contradictory: the construct of the ‘club’ community is addressed in individualistic and individualising terms by the corporate authors. Some possible implications of the findings for parents and carers are presented, and the multimodal aspects of infant milk promotion which currently escape regulation are indicated. The methodology and analytical framework which have been used in the study are also evaluated in chapter 7. The thesis ends with a short chapter summarising the findings and the implications for further research.

2. Literature overview

2.1 Introduction

In this chapter there is a discussion of the academic literature that forms a theoretical background, in general, to the topic of discourses found in texts on infant milk packaging and on formula manufacturers' 'club' homepages. The chapter focuses first on approaches to discourse, because these will prove relevant to the analyses in later chapters of packaging and website data. Initially, approaches to discourse will be explored from the perspective of linguistics (Jaworski and Coupland, 1999; Gee, 2014; Yule, 2014) including relevant features of the underpinning language theory (Austin, 1961/2010; Halliday and Webster, 2009). Next, social scientific views of discourse (Parker, 1989; Wooffitt, 2005) will be discussed, followed by brief observations of some of the relevant aspects of the work of the theorists Foucault (1972; 1979; 1980) and Habermas (1984/1987), identifying some strengths of these approaches and weighing up critiques which have been made of facets of their work on discourse. An account of approaches to critical discourse analysis (Fairclough, 2001) will be followed by a discussion of ways in which multimodal objects of study have been conceptualised as discourse (Kress and van Leeuwen, 2001). The latter will be seen in relation to academic work in semiotics (Williamson, 1978; O'Toole, 1994). Because it will be argued in later chapters that infant milk packaging and 'club' homepages in Britain are potential sites for the dissemination of notions of health, there will be an evaluative exploration of sociolinguistic approaches to health communication and health promotion. A discussion of research on branding, food promotion and packaging, including infant milk packaging, from various academic disciplines, forms a later section of this chapter. Lastly, there is a brief overview of digital discourse analysis of online 'communities' and branding, positioning my study of manufacturers' 'club' homepages in relation to these studies.

2.2 Approaches to discourse

Yule (2014) says that ‘in the study of language, some of the most interesting observations are made not in terms of the components of language, but in terms of the way language is used’ (2014: 139). From Yule’s perspective, echoing Stubbs (1983), the word ‘discourse’ is defined as ‘language beyond the sentence’ (2014: 140), and the analysis of discourse is concerned with the study of how language is used to communicate in naturally-occurring written and spoken texts. Yule goes on to suggest that ‘as language-users...we can cope with fragments...and we have the ability to create discourse interpretations of fragmentary linguistic messages’ (2014: 140). This observation is important when considering how the notion of discourse, if understood to mean stretches of language above the clause, can be used in the study of multimodal texts such as packaging and homepages, where communicative fragments, including logos, short phrases, and tables, are all laid out alongside and within longer stretches of grammatical texts, graphical devices and images (Graddol, 2007; Wagner, 2015; Recuber, 2017). Amongst ways of explaining the language user’s ability to make sense of texts of all types is with reference to the viewing participant’s or reader’s operationalising of context, and this will be considered next.

2.2.1 Context and discourse

The significance of socio-economic setting has been acknowledged by linguists in the discourse analysis tradition (Mills, 1997; Jaworski and Coupland, 1999; Gee, 2014). Jaworski and Coupland (1999) summarise their understanding of the relationship between language and context thus:

[t]he meaning of an event or of a single utterance is only partly accounted for by its formal features (that is, by the ‘direct meaning’ of the words used). The social significance of discourse, if we define it simply as language in use, lies in the relationship between linguistic meanings and the wider context (i.e. the social, cultural, economic, demographic and other characteristics of the communicative event) in which the interaction takes place (1999: 12–13).

This definition places context on a broad stage at the macro level; however, Jaworski and Coupland go on to present further principles which they suggest analysts of discourse are required to attend to. They include the very close analytical reading of carefully transcribed data, whilst holding the strong view that language is a functional system (*ibid.*). That is, language can represent things in the world and it is also capable of doing things (Hasan et al., 2007; Halliday and Webster, 2009; Gee and Handford, 2012). It is noteworthy that a common thread in the above discussions of discourse is the emphasis on language in use, and this will be looked at more closely later.

A broad conceptualisation of context, then, as Jaworski and Coupland's (1999) principles demonstrate, need not contradict the usefulness, to the reader, viewer or participant, of other elements of context which are more immediate to the communicative event, and which aid in the construal of meaning. In a description of language called Systemic Functional Linguistics (SFL), it is claimed that variables called the field, tenor and mode of discourse pertain to the situation, or the 'environment of the text' (Halliday and Webster, 2009: 240). The field of discourse refers to 'what's going on', or the purpose of the written or spoken interaction; tenor refers to the participants and their relative 'social positioning'; and mode refers to the medium of communication or 'how the text is involved' (*ibid.*). These general theories of the ways that language users are able to draw out and infer meanings beyond the bounds of the clause, from the immediate situation of the text, and from the text's broader cultural circumstances, can be linked to discourse through, for example, considering a stretch of discourse as instantiating elements of the wider social context (van Dijk, 2008). Cameron (2001) puts forward a definition of discourse as '“language in use”: language used to do something and mean something, language produced in a real-world context' (2001: 13). This conception of discourse identifies the importance of 'standpoint' (*ibid.*). Attention to the orientation or communicative purpose of a stretch of text aids in the analysis of the features of language

used. The view that discourse can be defined as language in use above clause level rests on a theory of language which underpins what Culpeper et al (2009), in their discussion of discourse, call the 'social (context) view...[h]ere the focus is on the *use* of English and its associated social contexts, including both how English is shaped by the social contexts and how English shapes social contexts' (2009: 5). Thus, the relationship between language and context could be seen as one of oscillation. With this in mind, it is interesting to note that one etymological entry for 'discourse' is from the French, *discours*, (Latin: *discurs-us*), meaning 'to run to and fro' (Burchfield, 1987: 444). A relevant feature of the theory of language, and how it is bound up with discourse theory, will be briefly considered next.

2.2.2 Theory of language in use

Mills (1997) refers to a change in the history of the theory of language when she suggests that:

...for many theorists within mainstream linguistics, the term discourse signifies a turning away from sentences as examples of usage in the abstract, that is, examples of the way that language is structured as a system, to a concern with language in use (1997: 9).

This meant a departure from the Anglo-American philosophy of language within the logical-positivist tradition, in which, to summarise, a theory had been developed that certain knowledge is solely reliant on data derived from the senses, and thus that language is accounted for by an understanding of some kind of correspondence between a word and a fact in the wider world. Thus, within this positivist approach, expressions of preference or ethical positions, for example, could be viewed as only emotive because they did not refer to any observable fact (Leitch, 2010: 1287). Amongst philosophers who reassessed the logical-positivist theory of language was Austin (1961), who wrote about his position thus:

...people began to ask whether after all some of those things which, treated as

statements, were in danger of being dismissed as nonsense did after all really set out to be statements at all. Mightn't they perhaps be intended not to report facts but to influence people in this way or that, or to let off steam in this way or that? Or perhaps at any rate some elements in those utterances performed such functions, or, for example drew attention in some way (without actually reporting it) to some important feature of the circumstances in which the utterance was being made. On these lines people have now adopted a new slogan, the slogan of the 'different uses of language' (1961/2010: 1290).

Austin here describes a movement towards regarding language, as it is used, as a proper and defensible object of study, with a firm recognition that language is part of social practice. Austin (1961/2010) continues in the same section to introduce his notion of speech acts, including performatives. Performatives are forms of language which bring something about in the world or alter or make a relationship between people, such as the promise to marry (Austin, 1961/2010). Apart from its impact on SFL, and on discourse analysts, this theory has been drawn on by pragmaticists who are interested in how communication may work in real instances of language, when the grammatical form and literal definitions of the words used do not adequately account for the accomplishment of meaning (Grundy, 2008: 1). Moreover, Brown and Yule (1983) laid emphasis on the necessity of 'doing pragmatics' as part of any analysis of discourse, precisely because such analysis 'involves contextual consideration' (1983: 26). Following on from this, it is logical and necessary that in later chapters I will examine the performance of locution in the data, or surface meaning at the textual level, and it will also be necessary to account for what is implied in expressions in the data. As indicated by Brown and Yule (1983), the data will also be examined for the producers' assumptions (and see section 3.7.1, below). Because the data are in the world and help make up the world, the connections with, and relevance to, certain social contexts may be assumed by the corporate authors to be common ground with their readers/ viewers. In social theory the broader context of discourse is considered to be particularly important.

2.2.3 Social scientific approaches to discourse

To summarise: a basic, or perhaps, core, approach to discourse which will be used as a starting point for the argument in this thesis is that discourse involves naturally occurring, socio-culturally contextualised language which can be subjected to close analysis for meaning. That discourse can also be interpreted as involving signs apart from language, such as images and all manner of graphical devices, will be argued below. The tentative definition of discourse (discourse i) above represents one approximation of the term ‘discourse’, but in social science and in social theory there are different understandings of the term (Potter et al., 1990; Wooffitt, 2005; De Maio, 2010). As an early example of work using discourse as an explanatory term in social science, Wooffitt (2005) cites the research of social psychologists Gilbert and Mulkey in the 1970s. Their data analyses, of scientific writing and of interviews with scientists, drew on Halliday’s notion of the relation of language to context, and contained insightful yet general observations about scientific knowledge and its workings rather than detailed linguistic analysis (Wooffitt, 2005: 14–19). Further, the social psychologist Parker (1989) includes an account of discourse and discourses in his discussion of power:

[t]he understanding we can give of the social and historical status of different texts should, then be informed by our understanding of the role of discourse...A discourse is a system of statements which construct an object. This fictive object will then be reproduced in the various texts written or spoken within the domain of discourses (that is, within the expressive order of society). So, for example, social psychologists may draw upon a discourse of ‘authoritarianism’ and they will use the notion of ‘authoritarianism’, which has been constructed as an object by that discourse, to explain different social and political phenomena. Each time they use the term they will, by the same token, be reproducing that discourse. We find academic and popular texts circulating which draw upon and support that discourse (1989: 61–62).

This is a definition that can inform and illuminate my reading of the expression ‘discourse(s)’, as used in social scientific research which pertains to the use of packaged formula milks and digital ‘communities’ such as manufacturers’ online ‘clubs’. For

example, Blaxter (2010) investigates health discourses; Lupton (2008) discusses the notion of different discourses at work in health promotion; and Lee (2008) presents research into the differing representations in society of mothers who bottle-feed their infants. The representations contribute to discourses about those mothers and may work to socially construct ways of being a 'bottle-feeding mother', including in health promotional texts (Lee, 2007b). Parker's discussion is helpful because of its succinct construal of discourse (discourse ii) as an organised collection of accounts about the world which can create a structure of concepts, or 'fictive' objects; furthermore, the idea of the circulation of discourses is useful (1989: 61). Parker (1989), also refers elsewhere to twentieth century European theorists, in particular Foucault, and in this acknowledgement of the influence of Foucault's discussion of power and discourse there is some commonality with discourse analysts in the linguistic tradition, notably Hodge and Kress (1993), and Fairclough (2001: 86-87), who employ a critical, or socially engaged, approach to the analysis of discourse. Next, there will be a brief aside which attempts to address, only generally, some salient points arising from Foucault's (1972; 1980) much discussed, and particular, conceptualisation of the weaving together of power and discourse.

2.2.4 Foucault, Habermas and discourse

The notion of discourse in Foucault's writing tackles power, in one aspect, through an argument which proposes a binding together, through discourse, of the ways that power and knowledge operate in society:

[w]e should admit that power produces knowledge...that power and knowledge directly imply one another; that there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute...power relations (1980: 27).

In this way, according to Foucault, discourses produce knowledge; and then power, coursing and expressed through these, can make information seem ‘true’, or be accepted as the natural state of affairs, or be ignored, including information such as experience and society’s general ways of categorising experience. Discourses are not closed, therefore, as discourses interrelate and are able to produce more knowledge in networks: ‘[w]henver one can describe, between a number of statements, such a system of dispersion, whenever...one can define a regularity...we will say...that we are dealing with a *discursive formation*’ (Foucault, 1972: 38. Italics in the original). This shows how potent language can be, in its work of transmitting knowledge. In Foucault’s conceptualisation, however, discourse is not limited to language, because discursive formations are entire historical social practices which can be enacted in, or dispersed via, institutions such as the family, prisons, clinics and academies (1972; 1980). Such a broad idea of discourse is not limited to socio-cultural theory; for example, Gee (2014), a linguistic discourse analyst, differentiates between discourse (i) and a notion of ‘“Discourse”, with a capital “D”’(2014: 24).

The latter encompasses, in Gee’s approach, ‘ways of combining and integrating language, actions, interactions, ways of thinking, believing, valuing, and using various symbols, tools, and objects to enact a particular sort of socially recognizable identity’ (*ibid.*: 46). Related to Foucault’s (1972; 1980) conception of discourse in society, is the notion of a person’s selfhood as a subject and as an object of discourse. Set against this view of the operation of discursive formations, Foucault emphasises that power will be productive, for example in causing resistance. This can be expressed, in his view, through competing discourses. An assessment of Foucault’s claim that the self is discursive is particularly pertinent to the analysis of the infant milk manufacturers’ ‘club’ homepages, where representations of parental and infant identities are made salient:

[i]f our ‘identity’ is an ever-changing construction in a sea of competing rhetorics of self, or the self-divided expression of our polyvocal voices, then identity is constantly in flux, constantly unknown to itself, and we are therefore forever in a state of self-

doubt as to why or how we can change ourselves or the world (Caldwell, 2007: 771).

Amongst other critiques of Foucault's work has been the argument set out by Habermas (Downing, 2008), that Foucault tends towards nihilism. This is because his is a totalising view with no escape from discourse; he underestimates the contribution of progress, and he denies that some rights and liberties have been won in the West post-Enlightenment (*ibid.*). Because ideas put forward by Habermas (1984/1987) will have some relevance for aspects of the analysis set out later in this thesis, some particular facets of his work that relate to discourse will be briefly explored next.

Habermas (1984/1987) is seen, like Foucault, as being part of a school of critical theorists of society, and his work has also been recognised as an influence on the development of thought in critical discourse analysis (CDA) (Fairclough, 2001: 163–164). Habermas' view of the Enlightenment is that it remains an unfinished project (Fössel and Habermas, 2015). This is linked to Habermas' notion of discourse, which is largely unlike the definitions of discourse offered above in some branches of linguistics, social science and socio-cultural theory. Habermas reserves 'discourse' to mean a higher, or conceptual, level of productive and rational discussion (in Habermas' terms) which can follow a challenge to a posited statement by any of the participants in a discussion (MacKendrick, 2008). Habermas' (1984/1987) view of reason is that it is built into syntax, or sentence structure, and that therefore through communication, statements can be challenged and defended when the circumstances of that communicative effort are not distorted. This has a bearing on the analysis in this study because the relative status of the formula milk promoting communicator and the viewer/ reader will be a concern.

Another instructive set of ideas, which Habermas (1984/1987) has also developed, to be borne in mind when describing promotional texts on packaging and in the 'club' homepages, is that of the lifeworld or everyday conduct and social existence, and its

colonisation. This colonisation occurs, for example, through the work of the ‘logic of the market’, and can be observed on a boundary, which Habermas posits exists, between everyday experience (the lifeworld) and encounters with complicated technical, commercial and bureaucratic systems (Habermas, 1984/1987: 366–367). Against these notions, Habermas’ theory of communication has been critiqued as naïve and limited, for example by Marsh (2000):

...what his (Habermas’) theory seems to amount to politically at best is that we resign ourselves to the fact of capitalism and to fight excessive colonization...The best we can do, Habermas seems to say, is a more or less democratic welfare state in which capitalist ownership and control of the means of production remains intact and the colonization of the lifeworld is minimized (2000: 558).

Furthermore, Habermas has been seen as proposing a credulous and liberal version of the private and public domains, and of these being simultaneously analytical categories and normative descriptions, so that his version of the lifeworld is at risk of being seen as a ‘power-free zone...rather than a site of alternative generations of power, mobilisation and struggle’ (Stewart, 2001: 176). Fraser (1985) argues that:

Habermas’ way of contrasting the modern family with the official capitalist economy tends to ... overstate the differences between these institutions and blocks the possibility of analyzing families as economic systems, that is, as sites of labor, exchange, calculation, distribution and exploitation. Or, to the degree that Habermas would acknowledge that they can be seen that way too, his framework would suggest that this is due to the intrusion or invasion of alien forces; to the “colonization” of the family by the economy and the state (1985: 107–108)

The theory of the colonisation of the lifeworld, and its critiques, will be borne in mind in the analytic and discussion chapters, below. The foregoing critique of Habermas’ thought bears out his dictum that the validity of all propositions can be questioned and challenged in discourse, and in this way ideas and further arguments can be developed. The commentary concerning the reformist limitation of Habermas’ analysis also serves to highlight Habermas’ own serious misgivings about history. His assessment of

historical movements concerns the propensity of revolutionary struggle to be overcome by an overtly coercive system, a standpoint which Myerson (2001) suggests is rooted in Habermas' own early experience. The interesting and urgent question which is then begged about political alternatives, as provoked by Marsh (2000), is too vast a discussion to consider here. My limited engagement with the debate is the view that Habermas' contribution still has much to offer to the development of critical theory. For example, a corollary of Marsh's comment is a warning for the discussion chapter of the danger of remedies wholly resting on the pursuit of regulation, as the lifeworld itself can become subject to juridification. In support of a Habermasian approach, it is clear that regulation has a role, but is legitimate only when tested through open and public discourse (Habermas, 1984/1987).

The observation by Fraser (1985) that the family has the potential to be a site of oppression points to the fruitfulness for analytical chapter 6, below, of an ongoing engagement with ideas springing from Habermasian theory. Thus Habermas' notion of the lifeworld and Fraser's critique of this aspect of its colonisation will be built on in the sense that their dialogue alerts me to the broader possibility of pathologies in the representations of the family in the digital data, such as evidence of distorted communication which is exclusionary. This can arise from, for example, an imbalance in access to discursive resources, even in relation to a private lifeworld experience such as infant feeding and nurturing.

2.2.5 Approaches to discourse analysis

There are different qualitative and quantitative methods of discourse analysis (Culpeper et al., 2009). The different approaches which will be focussed on here, however, are qualitative, because these methods have been selected as appropriate for application to multimodal data and they will be used to analyse data in later chapters. The data that will be collected will be in the formats of packaging, and of website homepages.

The well-established critical discourse analysis (CDA) approach prompts an awareness of a broader sociocultural context when interrogating texts. A critical approach can also bring to light the gaps which can indicate ideological positions; or can point to failures in communication (Fairclough, 2001: 40–41) and this serves as a reminder of the significance of reflexivity in the researcher's attitudes, role and methods (Gee, 2014). Mills and Mullany (2011) draw attention to the importance of reflecting on, and being aware of, one's biases when carrying out research. In my case, this reflexivity entails an awareness of the privilege of my position as a white, lower middleclass Westerner. It has been pointed out, as a serious critique of CDA, that the methods of critical discourse analysis themselves offer no guarantee of a socially progressive orientation towards the object of research, as acknowledged by Fairclough (1985: 52). Such a weakness is apparent because the same methods could be used to carry out analysis from, for instance, a neoliberal stance (Breeze, 2011). This also makes an open and self-reflexive position on the part of the researcher necessitous, albeit criticised by Hammersley (1997). CDA has also received critique, for example from Verschueren (2001), for leaving open the risk of collapsing the different stages of analysis, description, interpretation and explanation. In his view, critical discourse analysis can rely too much on social theory in the explanatory stage, and may not grant adequate attention to the textual evidence itself, with the danger that '[t]exts are simply made into carriers, as it were, of what one already assumes to be the case' (*ibid.*: 69). One feasible response to this is to ground the explanation within the textual evidence, as observed during the description and interpretation activities.

The principle that '[p]ower is central for understanding the dynamics and specifics of control (of action) in modern societies, but [that] power remains mostly invisible', constructing our habits and practices, is inherent in social constructionism, and this has had an influence on CDA (Wodak and Meyer, 2009: 10). In its strongest form, the social constructionist view extends to the conviction that the production of knowledge and the ways we categorise knowledge, for example in science, are social constructs (Berger and Luckmann, 1979). Not all practitioners of the critical analysis of discourse, for instance

Fairclough (2003), take up this strong form of social constructionism, however. Fairclough distances himself from what he describes as this idealist position, or the position that all objects, including those in the natural world, depend on the mind and language (2003: 8-9). Critical multimodal analysis has also been influenced by social constructionism, however, as demonstrated in a definition of discourses as ‘socially constructed knowledges of (some aspect of) reality’, which can be instantiated in many different modes (Kress and van Leeuwen, 2001: 24. Parentheses in the original).

2.3 Approaches to multimodal discourse

Halliday (2009) observes that language is one amongst many modes of semiosis, or signs, that we employ to communicate. Semiotic systems comprise signs made up of the signified, or concept; a signifier, or sense impression such as an image, a word or a sound which comes to be connected with the signified; and in some cases a referent which is a real object in the world (Rose, 2012). To Halliday, however, language has a special status, as he explains:

SFL locates language, in its turn, as one among a wider class of systems called ‘semiotic’ systems of meaning...Language has the further property that it is a semiogenic system: a system that creates meaning. Not all semiotic systems are also semiogenic...By contrast, the meaning potential of a language is openended (*sic*): new meanings always can be, and often are being, created ...those who operate with any of the others [semiotic systems] **also** operate with language (2009: 60. Bold in the original).

Halliday gives language this privileged position because the systems of communication which we also use, such as gesture, image and music, are, after all, created by language using subjects. His argument is that language is singular in its creative potential because of its double articulation. This is the combinatorial feature of language in that it is capable of producing meanings from the fusing of a small group of elements which themselves have no sense. This privileging of written language, at least, over other semiotic forms has been

questioned by semioticians and is still discussed (Chandler, 2007). Clearly, language can also be employed in meta-description, as Halliday (2009) goes on to elucidate. In this way, as Peirce (1991) theorised, signs engender more signs. Theorists (de Saussure, 1974/1916; Peirce and Hoopes, 1991; Eco, 1976) have described ways in which a sign can operate and have meanings. More recently, semiotic theories of multimodality have been developed. A multimodal text, then, as the term suggests, is understood to be composed of signs derived from many modes (Kress and van Leeuwen, 2001).

2.3.1 Semiotics and the multimodal approach

There are many approaches to multimodal objects as forms of discourse, including those theories which concentrate on the relationship between written text and image, for example in comic books (Cohn, 2013) and picture books (Tenbrink and Forceville, 2011). Other analysts have applied the theory of rhetoric and rhetorical communicative devices to the study of design choices in textual layout (Schriver, 1997), for example, and to multimodal texts in advertising (Kennedy, 1982). Scott's (1994) visual rhetoric perspective was developed in pursuit of consumer research, an industry which, she argues, had hitherto assumed that advertising images simply reflect reality. Scott (1994) proposes a visual rhetoric framework, based on the notion that imagery in advertising creates sophisticated and complex arguments or discourses which consumer/viewers have to process cognitively. In other words, such promotional images can suggest ideas which have origins from outside of the image itself, and significantly, this is part of a persuasive effect (Scott, 1994). This use of a referent system in promotional imagery is also considered by Williamson (1978). She argues that 'advertising may appropriate, not only real areas of time and space, and give them false content, but real needs and desires in people, which are given false fulfilment' (1978: 170). Importantly, Williamson has the insight that advertising can also make imaginative and even ironic use of any critique and commentary which is inimical to its content or approach. As Williamson says of promotional material: '[it] will always recuperate by using criticisms ... as frames of reference which will finally

enhance, rather than destroy, their ‘real’ status’ (*ibid.*: 174. Italics in the original). This argument is relevant when considering historical anti-formula campaigning, and how this reputational harm is managed by the formula milk manufacturing corporates.

Kress and van Leeuwen (2001; 2006), in contrast, developed a framework which derives many of its terms from the work of Halliday. This approach to multimodality has as its premise that images, and three dimensional objects, can be read by viewers, and in this way the meaning potential can be seen as having a form of grammar. Using elements of composition which can be identified within an image, such as layout, colour use, and the realism of an image, Kress and van Leeuwen (2006) argued that visual discourse could be analysed. This could encompass the reading of the visual presentation of social actors in imagery, including the kinds of symbolic meanings which could be connoted by the representation of humans as toys (van Leeuwen, 2008). Machin (2013), and Ledin and Machin (2018), have taken Kress and Van Leeuwen’s framework forward, arguing strongly that criticality requires attention to be paid to the context of visual discourse for any analysis to have an argument, or to be able to answer ‘concrete and critical research questions’ (2018:14). The concern with context can be said to align multimodal critical discourse studies with critical discourse analysis. Ledin and Machin, for example, claim that context must be considered at the level of a wider social practice in order to discern the meaning of an image or, indeed, of any text. They argue that analysis must discuss ‘a realisation of a ... communicative situation’, with each example seen as an instance of a type of communication, and this they describe as texts deriving from a ‘canon of use’ (*ibid.* : 13). This approach builds on the work of scholars in multimodal analysis, but Ledin and Machin state that analysis which is systematic and detailed ‘must be tied to actual contexts’ (*ibid.* : 15). How MCDA will be built on in my research will be addressed in more detail in chapter 3, on methodology.

A discourse context which formula milk packaging and ‘club’ homepages texts may draw on is that of health communication, and I turn to an overview of the literature concerning this next.

2.4 Health communication

The health sociologist De Maio (2010) states that '[h]ealth is traditionally understood as a personal trouble, and rightfully so, since it is individuals who experience illness' (2010: 1). There are two aspects of the lay understanding of health as presented above: the first is that health is experienced subjectively, and the second is that health is defined by the absence of its opposite, disease. As De Maio also says, how health and illness are defined, determined, and measured vary culturally, over time and location, and to these extents they can be said to be socially constructed (*ibid.*: 2-3). In parts of Argentina, for example, people with relatively low life expectancy, and even where there is high infant mortality, describe themselves as quite healthy (De Maio, 2007). Simultaneously, in the West, as noted by Bury (2005), 'whilst scepticism about medical intervention abounds, many individuals engage in medical treatments for a wide range of reasons that have only an indirect relationship to disease or illness' and Bury ascribes this behaviour to increased demand responding to perceived offers of biomedical services, as in a market model (2005: 105-107). One way into these constructions of health is through broadly examining the scholarly investigation of the language used to get across ideas of wellbeing, and the risk of illness and disease.

It can be said that there are three major modes of health communication: spoken, written and computer-mediated (Harvey and Koteyko, 2013), and some campaigns which are health-related, both public and commercial, may display a mix of all of these. Linguists have studied the power enacted in consultations between professionals, who represent the world of medicine on the one side, and patients, who are, as it were, on the other, and this interaction has been seen as biased in favour of the health professional (Fairclough, 2001). There is also evidence of a complex intermingling of 'voices' and views in the process of the medical examination and discussion (Harvey and Koteyko, 2013). The professional role and the perception of the 'expert' in such encounters is therefore key in the patients' attentiveness to health messages (Lupton, 1992). Nevertheless, the consultation in a general

practice or hospital clinic can expose a patient, as well as those who may accompany the patient, such as parents, to health communication in the forms of spoken direction, requested or unelicited advice, and written leaflets and pamphlets (Heritage and Lindstrom, 1998).

The factors which determine the comprehension of patient information leaflets that accompany medicines (PILS) have been researched (Clerehan et al., 2005). The findings are useful as background when making a comparison with the information that can be found on formula packs and on the ‘club’ homepages, because of the direct address by manufacturers to the reader/viewer. PILS are found to be organised generically. They generally employ instructional and informative advice; contain technical biomedical lexis which may be densely introduced into grammatically complex clauses, and involve various distinctive layout features such as lengthy paragraphs, headings and tables (Clerehan et al., 2005). Jones (2013), describing his own interpretative processes in reading a Tylenol packet (Tylenol is a North American brand of over-the-counter painkiller), when suffering back discomfort, also notes that:

...this simple package of Tylenol is a complex chorus of different ‘voices’: the voices of doctors and biomedical researchers, of advertisers and marketers, of ‘product safety’ and quality control specialists, and of lawyers and government regulators. Each voice in this chorus links the text to complex chains of discourse and action, some of which I am conscious of, and others which are hidden from me (2013: 16).

The ‘chains of discourse and action’, to which Jones alludes, are read in traces of past texts and are invoked on the packet in Jones’ account, but these ‘voices’ can also be disseminated and travel into future language in use, not necessarily limited to the discussion of health (*ibid.*: 16–17). It is also interesting to note that in his commentary, Jones remarks on discourses which remain obscured; there is thus some complexity of communicative purpose even in as short a text as appears on a medicine packet.

Jones' reading of his Tylenol packet creates a form of narrative, and stories can create a powerful way in which ideas about health can be circulated (Gwyn, 2001). Gwyn (2001) focuses on the linguistic processes and structures which are used by people to construct illness narratives, while stressing that stories are told by staff in medical professions as well as by the laity. Narratives are effective in the 'educating' of patients because stories 'are often memorable; are grounded in experience; [and] enforce reflection', as Gwyn says (2001: 159, citing Greenhalgh and Hurwitz, 1995). In referring to the narrative structure of a late twentieth century advertisement, the 'Sanatogen Smile' (Sanatogen is a make of over-the-counter vitamin supplement), Gwyn illustrates how an archetypal story structure can persuasively present even mundane objects (2001: 159, citing Vestergaard and Schröder (1985)). An actantial model of narrative structure, which Gwyn derives from the structuralist Greimas, proposes that the narratives we encounter in many genres can be analysed through the application of broad 'actant' categories (Toolan, 2001: 82). These are Giver and Receiver; Subject and Object; and Helper and Opponent (*ibid.*). Gwyn demonstrates that in the Sanatogen advertisement, good health is presented as the hero or subject; illness is the enemy/opponent and the vitamin product is the ally or helper (Gwyn, 2001: 155). Narratives can act as vehicles for powerful ideas about health and illness. In creating memorable metaphors, narrative structures help in the building of those very notions. Health and illness are contested concepts and reflect relations of power in social organisation (De Maio, 2010). A site of contestation and challenge is the practice of the promotion of health.

2.5 Health promotional discourse

2.5.1 Definitions

Jones (2013) defines the aim of health promotional discourse as follows: 'to explain to people what to do in order to stay well and what not to do in order to avoid disease' (2013: 43). Beattie (1991) suggests that the term 'health promotion' was used internationally from the late 1970s, and was circulated as a term by health organisations

including the World Health Organisation and the US Department of Education, Health and Welfare (1991: 165). An important aspect of health promotion, according to Beattie, was the development of a system of ‘“marketing” health’ which necessitated the employment of persuasive strategies, using mass media (1991: 166). Health promotional discourse emanates from biomedical and public health sources (Petersen and Lupton, 1996; Coveney, 1998; Lupton, 2003; Zarcadoolas, 2011), where messages about, and connecting, lifestyle and health are omnipresent (Lupton, 1995; Seale, 2002; Brookes and Harvey, 2015). The circulation of health promotional discourse in everyday interaction has also been studied (Backett and Davison, 1992; Bury, 1994; Thompson and Kumar, 2011) and theorised (Crawford, 2002). The aspect of health promotional discourse that relates to nutrition is often also mediated by the food and drink industry, through advertising campaigns and package labelling (Wansink et al., 2004; Herrick, 2009; Nestle and Ludwig, 2010). Thus, an exploration of health promotional discourse is relevant to this study. The discussion of the discourse, in this section, will briefly examine accounts of the development of health promotion (Hugman, 1994; Seedhouse, 2004), in order to give some historical context to the discourse. This will be followed by some consideration of the work of a selection of critical scholars (Petersen and Lupton, 1996; Brandt and Rozin, 1997; Lupton, 2003), amongst others, whose analyses of health promotional discourse have further defined it. This section ends with an account of scholarly work which is orientated to the linguistic and social semiotic analysis of health promotional discourse in use.

2.5.2 Health promotional discourse in an historical context

The philosopher Seedhouse (2004) argues that health is contestable as a notion, as a variety of beliefs about health are held by people in different eras and places. He maintains, however, that health promoters have historically been obliged to make a presupposition about the objectivity of health as a state. This has been the case in order for practitioners to carry out their health promotional functions, because some behaviours

have to be categorised as good or bad for health in order for them to be evaluated and changed (*ibid.*). Seedhouse argues that it is ‘an unreasonable imperialism to claim that only those behaviours which conform to a particular health promoter’s idea of health are truly healthy’ (2004: xii). Moreover, rather than there being a unitary object of study which is identifiable as health promotion, Seedhouse argues that there are three main models of health promotion in the West, and that these models have grown, over time, from responses to the influential Lalonde Report (1974), called *A New Perspective on the Health of Canadians: a Working Document*.

The report proposed, and planned, the integration of the Canadian health care system with health promotion, and Seedhouse says that, as a consequence, three frames conceptualising health developed. A ‘bio-medical model’ of health promotion; a ‘social health promotion’ model; and a ‘good life promotion’ model were spawned by the reactions to the Lalonde Report in Western public health organisations (2004: 98). The bio-medical model of health promotion is based on the desire to combat disease and accidents, and, according to Seedhouse, maintains a naturalised, or taken for granted, discourse of objectively measurable health and outcomes which are based on the preservation of the status quo. The social health promotion model, in contrast, is founded on the view that there are many structural, social and environmental determinants of health, and that inequalities leading to ill health and injury should be ameliorated. The third, or good life, model which Seedhouse analyses, he views as seeking to produce ‘positive health and “well-being”’, and as such can move further than promoting preventative activities towards the encouragement of more nebulous goals, such as the aim of achieving a fulfilling life (2004: 98-99). Seedhouse claims that the good life model is ‘strongly normative’, and that the model employs persuasion to inculcate certain values and lifestyles which he says are enmeshed in capitalism (2004: 86). Behaviours which are encouraged in the good life model include the cessation of smoking, moderation in the drinking of alcohol, the adoption of regular exercise, and the choice to eat a balanced diet (2004: 111). The advocacy of the behaviours is not exclusive to this model, but Seedhouse

comments that this form of health promotion relies on an individualistic approach which supports the status quo, encapsulated by the endorsement of self-help group membership. This is because in the good life model, each of us is seen as a self-reliant citizen, responsible for optimising our own health (2004: 112).

Seedhouse further suggests that all these models will fail in effect, because the praxis of health promotion does not define or make clear the beliefs and political ideologies, or as Seedhouse puts it, the 'prejudices', upon which it proceeds (2004: 91). Seedhouse's insights help to outline the field of health promotional discourse, and a critique of health promotion is argued in its own terms by Seedhouse's interrogation of the term 'health'. It can be argued, however, that rather than there being three distinct models of health promotion, as argued by Seedhouse, there are elements of the bio-medical and good life models which are frequently entwined in discourse, as seen in food promotion discourses and in consumers' responses (Caplan, 1997; Bisogni et al., 2012).

Hugman (1994) reflects on the history of public health policy in order to examine changes that may have had an impact on the discourse of health and its promotion in the UK. Hugman's study is significant because it offers a diachronic explanation for the relationship of patients' groups and health campaigning networks to health promotional discourse, and it thus touches on the consumer viewpoint. Hugman views public health policy as, historically, part of the welfare state, and suggests that a crisis in the delivery of welfare in the later part of the twentieth century has led to an approach which he describes as consumerist. On the one hand, according to Hugman, economies of developed industrialized societies have been unable 'to sustain the growth of public welfare' and on the other, this failure in fiscal management by government has coincided with the rise of 'the political New Right, with its emphasis on individualized concepts of social relationships and a challenge to the legitimacy of the role of the state as a corporate provider of health and welfare' (1994: 208). Hugman goes on to trace the development of health service user and interest groups, and campaigning networks, in the changing

context of public health policy in the 1970s and 1980s, and, interestingly, Hugman conceives of their approaches to health provision as at odds with the aims of neoliberal policy. Hugman's insight is that this contradiction stems largely from two radically different views of public health and welfare: to successive governments in the UK from the 1980s onwards, a market model has encouraged 'freedom of choice', whereas user groups wish to change the relationship between health professionals and patients, while, crucially, requiring all the health, welfare and social services and infrastructure to be fully maintained and developed (1994: 209). In relation to the growth of an individualistic model of health promotion, Hugman broadly describes the language which policy makers and the consumers of operationalised health policy use:

[t]hey share the vocabulary of power, rights and choice, yet at the same time they are divided in relation to the goals towards which they are working. So we may even speak of (diametrically opposing) 'consumerisms', and this is reflected in the finer linguistic distinctions, between the New Right emphasis on choice *as* power and the service user groups' assertion of empowerment *in order to* exercise choice (1994: 209. Italics and parentheses in the original).

The significance of this contradiction in the UK, therefore, is that, as Hugman points out, while the lexis of health promotion has changed over the decades, the meanings of key lexical items in health promotional discourse such as choice and freedom have been contested.

2.5.3 Critical approaches to health promotional discourse

Many contributions to the discussion of discourses of health promotion are informed by readings of Foucault (Petersen and Lupton, 1996; Rose, 1999). As Korp (2010) suggests, because of 'the unparalleled development of health promotion in the recent decades', there have been analyses which focus on control, power, and on the healthy lifestyle as a construct (2010: 800). A power/knowledge dyad is thus important as a frame of reference. The concept is helpful in considering, for instance, links between public health procedures

and, for example, the language of health promotion associated with food and eating habits, which are analysed to demonstrate that a moral tone and a discourse of potential illness are combined with a convergence on the individual (Rose, 1999; Petersen, 2003). The individual can then be framed in health messages as at risk of deviance from a norm or on the verge of illness (Becker, 1993).

Lupton (2003) also argues that there has been a move away from the control of infectious disease and contagion towards the general exhortation in health promotion to individuals to take on responsibility for their own health, and that of their immediate families. This is a shift which Lupton says is achieved through the management of discourse:

[c]ontemporary public health directed at 'health promotion' narrows its focus on the individual by associating the so-called lifestyle diseases with individual behaviours. Health promotion rhetoric maintains that the incidence of illness is diminished by persuading members of the public to exercise control over their bodily deportment (2003: 35).

Lupton views public health promotional discourse as dialectical, to the extent that individual freedom is constantly held in tension with the claim of a greater good, which is to 'control individuals' bodies in the name of health' (2003: 35). The means for the maintenance of a balance of these values, argues Lupton, is through the promulgation of discourses of behavioural change; risk-aversion, and the regulation of the self. All of these strategies aim to conceal from the public that these discourses are 'disciplinary', because health is presented as self-evidently a 'right' and a 'good' (2003: 35), as Seedhouse also argues. Lupton comments on the co-option of argumentation using anxiety and guilt by practitioners of health education; and on the use of 'shock tactics and fear appeals' in public awareness campaigns (2003: 35). These are discursive, multimodal strategies which have also been identified in health education and promotion within commercial activities in the UK (Brookes and Harvey, 2015). Moreover, according to Petersen and Lupton (1996), a message of anxious self-control is communicated through the use of binary oppositions such as 'healthy/diseased; self/other; ...rational/emotional' (1996: xii).

Petersen and Lupton claim that these oppositions are connoted in public health discourses. They help to construct a form of citizenship based on an 'entrepreneurial' identity which involves making a 'superhuman effort' (1996: xiii) to achieve and maintain wellbeing and responsibility, through the individual's watchful decision-making about consumption which is based on health advice (1996: 101).

Armstrong (1995), in his study of public health policy, makes observations about the use of data such as growth charts and weight measurements to inform dietary guidelines. Armstrong's focus, thereafter, is on the apparent shift in public healthcare during the twentieth century from the collection of data about clinical signs and symptoms, such as lesions and fevers, to the enumeration of information about normal populations, a phenomenon he calls the rise of 'surveillance medicine' (1995: 393). Individuals are constructed as potentially failing to meet the standard which is set, and which is constantly recalibrated through the use of population-scale measurements, surveys and screening (Armstrong, 1995; Clarke et al., 2003). This is a monitoring approach to public health, which Armstrong (1995) and other social scientists have considered (Petersen and Lupton, 1996; Clarke et al., 2003). According to them, monitoring can be used to invent new categories of risk factors, for example in nutrition; it can, moreover, inform guidance which is absorbed in our social culture through media transmission; and, strikingly, can also create opportunities for incursions of health expertise into the private, domestic sphere through data-gathering as well as through the distribution of health guidelines (Armstrong, 1995; Petersen and Lupton, 1996; Clarke et al., 2003). Lupton's argument draws on the Foucauldian notion of surveillance and self-regulation (2003: 34), commenting on the use of the close observation and scrutiny of the family through the health visitor system. These analyses inform this subject of inquiry, the interpretation of infant milk packaging and 'club' homepages, because it has been noted by Cook and O'Halloran (2000) that a number of parents (an unspecified proportion) who answered the questionnaire in their study looked for 'advice on feeding from the health professionals in the clinics' (2000: 31). This comment suggests that there is space for further

investigation of the discursive techniques through which dietary guidelines, the ‘expert’ and the ‘professional’ are presented and constructed in the packaging and homepage data.

In Brandt and Rozin’s (1997) multidisciplinary *Morality and Health*, the possible advantages and drawbacks of ‘the moralization of health behaviours and beliefs’ are considered (1997: 9). These observations are contextualised through the consideration of discourses of lifestyle which promote normative standards of behaviour, including advice about diet and exercise (Brandt and Rozin, 1997) and these relate to Seedhouse’s ‘wellbeing’ model of health. There is also some discussion of the shift in society towards individual responsibility for ill health; in the view of the authors this is a moralistic attitude because ways of conducting oneself which were once viewed as neutral have acquired a strongly moral significance (Brandt and Rozin, 1997). According to Rozin, ‘something is in the moral domain if the term *ought* (or *ought not*) applies to it’ (1997: 250. Italics in the original). Amongst potential effects on an audience of this moralization, in health promotional discourse, are alienation, withdrawal, and the taking on of stigma (Rozin, 1997). Brandt and Rozin also note a rise in the use of health statistics and epidemiology, and in their view this development, significantly, occludes broader social, economic and cultural determinants of ill health and thus further places moral responsibility firmly on the individual.

Jutel (2006) suggests that categorising is embedded in the use of language, for example in the journals and media she studied, in which the term ‘overweight’ was described. Her content analysis produced the hypothesis that particular phenomena are at work. These are: ‘the belief in the neutrality of quantification and the objectivity that measurement brings to qualitative description’, and a reliance on ‘normative appearance’ to denote health and illness (Jutel, 2006: 2268). This study goes further, in accord with Maurer and Sobal (1995), to claim that the construction of being overweight as a lifestyle related disease enables commercial interests to be served in the forms of the expansion of the drug, dieting and gym industries.

Petersen and Lupton (1996) also touch on the use of quantification, and in their insightful commentary they take up a critical theme of the operation of power. If power is seen as operating through the dissemination of expertise and knowledge, then these can be seen as constraining thought and behaviour, for instance through the ordering and categorisation of certain privileged scientifically-based facts, and through the representations of these in discourse (*ibid.*). As Jones (2013) points out, it becomes important to ask who chooses ‘what to count’, who is counting, and why (2013: 40). Flowing from this quantifying organisation of knowledge in health promoting discourse, Petersen and Lupton argue, is the positioning of subjects who are largely self-governing, albeit subjects who are regulated through the offering of advice and “‘healthy” choices’ in a variety of texts (Petersen and Lupton, 1996: xiii). These observations are all relevant to, and point to the need for, the analysis of the communicative import and effect of the use of nutrition tables and figures in baby formula milk packaging as constitutive of health promotional discourse, and to the understanding of data from packaging and ‘club’ homepage websites.

In a counter-argument to Lupton, however, Beattie (1997) comments that the critique of the bio-medical representation of health promotional discourse does not take enough account of initiatives ‘through which local people are making their own voices heard’, nor is the effort of public health workers ‘against the grain of official discourse’ adequately recognised, invoking the model which Seedhouse (2004) would describe as social health promotion (Beattie, 1997: 98). A further commentary to be mentioned is the possible erasure of corporeality in Foucauldian analyses, as can be seen in a strong form here: ‘[t]he human body can no longer be considered a given reality, but as the product of certain kinds of knowledge and discourses which are subject to change’ (Lupton, 2003: 23). It is argued, further, that agency is decentred in this conception and that the possibility of social change through agency is thereby limited (Caldwell, 2007). Some contrasting views about health promotion discourse, health beliefs, and dissent, will now be briefly reviewed.

2.5.4 Health promotional discourse and forms of practice

Crawford (2002) theorises health promotion as an ‘entire set of signifying practices – characteristic of our age’, in other words, as a form of ritual (2002: 219). Viewed in this way, health promotional discourse becomes only one facet of a cluster of ‘signifying practices’ which are ‘performed in various settings – medical encounters, at work, through the media, advertisements, and, crucially, in everyday conversations among friends, family and colleagues’ (*ibid.*: 220). Ill health can be conceptualised by laypeople as ‘matter out of place’ (*ibid.*: 224). The role of the ritual is to express and dramatise anxieties created in Western neoliberal culture, mythologizing the way we are, according to Crawford (*ibid.*). An important function of health promotional discourse, therefore, is that it produces a structure of meanings, in place of ‘the unresolvable disorder at the heart of capitalist culture’ (*ibid.*: 221). According to Crawford, the essential anxiety-producing conflict which can be played out, through the ritual which is health promotion, is between discourses of a middle class work ethic, expressed in individualism and the idea of ‘personal responsibility’ for creating a healthy body, and the logic of consumerism, expressed in ‘self-fulfilment through the satisfaction of desires’ (2002: 222). The way in which the signifying practices have achieved this social and cultural power is through each individual’s capacity to internalise, to a greater or lesser extent, what Crawford calls ‘the interplay of control and release’ (*ibid.*). Health promotional practices make demands of people (2002: 222). Crawford’s hypothesis uses the recognisable metaphor of ‘ritual’. It also hints at the ways in which discourse and material practices may articulate with some health beliefs. However, this can also be seen as a rather totalising view of health promotion; any repertoire of our social practices could be categorised as a form of ritual and the explanatory power of the critique is perhaps then diluted.

In another approach which uses social practice as a paradigm, Blue et al. (2016) study the habit of tobacco smoking, a well-known target of much health promotional messaging

(Butler et al., 1998; Raw et al., 1998; Lawlor et al., 2003). Health promotional discourse is discussed, in Blue et al.'s paper, in order to influence and alter any future health promotion policy. Blue et al.'s argument rests on the notion that a practice such as smoking must involve specific integrated features, and that these can be associated with other health-related behaviours, including beliefs. As in Crawford's (2002) argument, discourse is separated out by Blue et al. from habits which involve tangible objects. Without all of the integrated elements which are needed to carry out a certain practice, comprising the material means and objects, embodied, practical, and special knowledge, including discourses, Blue et al. claim it would be difficult to carry out a social practice in a sustained way, as summarised by the discursive term 'lifestyle behaviour'. The approach draws on Bourdieu's (1979/ 2010) concept of habitus, or an individual's disposition to behave in ways which are meaningful and have some consistency. Bourdieu conceives of these structured ways of being as attempts to internalise the social world. Blue et al. claim that conceptualising lifestyle behaviours in this way shifts the focus away from the individual as a potential deviant, and, moreover, places less emphasis on the social determinants of health in order to develop a new conception of health promotion. As in Crawford's thesis, the place of discourse is thus limited to being one component of a complex set of practices, only some of which construct and are constructed by symbolic meanings. Materiality is therefore an important aspect of Blue et al.'s social practice argument, in a form which is absent from most critical approaches (Rose and Tolia-Kelly, 2012). The material objects, for example the smoking paraphernalia of cigarettes and lighters, and the corporeal body, are all central to the investigation of health promotion in Blue et al.'s (2016) discussion. Some consideration of the material, *qua* object, is relevant for this study because it connects with a line of theorisation about the links between written and visual forms of text, and how they relate meaningfully to tangible matter (Kress and van Leeuwen, 2006: 216-217), for instance of the body and of packaging. This line of discussion also problematises representations of the parents and infants in the online world of the 'club' homepages, because the body is placed centrally in the argument. Matthews and Wexler (2000), in an archival project, present photographs of pregnant

women and so put the body at the centre of their study. They collected images from a range of historical and contemporary sources, including medical texts, family photograph albums, and advertising, as well as images from catalogues selling maternity clothes. The aim of the project is to highlight the paucity of images which present pregnant women as ‘active and authoritative’ (*ibid.*: xvii). They discuss ‘clinical looking’ which is motivated by the medical imagery, and ‘scopic looking’, or more ‘voyeuristic’ forms of gaze which appropriate the image of the pregnant body (*ibid.*: xiv). They stress that images which limit or idealise the pregnant woman are ‘important because just as the pregnant woman as an individual constructs her sense of self in part from images of herself, so does our society derive a sense of collectivity from the images it constructs and circulates’ (*ibid.*: 2). Matthews and Wexler’s study of the status of pregnancy and of the gaze is important in helping in the analysis of imagery of the women who appear in the ‘club’ homepages.

2.5.5 Health promotional discourse and dissent

It is interesting to note that, from the public health perspective, there is a requirement for practitioners to monitor iterations of advice in the media and in commercial promotions, with the presumption that there is message distortion, as discussed by Webb (2007).

Webb perceives public health legislation and information to be expert and objective, while accepting that advice about nutrition, for example, can appear confusing and even conflicting to its target audience (2007: 9). Resistance by the public to health education campaigns is, in this way, blamed on interference by the media, as well as on the lay people’s prior health beliefs, inattention to messaging, and on our poor comprehension of complex ideas. Attree’s (2006) counter critique, also from a public health research perspective, is of health promotional discourse which focuses on diet, and on the reception of health messages in areas of deprivation in the UK. A starting point for Attree’s argument is the low take-up of healthy eating amongst people who experience social deprivation. This phenomenon, Attree comments, is explained in the health education literature by a theory of the public’s deficient awareness and low level of understanding,

as exemplified in Webb's (2007) argument, and of people's intransigence; and, alternatively, a lack of access to wholesome foods in some areas of the UK. Drawing on Department of Health policy documents from the 1990s onwards, Attree argues that official policies are 'informed by notions of the empowered consumer, who is (or should be) actively pursuing health as a goal', using the language of individualised responsibility and personal choice (2006: 71). These constructs in policy documents are shown by Attree's analysis to be in evidence alongside an apparently contradictory acknowledgement of constraints such as high and fluctuating food prices and healthy food scarcity, or 'food deserts' (Attree, 2006: 71). Attree describes the emphasis, in health promotional discourse, on consumer awareness and attitudinal change as 'problematic' because:

...there is little evidence that low-income mothers are ignorant of healthy food choices...The majority wanted to provide "healthy choices" for their children, but felt constrained by their circumstances...in attributing primacy to individual choice, health as moral discourse underplays the significance of structural determinants of health (2006: 73-74).

Attree powerfully cites Crawford's (1984) argument that prevailing middle class values are circulated through the healthy lifestyle discourse, which people who are challenged by socio-economic inequalities question, doubt, and ultimately resist (2006: 74-75).

Monaghan (2007) also found resistance to nutritional health messages in his interviews with men about the body mass index (BMI). The BMI system uses an equation extrapolated from population studies to correlate weight and height and to set targets for individuals' self-control, and it exemplifies the use of measurement to link health, food and exercise (*ibid.*). Coveney's (2006) influential study argues that technologies of care and of self care such as growth charts, dietary guidelines and body mass indices inform and circulate discourses of health through nutrition in the West. Monaghan (2007) identified the BMI as often collocated in health promotion literature with the topic of obesity as an epidemic. Monaghan's participants avoided or rejected labels such as 'obese' and questioned the BMI on the grounds of its irrelevance to them. He cites the creation of anxiety about ill health and corporeality; its possible encouragement of

the insurance industry; and its 'irrational standardisation' (2007:584), with participants drawing on counter-examples from popular culture such as the physical presence of the actor/politician Arnold Schwarzenegger (Monaghan, 2007: 588-589). The study shows the importance of engagement with 'men's critical understandings' (2007: 593) of health, which Monaghan claims have been neglected in the literature (2007: 584), and in this study there will be due attention to the presence or absence of men in the texts and imagery associated with nutritional health messages as they are presented in the packaging and the 'club' homepage data.

The medical sociologists Williams and Popay's (2001) consideration of health promotional discourse draws on a Habermasian perspective. In this view, health promotion in all its versions is seen as an attempt to make up for a deficit in welfare state provision for health, itself a corrective for the health inequalities caused by, and inherent in, late capitalism (*ibid.*). A key function of health promotional discourse has thus been developed by policy makers into the need to represent political and economic decisions and resolutions as scientific and technologically driven, in the form of 'guidance' (*ibid.*: 29). To Williams and Popay, this development is an example of the colonisation of the lifeworld through discourses which make salient professionalization and expertise (*ibid.*). Using as an example the meat industry crisis caused in the 1980s and 1990s by the incidence of bovine spongiform encephalopathy, a transmissible form of brain disease, Williams and Popay generalise their argument to nutritional health promotion campaigns. They argue that it is clear to 'the man and the woman in the... shop' that there is often disagreement in the guidance and advice which appears to go further than 'epidemiological or other factual evidence' (*ibid.*: 30). Experts can thus be viewed by lay people as operating in the spheres of politics and influence, because hidden values are being promoted and, moreover, this strategy is suspected (*ibid.*). Williams and Popay consider the expression of scepticism amongst the public about health advice to be a form of contestation and resistance. In contrast to official health promotional discourse, the authors posit local or lay knowledge as significant because it forms an expression of the lifeworld that seeks

a public forum, but which is often excluded from wider recognition by ‘the “system” forces of state and economy’ (*ibid.*: 31). This critique interestingly demonstrates how the concepts of lifeworld and system can be operationalised in a context of health promotion discourses. There is also some deliberation, in Williams’ and Popay’s argument, about the lay perspective as a form of expertise in its own right, and how, as in Attree’s (2006) and Monaghan’s (2007) findings, agency can be expressed in public scepticism about health promotion and its methods. The term lay ‘material knowledge’ (Williams and Popay, 2001: 31) used in the argument is underspecified, however; and their hypothesis that lay and expert discourses can be brought together in an equal exchange with government, with medical authorities, or with the big food corporates, is not explained as a feasible practice. This element of the discussion lends nuance to the observation by discourse analysts of the use of false or synthetic personalization in commercial and organisational discourses which appeal to consumers (Fairclough, 2001; Thurlow, 2013).

2.5.6 Language, social semiotics, and health promotional discourse

There is a relatively small body of linguistic and multimodal studies in English which consider health promotional discourse. The medical social scientific work that has been cited above also provides valuable pointers from other disciplines towards further detailed analysis of the language and social semiotics *in situ* which sets about to accomplish the communicative work of health promotional discourse.

Amongst studies which examine discursive practices in relation to nutrition and health, Spoel et al. (2012) used semi-structured interviews of fifty-five participants from Canada and the UK to explore the meanings of healthy eating and active living. The paper employed a rhetorical analytical approach, drawing on themes of guilt, purification and rebirth (*ibid.*: 623). The analysis demonstrates that the terminology, and even the tone, of health promotion campaigns, or in Spoel et al.’s framing, health guidance as presented as a set of commandments, were often reproduced in the participants’ use of language.

Spoel et al. suggest that the connection between food intake, health and illness is ‘diffused, [and] naturalized’, to ‘construct an ambivalently medical *and* moral frame to account for unhealthy eating’ (*ibid.*: 626–627. Italics in the original). Through employing a rhetorical framework for their analysis, the paper draws attention to the frequent use of religious tropes and metaphors which invoke sin and redemption in interactions about health and eating, an observation which Coveney has also made (2006: 46–64).

Jewitt (1998) employed Kress and van Leeuwen’s multimodal approach to analyse sexual health educational materials for young people. The goal of the materials is to further sexual health awareness and change behaviour. In so doing, Jewitt argues, the documents importantly, ‘reinforce societal messages about what is socially acceptable and unacceptable sexual behaviour’ (1998: 264). In other words, they ‘enshrine norms’, for example through their representations of masculinity (*ibid.*). Jones (2013), in his discussion of HIV/AIDS prevention messaging in Hong Kong, also considers that communicative expression other than that stated in his basic definition (see above) is achieved by health promotion discourse, to apotheosise normative health beliefs. He focuses on the ways in which agency can be represented in health promotion texts. This is because, in his analysis of HIV/AIDS prevention pamphlets, Jones reveals a connection between health promotion, the notion of risk, and the representation of agency. According to Jones, the link is forged by the producers of health promotion texts through the particular use of transitivity, or the ‘different ways to represent “doings” and the relationships between participants (objects, people, places, practices) involved in them’ (*ibid.*: 43). Jones claims that the treatment of transitivity is ideological, in that particular social practices can be promoted, and identity can be constructed, for example by the ascription of agency. In his study of health promotion texts, Jones notes that HIV is portrayed as actively ‘*invading*’, ‘*spreading*’, and ‘*destroying*’ (*ibid.*: 44. Italics in the original). In contrast, it is only the readers’ active mental processes which are addressed in the target texts, with readers of the pamphlets being urged to think, ‘*remember*’, and ‘*pay attention*’ (*ibid.*: 44. Italics in the original). Jones, moreover, argues that the connection between biomedicine and the practice of measuring

has become ‘naturalized’ for readers of health promotional texts, with quantifying expressions in graphs and tables being viewed as authoritative by viewers, even when the units of measurement are not entirely clear (2013: 40). Using as examples the criteria for high cholesterol and for obesity, Jones draws attention to the use of quantifying expressions in health-related and promotional texts as rhetorical devices. These do not reflect reality neutrally, he argues, but are employed as instruments of argument that can foreground selected aspects of phenomena (*ibid.*).

In analysing Facebook content concerning the class of metabolic disorders generally called diabetes, Hunt (2015) acknowledges that social media have become important sources of information about health. A critical, multimodal approach is employed by Hunt to analyse the Facebook pages of a diabetes charity, and of a company which supplies various services to people who have diabetes and to the people who care for them. Amongst the findings are that people with diabetes are depicted as prepossessing, notwithstanding their illness. This mode of multimodal text draws in the viewer to the site, and, moreover, prompts ‘synthetic personalisation’ (2015: 79, citing Fairclough 1992), as also noted by Thurlow (2013). As Hunt argues, the depiction of happily sociable people on the Facebook pages may construct an unrealisable aspiration which could provoke a sense of defeat or guilt amongst those with diabetes. In their critical, social semiotic analysis of a Type 2 diabetes mellitus national campaign which was developed jointly by a charity and a British supermarket chain, Brookes and Harvey (2015) identified the strategic use of representations designed to instil dread in the viewer. This effect was achieved through the use, in leaflets and posters, of such means as naturalistic photography, graphics, colour, and typography, exaggerating the risks of type 2 diabetes and of the limitations to life associated with the disease. The use in the campaign of the second person pronoun, and of imperatives, to draw in the viewer, also demonstrates some significant slippage in communicative approach, with the charitable organisation adopting advertising genre tactics and the retailer identifying itself, with no irony, as a health campaigning organisation, as noted by Brookes and Harvey (2015).

There is a body of work in linguistics which considers the communicative effectiveness and legibility of health-related communication (Graber et al., 1999; Zarcadoolas, 2011). Cook and O'Halloran's (2008) study of labels on cereals and formula milks for babies also focuses on consumers' comprehension of packaging texts, and the scholarly work which considers food promotional discourse will be examined in the next section.

2.6 Promotion of food discourse

2.6.1 Introduction

Tominc (2016) observes that:

[a]midst scandals related to safety, loss of public trust in the supply chain, and increasing concerns about obesity and other related health issues, food has become over the last three decades a central topic in the academic and governmental agendas. Nevertheless, linguistic studies into the link between language and nourishment have in the past been scarce and scattered, with most research on gastronomic literature (such as restaurant menus, labelling and especially recipes and cookbooks, as well as media representations of food issues) being conducted in disciplines such as sociology, anthropology and history (2016: 467. Parentheses in the original).

Food studies have developed in the wake of controversies which highlight the fragility and contradictions inherent in the food supply and in our relationship with food. Until recently, scholarship in this area has been dominated by the social sciences with some disparate contribution by linguists, according to Tominc. There is an area in the study of society and its relationship to food which linguistic and social semiotic approaches can contribute towards; however, as indicated by Tominc, the domain of scholarship related to food consumption is very broad. This section, therefore, will be limited to a discussion of the literature which is related to the discourse of food promoted as a commodity, and that therefore has relevance to the scope of this study.

2.6.2 Food promotional texts

Matthiessen (2009) categorises promotional texts as comprising ‘many different kinds of advertisement, product blurbs, fundraising letters’, including texts ‘on the borderline between “recommending” and “reporting”’ (*ibid.*: 36). The defining feature of such texts, according to Matthiessen, is that they ‘are texts persuading the addressee to do something’, essentially ‘for the benefit of the speaker rather than for the benefit of the addressee’ (*ibid.*: 36). Matthiessen’s point is an important one: the difficult task of the promotional text is to position the consumer as being invited to act, even though the action of consuming will not necessarily be in their own interest. It has to be recognised, however, that there are legal constraints on the wording of marketing texts, as food and drink labelling and promotion are regulated in the UK, over and above the laws concerning the advertising of general goods (Atkins and Bowler, 2001; Graddol, 2007). The regulatory instruments include the international Codex Alimentarius; the European Food Information to Consumers Regulation No. 1169/2011; and the Food Information for Consumers Regulations (Jukes, 1997; Rijk and Veraart, 2010). There are many studies which look into the regulation of food marketing and food promotional techniques, with special attention to their impact on children (Hill and Tilley, 2002; Ambler, 2006; Matthews, 2008; Elliott, 2013). There is also a large body of business and marketing research (Abratt and Goodey, 1990; Omar and Kent, 1996; Bennett and Rundel-Thiele, 2005; Härtel and Russell-Bennett, 2010) and journalistic critique (Blythman, 2004; Boseley, 2014; Poole, 2015) investigating commercial food promotional behaviour. These studies indicate that the consumer is not simply being enticed to buy particular commodities such as foodstuffs, but to enact brand loyalty, as Hollywood et al. (2016) put it, to meet ‘manufacturers’ longer-term goals for brand preference and repeat sales’ (2016: 30).

The cultural theorist Lury (2004) defines brands as forms of information which for many people are embedded in everyday life. Branding can then provide ‘a platform for the patterning of activity...extending into – or better, implicating – social relations’ (2004:

1). For the linguist Myers (1999), brands have social significance because ‘[i]n associating meanings with brands, we draw on and shift the multiple systems of meaning that make up our culture’ (1999: 9). These studies indicate how commercial branding is not a mere, irrelevant ephemeron, but can act as a vector contributing to discourses of social role enactment, for example in multimodal representations in promotional materials. Kornberger’s (2010) dictum that brands combine magic with logic (cf. Williamson, 1978) can be illuminated by his observation of a function of brands, including food brands. This function is that:

[r]ather than following the old model of closed, inward-looking technology-centred companies, brand-driven organizations maximise their surface area in order to have maximum contact with their environments. That might make them superficial, but it definitely makes them more engaging (and entertaining)...[in] managing consumption (Kornberger: xiii).

Companies which promote goods directly or advise companies so to do by creating advertising campaigns can therefore manage consumers by spreading their exposure and impinging on many aspects of consumers’ lives. Brands, then, can be viewed as complex signs because they require interpretation by us as consumers (*ibid.*). It is important, in the analytic chapters below, to look at two major modes of sign production by the milk formula brands through which the companies attempt to make contact with an important constituent in their environments, packaging as well as digital communication.

Linguists Freedman and Jurafsky (2011; Jurafsky, 2014) analysed the language used on bags of potato chips to investigate what this might reveal about food promotional techniques and the representation of class identity. (Crisps are potato chips in North American English usage (Burchfield, 1987)). They demonstrate that the incidence of certain linguistic features was related to the price of packets of crisps (Freedman and Jurafsky, 2011). For example, there was greater syntactic and lexical complexity in the texts on the more expensive, branded packets, with significantly more health claims made in these texts. They also noted that the increased use of negation was correlated positively with price, and in these texts there were also more comparatives such as ‘less fat’

than on cheap or unbranded crisp packets (*ibid.*). As Jurafsky comments, ‘the ridiculous emphasis on health is an admission that the manufacturers are well aware that you may be sceptical of the nutritional value of their products’ (2014: 110). Freedman and Jurafsky (2011) use Bourdieu’s (1979/ 2010) notion of distinction to argue that the copywriter’s choices, as displayed on the crisp packets, were designed to appeal to the consumer’s sense of class status, with the encoding of prestige accomplished through the complexity of the language and with the appeal to ideas of health. Bourdieu had theorised that taste, which he described as an example of ‘cultural competence’, secures social and economic distinctions between people, and is demonstrated through choices of consumption (1979/ 2010: 1665). Freedman and Jurafsky’s (2011) study is limited to the critique of language use on the crisp packets they examined, and the meaning potential of contextual elements, such as fonts, colour, use of space and layout, is not explored.

Lakoff (2006) extends the concept of distinction expressed in taste to that of a social ‘food-related identity’. She touches on the possible readings of textual design in a variety of texts concerned with food, including magazine articles, recipe books and menus:

[e]ven when we concentrate on our individual selves, we are, knowingly or not, working toward the creation and re-creation of our group ethos. And the values, attitudes, and behaviors identified by the group in which we acknowledge or desire membership will in turn influence our individual choices and our evaluations of those choices (2006: 144).

This insight will have relevance to assessing how the multimodal promotion of the ‘club’ on the homepages makes appeals to a ‘group ethos’. Lakoff perceives change in society’s attitude towards food as a significant sociocultural marker, and this she associates with language. She argues that as: ‘[o]ne index of the importance of an artifact in any culture is the proliferation of new words around it...there are innumerable new words for new foods, or new forms of appreciation for old ones’ (2006: 149). The data she uses to explore an aspect of social identity work are the menus offered by establishments at opposite ends of the restaurant market, one serving food for ‘\$9.96’ and one restaurant

offering meals for '\$75.00', in the same area of Berkeley, California (Lakoff, 2006: 154). Lakoff notes differences in the semiotics of the menus, with the menu in the expensive restaurant presented with an elegant calligraphic typeface surrounded by white space, which to Lakoff connotes luxury. The menu in the other, cheaper, restaurant, meanwhile, includes many more items which are represented in dark, small font; their food is also displayed in photographs in the restaurant window (2006: 154). Lakoff argues that the arrangement of each menu communicates the presuppositions that are made by owners and customers about 'interaction, and role to be played' (2006: 154). With reference to two of Grice's (1975) co-operative principles: to contribute as much information as is needed, and not more; and to be relevant, Lakoff provides an incisive commentary concerning the menu at the expensive venue. Its 'extreme informativeness' was designed to convey the inclusiveness of a closed group, and of shared expertise, she argues (Lakoff, 2006: 156). This gambit could be interpreted as a face threat, however, to the less than expert diners: "we have to spell it out for you, as we would not for ourselves", as Lakoff *précises* the illocution of this style of menu (2006: 157). Thus, the fashion to provide a bare minimum of information about the food on offer in some other high-end restaurants is demonstrated by Lakoff to be a repairing move, conveying some 'intimacy' again (2006: 157). The text is thus designed to reassure the customer about their competence, and to affirm their sense of place in the prestigious group identity. Lakoff indicates how the semiotics of layout and presentation can be implicated with words and their meanings (cf. Barthes, 1977) in a particular form of food promotion text, the menu. This finding, with Lakoff's observation about neologisms, and about the pragmatics of the menu, will all contribute to the analysis of formula packaging.

Freedman and Jurafsky (2011) argue that the concept of authenticity is foregrounded in food promotional discourse, for example in various allusions to tradition which they found in texts on the cheaper crisp packets in their collection of data. Beverland (2006), from a business studies perspective, discusses the co-opting of authenticity by marketing. He differentiates between real and 'contrived' authenticity in marketing campaigns,

claiming that authenticity is often stylised in promotional texts (2006: 252), highlighting a sophisticated semantic equivocation which can be implemented by food and drink marketers. One way in which some retailers and manufacturers attempt to communicate authenticity, Beverland argues (2006), is through appearing to distance themselves from overt commercialism, for instance by emphasising values such as health, social, and environmental concerns. He asks, ‘does authenticity have to be real?’ to persuade the consumer (*ibid.*: 251). The conclusion reached is that promotional discourse which combines real and fictional versions of ‘authenticity’:

...created a rich, multi-nuanced brand story. These rich brand stories are important because by drawing on all attributes of authenticity they can appeal to consumers with different levels of expertise and different degrees of variety seeking behaviour (2006: 257).

From a commercial perspective then, as Jurafsky suggests (2014), a complex artifice of ‘authenticity’ can be warranted by advertisers because of its appeal to consumers who have various conceptualisations of social status and its meanings. The studies above indicate that although there is a vast body of marketing research which measures consumers’ responses to food promotional material, there is still research required about a significant topic such as food branding, based on linguistic and social semiotic principles.

2.6.3 Nutritionism

Guthman’s (2014) investigation of the discourses of diet has led her to theorise that there is a ‘public conversation’ about food which is ubiquitous, multivocal, and perhaps vociferous (*ibid.* : 2). Her stance is that of a critical nutritionist, suggesting that she understands food to have many meanings which cannot be reduced to its nutrient elements. Contiguous with this approach is an acknowledgement that there is great complexity in the relationship between the food and the body, and that ‘knowledge about health is socially, culturally, historically, and environmentally constructed’ (*ibid.*:

1). Such critical thinking about dietetics has informed this thesis, as it forms a way in to an exploration of the ways in which language and imagery are used on packaging, for example, to construct knowledge about health through discourse. Hayes-Conroy et al. (2013) focus on the position of the ‘expert’. They argue that this position has been co-opted by many figures, including celebrities, bloggers, and employees of the companies which promote weight loss diets. Hayes-Conroy et al.’s argument is not, it appears, that these people cannot claim to have the expertise of nutrition scientists, but that ‘other knowledges’, such as lay discourses, can be denigrated when expertise is claimed and aggrandized (*ibid.*: 3).

The enquiry into discourses of food in the public arena has been pursued by the sociologist Scrinis (2013). The main concepts in nutritionism will be listed here, based on *Nutritionism: the science and politics of dietary advice* (2013). The central ideas are the de-contextualisation and simplification of scientific information; reductionism, or the focus on nutrients such as fats, vitamins and carbohydrates rather than on a whole food or meal. There is an emphasis on the functional elements of foods, or those ingredients about which claims, now familiar, are made by producers concerning specific benefits to the body such as lower cholesterol. This is accompanied by the elevation of claims about nutrients to the status of truth; the dramatization of the role played by a single nutrient, without context, along with explicit or implied health claims. Scrinis notes the stigmatising of some foods, for example saturated fats; an oppositional approach to foods, for example suggesting that there are good and bad foods or nutrients; the use of nutrient terms, such as low-GI (*ibid.*). Nutritionism involves the legitimization of food manufacturers in erecting a façade of nutritional ‘advice’ to help market their products, with a reductive approach to regulation which includes lobbying by the food industry. There is a commodification of consumption practices such that the public can have some anxieties heightened about food and feeding, because of the emphasis on nutrients and health, creating ‘nutricentric’ individuals (*ibid.*). At the same time, ‘needs’ for certain novel

foodstuffs are expressed by the public. There is also, according to Scrinis, concealment of controversies amongst nutritionists; alongside the wilful distraction by food manufacturers of the public from some ingredients, additives and manufacturing processes (*ibid.*).

Scrinis has theorised that the presentation and promotion of some mass-produced foodstuffs have been dominated by such an ideology of nutritionism, through a ‘focus on the nutrient composition of foods as the means for understanding their healthfulness, as well as by a reductive interpretation of the role of these nutrients in bodily health’ (2013: 2). There are results in society, Scrinis claims, of this increasing, discursive reference to the particular components of food. Two effects are the oversimplification of public health guidance about diet, for example on packaging, and the publication and dissemination of advice which is contradictory (Scrinis, 2013). An outcome of nutritionism may be confusion about health messages amongst food consumers, with some attendant scepticism about the validity of claims in health promotional material (Fullagar, 2009). Another result, according to Yates-Doerr (2013), is that the broad, social and pleasurable contexts of eating are ignored, and are supplanted with anxieties about nutrient intake and even the need for medical supervision. At the same time, the discourse of food-sharing as a social event can be diminished through the use of corporate promotional and marketing techniques, and simultaneously ‘operationalized’ as individual choice, with the monitoring of nutrient intake becoming a personal responsibility alongside ‘a civic duty to choose “well”’ (Brooks et al., 2013: 151).

Scrinis (2013) argues that nutritionism has exerted an influence on the discourse of food promotion such that it has helped create nutritional policy frameworks since the middle of the twentieth century, helping to construct the authority of nutrition science, whilst serving the food industry and undermining people’s own instincts about food choices. In addition, Scrinis argues,

...nutritionism constructs and preserves the scientific authority and material interests of nutrition experts, on the basis that only they are able to produce and interpret this scientific knowledge of nutrients. The authority of traditional and cultural knowledge of food, or of people's own sensual and practical experience with food, has been correspondingly devalued. The ideology of nutritionism ... ultimately serves the financial interests of the food, dietary supplement, and weight-loss industries by creating a new market for nutrients, nutritional knowledge, and nutritionally engineered products [creating] the nutricentric person – the subjects of nutritionism (2013: 13).

Here, Scrinis interestingly draws attention to the impacts that nutritionism has had. These include the promotion of nutritionists as authorities, and Scrinis argues that this is a significant development not least because our own received food heritage and wisdom have become demoted. Furthermore, Scrinis touches on the utility of nutritionism in the development of practices which are ancillary to the food industry, such as dieting. This practice is served by the diffusion of information in the media as well as food manufacturing and retailing. The significance of Scrinis' account of nutritionism is that he suggests it has the power to affect a lay understanding of ranges of foods and ways of consuming these, including contributing to the formation of people who have an anxious relationship with what they eat. Rather than it being the state which can bring about these shifts in social practice, it is the food industry to which Scrinis ascribes these changes.

Guthman (2014), interestingly, considers that the pressure to choose foods carefully, an obligation which she judges to be generally communicated in public health messaging and through the media, operates in tandem with a societal sense of loss of control:

...the public conversation may not be responding to a problem as much as it is generating one. And the problem I would argue it is generating is yet more anxiety about a food system gone awry, concomitant with the sense that there is diminished capacity to do anything about it (2014: 2).

In this way, nutritionism as a discourse has a ready and alert audience. An element of

Guthman's message about the food system, in keeping with critical nutrition as a school, is pessimistic. The work of the sociologist Kimura (2011; 2013), attending in the main to nutritionism as an ideology in Japan and in the Global South, also encompasses some potential means of resistance. These, she argues, can take the form of the support and strengthening of local food networks, for example, which re-contextualise knowledge about food and ways of eating.

Concepts of safety and perceived risk are conceptualised by Koteyko & Nerlich (2007) as enmeshed with choices that the western consumer makes about food. In particular, they argue that this entanglement has encouraged food corporations to develop markets for food such as probiotic yoghurts (2007:20). The significance of this commercial effort is that the foods are promoted with health claims (*ibid.*). This study is salient in applying a discourse analytic approach with Kress and van Leeuwen's social semiotic framework to texts and images in eight websites which market probiotics. The authors demonstrate that producers and marketers use text and image to project tradition, health and naturalness. The markets also created textual and visual connections with these and with technology (Koteyko and Nerlich, 2007). The authors argue that this promotional technique is aimed at 'reinforcing the discourse of healthism where individuals have the responsibility to build inner armors in their attempt to achieve optimal health' (*ibid.*: 29). Jovanovic (2014), moreover, uses a framework derived from the sociology of diagnosis in order to analyse an advertising campaign for a margarine which has plant sterols as an ingredient. Her analysis shows that claims about health were prominent, but that the main promotional message, aimed at women, was ambivalent:

[the] advertisement campaign is reminiscent of government health campaigns such as ParticipACTION, which serve as public service announcements, highlighting the health problem and acting as a way to morally induce personal responsibility for health and wellness (*ibid.*: 654).

Fear of the risk of high cholesterol and ‘empowerment’ are situated together textually (*ibid.*: 642). The message of empowerment is communicated, according to Jovanovic, through a discourse which foregrounds the healthy lifestyle and the wise consumer. This form of communication mimics health promotional communication (*ibid.*), using a paradigm of health promotion which Seedhouse (2004) identifies.

With the arrival on the market of increasing numbers of foods with health claims (Heasman and Mellentin, 1998; Coveney, 2006), including functional foods (Cathro, 1990; Magrone et al., 2013), there is a need for additional investigation that builds on the research using social semiotic and discourse frameworks, to look further into the transference of messaging from public health to food promotional techniques. Guthman (2014) and Scrinis (2013) view the dissemination of nutritionism as political, because, as Guthman argues, ‘nutritional ideas have been appropriated and commodified by the food industry in less than salubrious ways’ (2014: 3).

2.6.4 The discourse of food promotion and consumer confidence

Underwood and Ozanne (1998) undertook a study of the language on food packaging in North America from a business marketing perspective. They applied a framework which was derived from Habermas’ (1984/1987) theory of communication to extensive packaging data and to interviews with consumers. This work had the objective of increasing the efficacy and profitability of commercial food packaging, as expressed here:

[i]n today’s increasingly crowded market-place, opportunities for packaging to attract, communicate and influence choice are growing relative to more traditional marketing communication vehicles (e.g. mass media advertising). Manufacturers are coming to realize that packages can be designed to communicate effectively a brand’s core essence and create a differential advantage at the point of purchase... When packages and labels are communicatively incompetent, consumer confusion increases as most certainly does brand switching and discontinued use of the product. Yet when packaging more closely approaches authentic communication, brand loyalty can increase and brand relationships can grow (Underwood and Ozanne, 1998: 216).

Communicative incompetence, in this critique, is illustrated by instances of the infringement of the laws regulating food labelling. The authors also critiqued health claims that are not supported by expert opinion, and which cannot be checked by consumers; and the inaccurate visual representation of the packaged foodstuffs. All of these examples were observed by the researchers. The study does not look in detail at the use of language or imagery, as it applies an academic marketing point of view to the data. Their conclusion adopts a less than critical stance in bringing to bear Habermas' framework of communicative reason, summarised in the recommendation that '[m]arketers must seek to do battle on the store shelf front, to attract, communicate and persuade, all within the confines of this normative framework' (Underwood and Ozanne, 1998: 218). It can be argued that there is an area of research into packaging and associated promotional campaigns in which the fine grained consideration of language and images, underpinned by critical theory, can be applied analytically.

Wagner (2015), with a visual design education perspective, argues the following:

[t]he limited space of the food package leads to a competition where different types of messages try to claim territory from each other. The designers use different strategies to define the package as a whole, and to make it possible for the consumer to apprehend the package in its entirety, not just as a carrier of fragmented messages. To this end, all modes and resources must be used, graphical, textual and material (2015: 217).

She uses a multimodal analytic methodology based on Kress and van Leeuwen's approach to analyse various food packages, while applying an inventory of packaging features to explore the possible meanings of the data in her collection. The inventory included colour, text, typography, imagery, symbols and icons, physical structure or shape, materials, and closure devices (*ibid.*: 198–203). Looking at the multimodal combinations of these design elements in food packaging led Wagner to conclude that 'greenwashing' can be seen in some food product packaging schemes:

[s]ome manufacturers take advantage of the credibility of organic food and try to appear greener than they are, by using a vocabulary referring to nature and imitating the design of organic product packaging, which is often green and decorated with vegetable motifs (2015: 210).

Wagner suggests that an underappreciated aspect of modality can be the general appearance of a product, when the packaging as a whole unit in some ways “stands for” a standard such as environmental concern, without an overt ‘statement’ which can, importantly, take away any sense of ‘liability’ on the part of the manufacturer (*ibid.*: 216). Graddol (2007) is also concerned with the label as a readable text, although his focus does not extend to features of wine packaging such as materials and physical structure as Wagner’s study does. Rather, Graddol examines the fragmentary nature of the wine label in his case study, arguing that:

...the different semiotic resources of the text are employed to address the multiple audiences in a way that recognises the different social and economic relations the text producer wishes to construct with each (2007: 149).

Thus, the lawmaker, the consumer, and the public health official are all acknowledged through the readings and meanings of separate phrases, text boxes and lists which Graddol analyses on the label. This instructive work by Graddol demonstrates that discourse, even in a label, constructs relationships with the readership or an imagined readership. As Graddol shows through his analysis, this is reflected not only in lexical choices and register, but also through choices of contrasts in typefaces, font size and layout.

Cook et al.’s (2009) study is foundational in examining the texts which were involved in the promotion of particular types of organic food. A conclusion that was drawn is of the interweaving of commercially and politically orientated persuasive language in the marketing texts that were analysed, with regard to discourses in the organic food movement, and in organic food selling campaigns. To this end, the marketing techniques of large retailers were evaluated, and the analysis disclosed the use of ‘poetic’ language.

The authors note the use of alliteration and rhythmic patterning, and observe that the imagery in the language is 'sensual and tactile', resulting in an emphasis on values of nature which is expressed through the foregrounding of the representation of British wildlife, for example in such mundane data as organic potato labels (Cook et al., 2009: 155). Tradition was also seen to be referenced in a form of promotional poetics, couched in narratives about the food producers:

[a] recurrent theme in British organic food promotion is an idealized rural idyll of non-industrial farming, using bucolic imagery [in language] presumably designed to appeal to the predominantly urban British population (*ibid.*: 156).

Cook et al. suggest that a process they call 'discourse appropriation' has taken place, traversing small to very large retailers' use of copy (cf. Fairclough, 1992c). This movement of textual features perhaps adds the air of real or contrived authenticity to some of the food brands, as Beverland (2006), and Freedman and Jurafsky (2011) had also discussed. On some packaging, narratives about organic food producers also functioned to 'create a pseudo familiarity' in the promotional language, through the use of conversational style; first and second person pronouns; and humour (Cook et al., 2009: 157-159). Further, the researchers found, in interviews, that the representatives of corporate food industry were convinced by the efficacy of the marketing language they employed, and, disturbingly, the food industry interview subjects maintained a 'belief in the carelessness and emotional gullibility of consumers' (*ibid.*: 166). These attitudes, Cook et al. suggest, are not in alignment with the views of the consumers in the study's focus groups. These individuals voiced their lack of trust in the large retailers, despite these supermarkets being the most frequented food suppliers; for the most part consumers disregarded the lyrical language in the marketing material; and they expressed some doubt about food label health claims (Cook et al., 2009).

In summary, the focus group participants appeared to be immune to the promotional techniques which were the topic of research. It is suggested that the marketers in large

concerns have a motivation to conceal aspects of their commercial activity, such as trade arrangements and the impacts on the environment of their production methods (*ibid.*). Although not overtly employing a critical discourse analytic methodology, then, issues of power were nevertheless revealed by the study. Language use is the particular focus and orientation of the study, supported by concise contextualising passages which concern the structure and background of the organic food industry. However, although there is some description of the appearance of the packaging that is analysed, other than linguistic analysis there is little systematic attention to the use made of the multimodal meaning resources in the organic food promotional materials that were examined.

2.6.5 Infant food promotion discourses and packaging

Cook and O'Halloran (2000) studied baby food labels as part of a European wide project. In the same period, Björkvall (2001) employs elements of Kress and van Leeuwen's multimodal framework to foreground the use of layout in his discourse analysis of Swedish infant formula labels, which he compares with Swedish infants' porridge packaging texts. Using salience as a theoretical keystone, Björkvall points out that the infant formula labels in the study had fewer emotive images and texts than were apparent from analysis of the food packages; there were specialist lexical items and negatively couched phrases (2001: 814). Björkvall also argues that 'a medical context' for infant formula labels prompts the prominence of preparation instructions in the label layout (Björkvall, 2001: 814).

Cook and O'Halloran's (2000; 2008) studies of the use of language on baby food labels emphasise the reader's perspective, and the analytic aim of understanding 'how they are actually read' is clearly stated from the outset (2000: 3). Thus, the 'trigger questions' that were used in interviews with thirty consumers, and in questionnaires, were largely oriented towards the accessibility of the parts of the label which were described by the authors as 'obligatory', i.e. legally required; and short quotations and glosses of a sample of the responses themselves are reported in the study, with researchers' commentaries (*ibid.*:

25-33). The obligatory and non-obligatory elements of labels which made up the data, and which were interrogated through discourse analysis, were from packages of infant formula; follow-on formula for toddlers; and baby cereal. Non-obligatory sections of the labels included promotional terms and the advertising of brands. The use of vague language was noted in these panels. The study also takes into consideration some effects of the 'paralinguistic' aspects of the labels, including teddy-bear imagery; the use of colour; tick-boxes; font and type size (*ibid.*). These features are assessed for their counter-productiveness or effectiveness in aiding legibility. Colour is found to be successful in helping parents in their differentiation of brands, for example, but the size of typeface and its spacing are judged by the researchers to be less than adequate in highlighting warnings (Cook and O'Halloran, 2000). This comparison of the differing communicative force of persuasive and legally required elements on the labels demonstrates that the promotional features are salient (*ibid.*). There is also valuable insight into the pragmatic and semantic discursial features of the data:

...while wording and claims on the labels are usually true from a *text*-based point of view, in many cases readers' *discourses* did not necessarily coincide with text-based meanings because of the...contextual features (Cook and O'Halloran, 2000: 4. *Italics in the original.*)

An illustration of this point that is given by the authors is of parents' reactions to the phrase 'Reduced Sugar Farley's Rusks' on the front of a packet of branded biscuits. The product is marketed for consumption by young infants who are being weaned or by slightly older toddlers. Because of the salience of the claim about sugar content, and relying on background experience of nutritional advice, parents misestimated the percentage of sugar in the rusks, assuming 'reduced' meant 'low' (2000: 33). Again, in response to questions about infant formula ingredient labelling, the ingredient 'LCP' (long chain polyunsaturates) was remembered by some parents as associated with breastmilk and health (2000: 31). The authors also discuss the case of a respondent who made an explicit association between LCPs and intelligence. Cook and O'Halloran

feel that what they term ‘non-obligatory’ information is being relayed to this parent in competition with obligatory Important Notice about breastfeeding (*ibid.*) Compared with the studies by Lakoff (2006) and Freedman and Jurafsky (2011), however, there is no discussion of the possible identity positioning of consumers, in this case parents and other carers, by the communicative techniques that were found on the baby food labels.

An important example is given by Cook and O’Halloran (2000) of the warning statements on formula milk labels not communicating to parents, with the authors recommending that these statements, which are legally required, be more prominent. As in the study of organic food promotion (Cook et al., 2009), an interview with a representative of a label design company is revealing of attitudes to consumers which are made operational in design practices:

[t]here were two main premises which Coleman Planet operated upon in label design, premises which were general ones across the industry. The first one is the presumption that the reader is “lazy”. The second premise is what is known as the ‘communicative hierarchy’ – the label is designed to guide the reader from large type to the small type and from high spacing to low spacing (Cook and O’Halloran, 2000: 8).

Cook and O’Halloran contest both these assumptions, overtly through the analysis of the labels, and by implication in the comments which accompany the consumers’ responses. For example, the placement and the paralinguistic organisation of the obligatory Important Notice, concerning the legally required recommendation that breast milk is best for babies, are questioned in the study (Cook and O’Halloran, 2000).

Tradition and authenticity, also discussed and theorised by Beverland (2006), and by Jurafsky (2014), are alluded to in Cook and O’Halloran’s studies (2000; 2008) in their comments about the different understandings of ‘country of origin’ on infant milk labels and about ‘place of origin’ on a baby cereal box (Cook and O’Halloran, 2000: 24–26). For example, that the Dorset countryside is the place of production of the cereal can be inferred from a prominent image and from an address, neither of which are obligatory on

the labels. The actual origin is Spain (Cook and O'Halloran, 2000). Cook and O'Halloran cite the lack of salience of product origin as a possible cause of confusion for consumers; the claims about ingredients which could be associated with health, such as 'gluten-free' and 'sucrose-free' are also assessed to be confusing (2000: 16).

2.6.6 Food marketing in the digital sphere

Infant milk formula producers promote their products through packaging, but another medium of communication about brands is the Internet. Fairclough (2003) sees such technology as enabling a sophisticated admixture of genres. In discussing the World Economic Forum website concerning debates and meetings at Davos, Fairclough notes that websites are multimodal, non-linear, and able to offer the viewer different reading paths. To this extent, Fairclough argues, websites are open-ended and offer choice. He continues: '[h]owever, one should not overstate "interactive": the design of the website is constraining as well as enabling, i.e. it offers options, but also strongly limits them' (2003: 78). At a macro scale, the parallel restructuring of capital and of communication channels in late capitalism is viewed by Fairclough as susceptible to critique through the prism of genre analysis. Chandler (2007) notes, further, that:

[g]enres are ostensibly neutral, functioning to make *form*...more transparent to those familiar with the genre, foregrounding the distinctive *content* of individual texts. Certainly genre provides an important frame of reference which helps readers to identify, select and interpret texts (as well as helping writers to compose economically within the medium). However, a genre can also be seen as embodying certain values and ideological assumptions and as seeking to establish a particular worldview (2007: 189. Italics in the original).

Chandler thus argues that genre reception can help and hinder the reader/viewer. This is because a recognisable genre provides a guide for a reader's expectations but it also constrains the reading experience through the ability of a genre to, as it were, pre-set societal norms in and through its formal organisation. Askehave and Nielsen (2005)

suggest that the homepage can now be viewed as a genre, while claiming that to develop a theory of genre in the digital context requires integrating the idea of 'genre' with that of 'medium' (2005: 121). Their argument rests on the architecture of a homepage which allows it to be read linearly as well as navigated through the hypertext links which are embedded in its page structure. This ability to read in a non-linear way, jumping from topic to topic via links, provides a dimension which traditional print-bound entities, such as book prefaces and introductions, do not have. The authors further claim that (cf. Chandler, 2007), the genre of the homepage is established enough historically to allow the reader/viewer to have expectations of it as a form, and, crucially, that the web medium itself provides and carries meaning which impinges on features of social practices of use. The possibilities for, and constraints of, the reader's/viewer's understandings of digital entities in use are also a concern of the sociologist and conversation analyst Hutchby (2001; 2003).

Hutchby develops a theory of affordances, a term he ascribes to the North American psychologist Gibson. Affordances, to Hutchby, reside not only in the technology and not only in the user's perception, but in the interaction between them, located in time and space. A striking example which Hutchby gives, after Gibson, is of the waterboatman (*sic*), an insect which lives on algae in ponds and lakes. It is only when this insect uses its ability to walk on the surface of the water in its environment that the affordance of the water to be walked upon is apparent (2001: 448). The affordances of the homepages, for example, would reside in the interaction between the webpages themselves, the device on which they are viewed, and the viewer. It is this complementarity which is crucial to Hutchby's argument. The framework, as Hutchby explains it, also appears to have roots in the phenomenology of Merleau-Ponty (1974). In Hutchby's approach to the 'affordances of things' (Hutchby, 2001: 447) the embodiment of the viewing or perceiving subject is emphasised, *vis-à-vis* the thing-in-the-world which is used by the subject. In this sense, the mind of the viewer is in some way woven into the body, the environment and action in the world. Hutchby attempts in his account of affordances to create a

bridge between a constructivism which centres on the explanatory power of discourse for the theorisation of the social meaning of technologies, and the philosophical realism of ‘technological determinism’, or the view that technologies themselves as material objects create new social practices (2001:442). Hutchby’s notion of affordances makes it possible to view the limits and the potentialities of technologies as objects and carriers of media only in *reciprocal action* with the viewer/ reader. He emphasises that an over- focus on representation has been to the detriment of analysing the affordances, or the constraints and possibilities, of artefacts and their users in the real world. This is a theoretical deficit which he argues has historically been the case in sociological studies of technologies. Where the argument can be seen to have a weakness, however, is evident in Hutchby’s critique of Grint and Woolgar’s (1997) case study. Hutchby has an affordance driven account of someone struggling with a task of connecting a computer and a printer (2001: 451; 2003: 583). In the account, he asserts that the ordinary efforts of dealing with the affordances in practice, which involve in particular Ruth’s prior knowledge and experience and what is offered by the material objects, explain her action. This he calls ‘boundary work’ (2001: 451). Grint and Woolgar had emphasised the discursive negotiation of authority and identity in their account of Ruth grappling with the task. I would suggest that one account does not discount or negate the other, and that both discursive representational work and affordances together could help explain Ruth’s encounter with the printer lead task. Hutchby’s work, however, brings an awareness of the relationship between any affordances of the packaging and the homepages *and* the representational analysis which follows in the analytical chapters.

There are existing studies by discourse analysts of corporate homepages (McLean and Wainwright, 2009), and virtual community discussion group webpages (Pedersen and Lupton, 2016). There is also some sociological discussion of Australian infant formula milk manufacturers’ websites (Taki et al., 2015), and a report of a media communications survey of UK infant formula milk manufacturers’ websites (Gunter et al., 2012). Brookes et al.’s (2016) seminal critical multimodal analysis of infant feeding discourses in public

health communication will also be drawn upon. The contribution of this thesis is to apply detailed critical multimodal analysis to the text and images of corporate ‘club’ homepages, that is to say those owned by infant formula milk manufacturers. There appears to be a gap in the literature in this area of study and this study will thus produce new empirical evidence in this space.

Thurlow (2013) comments on genre when he recounts an anecdote which introduces his account of the use of discourse in the participative web, or Web 2.0. He notes that on a milk carton there was displayed an invitation to the reader to ‘follow’ the dairy producer’s Twitter texts. As Thurlow puts it, now, apparently, ‘products want to be our friends’ (2013: 226). This wry observation leads Thurlow to consider the extent to which language and image presentation on the web are exploited for commercial gain by advertising producers and other agencies of ‘neoliberal capitalism’ (*ibid.*). Thurlow argues that it is crucial to create spaces in which corporate social media can be interrogated. He contends that the developing corporate multimodal presence on the web can circulate ideologies which regulate and even repress readers’/viewers’ notions of identity. The impact of imagery is not analysed, however, as Thurlow focuses on the use of language in discourse. From a critical discourse perspective, Thurlow discusses web development as creating and sustaining myths. These include the notion of the novelty of ‘community’ on the social web. This argument is pertinent to the present study because it presents a critique of the genre of ‘[p]seudo-sociality’ (2013: 225) that relates to the infant milk manufacturers’ ‘club’ homepages which will be studied below. In examining Facebook as a discursive entity, Thurlow notes, after Habermas (1984), that commerce can continue to colonise the ordinary lifeworld by spreading the commodification of everyday, mundane matters. Burn and Parker (2003) argue that it is possible and desirable, when looking at multimodal texts, to employ a systematic method of analysing signification. They recommend that such analysis be integrated with an examination of the socio-economic and cultural context of the production of a text. Their approach to digitally-mediated multimodal texts is social semiotic, building on work by Hodge and Kress (1988), and they set this

within educational research on multimedia reception and production (Buckingham, 2000). Because of their social semiotic approach to digital, multimodal food promotional texts, Burn and Parker's analysis of the Dubble and Cadbury brands' websites (2003: 29–44) is of particular relevance to the present study. They compare how meanings are made and communicated on the two websites which promote chocolates, primarily to children. Through the application of a social semiotic analysis, it is made clear that the websites are contrasting, organisationally and representationally. This example of food promotional website comparison employs the systematic examination of the visual and verbal discourses present in the producers' promotional online sites in order to consider, in particular, how the ethics of food commodity production are foregrounded or obscured there.

2.6.7 Health and foodways in the digital sphere

A brief review of the scholarly literature pertaining to discourses in food promotional websites, especially where these relate to health, indicates, as far as can be seen, that there is a small gap in social semiotic analytical work which this thesis will attempt to fill.

Using the International Code of Marketing Breast-milk Substitutes as an investigative framework, Abrahams (2012) viewed the on-line presence of eleven formula milk brands in the USA. The stated aim of the research was to test the robustness of the Code against the promotional activities of the manufacturers on the internet, looking for evidence of 'violations' (2012: 402). The author found that nine brands were present on at least two social media sites, and associations were found between some of the formula milk producers and bloggers, including sponsorship. The media and communication scholars Gunter et al. (2012) also examined five formula manufacturers' websites in 2008 and revisited them in 2012. The expressed aim of their analysis was to assess the content of the sites in relation to WHO guidance on the advertising of infant formula, and with regard to UK regulation of milk formula promotion. This consideration of the limitations which are placed on the formula producers by legislation thus provided the framework

and extent of the analysis. The identities of the companies whose sites are in the study are not divulged, save that they are 'leading formula product' manufacturers (2012: 18). Breast feeding and bottle feeding regimes are compared, and the section of the International Code of Marketing Breast-milk Substitutes which states that breast feeding is best for infants is invoked. Each website is examined for direct information about formula products, and for evidence of links to particulars about products. Another key investigation carried out into the sites was for any presentation of the 'Important Notice' (Hampson, 2013) which recommends breast feeding. The critique of the use of imagery on the websites described by Gunter et al. is limited to the reporting of photographs of formula packs. The authors conclude that two manufacturers circumvented the UK regulation, by promoting formula for babies under six months through the marketing of follow-on formula. The latter is a milk feed for infants above six months of age. Regulation and the internet advertising of infant formula in Australia is also the subject of Berry and Gribble's (2017) content analysis. This demonstrated that health claims were made on the majority of infant milk formula manufacturers' websites, in spite of regulations which seek to limit the claims which these producers make in advertising.

Subsequent to the research carried out by Gunter et al. (2012), nutritionists in South Africa (Mugambi et al., 2014) contacted twenty five manufacturers of baby food and formula, worldwide. The aim was, initially, to find out how the producers used research on probiotics and prebiotics (believed to promote beneficial bacteria in the human gut). These are often listed as ingredients which are included in food and formula products for infants and small children, and are included in their online promotion (*ibid.*). The response rate to the approach from the researchers was so low, however, that the scholarly work became a detailed account of the lack of replies and of obfuscation by the contacts in the formula milk manufacturing companies. There is a call by Mugambi et al. for greater transparency amongst the formula and baby food producers in all activities. A group of researchers into breastfeeding efficacy, Parry et al. (2013), explored formula milk advertising in North America with focus groups of mothers who were expecting

babies, or who already had small children. The formula promotional brochures in gift bags which are given to parents in North American hospitals were shown to the mothers, and short sections from a Mead Johnson Nutrition & Company Enfamil brand website were printed and discussed with the groups (*ibid.*). The design of the research also includes more than one form of milk formula promotional material, i.e. printed material is considered as well as online matter created by the formula manufacturers. The analysis does not explore the language and semiotics of the material, however, but focuses almost exclusively on the reactions of the mothers to the images and texts which are presented generally as ‘advertising’. It is not possible to disambiguate the responses of the focus groups to the different modes of promotional material. A key finding of the research is that infant milk formula advertising which mentions the difficulties which can be encountered by breastfeeding mothers, especially problems which appear to be related to a baby’s digestion, were discussed by participants as presenting solutions. The researchers recommend the removal of milk formula promotion from all healthcare settings, including the cessation of the distribution of commercial gift bags in maternity wards. They also call for the strengthening of all regulation of infant milk advertising in North America.

2.7 Summary

The literature of health promotion and food promotion as discourses has been explored in this overview in order to position this study, and to locate a gap where further research can make a contribution. It is argued that this critical, multimodally-oriented study of infant milk packaging and ‘club’ homepages contributes to the research by considering such health and food promotional findings to gain an understanding of how these discourses influence images and written texts in the data. The methods that are used in this study, with a description of wider context, will be discussed in the next chapter.

3.Methodology

3.1 Introduction

This chapter will establish the methodological approach of this thesis in order to assess multimodal discourses which are apparent in textual form in UK infant formula milk packaging and online ‘club’ pages data. First, to establish the context in which infant formula milk is promoted in the UK, the birth rate of the target market will be outlined. There is a brief account of the regulation which is relevant to formula milk marketing in the UK. The law has been viewed as a response to campaigning which took place against dubious formula marketing in the 1970s in the Global South (Post, 1985; Neslen, 2018). There is then a description of the two sets of data which form the bases for the later analytical chapters, with a rationale set out for the selection of packaging and manufacturers’ ‘club’ homepages as ‘semiotic resources’ (van Leeuwen, 2005: 3–25). Ambrose and Harris (2011) argue that ‘packaging has become a fundamental element of the brand statement, if not the defining one’ (2011: 7) while the manufacturers’ ‘club’ homepage, in the second data set, can be broadly described as a hybrid, digital form of promotion. Through this means companies communicate directly to consumers, invite engagement such as advice-seeking or feedback from consumers, and can offer platforms for consumers to make contact with each other (Mangold and Faulds, 2009). These ‘club’ pages exist on the companies’ own websites, as distinct from manufacturers’ pages on other social media hosts such as Facebook. The choice of data has been informed by the exploration of food and health discourses in chapter 2.

A further methodological discussion is included in this chapter of the wider factors contextualising the discourses in infant formula milk packaging and the online ‘club’ homepages data in the UK. The two data sets are interconnected because the ‘club’ homepage web addresses appear on the packs. The milk formula manufacturing companies also operate within a broad business and regulatory environment. An historical

shift in the industry towards a wholly profit-oriented dominion may have given rise to discourses which ‘can be said to legitimise social practice’ (Machin, 2007: 13, citing van Leeuwen and Wodak (1999)), and thus it is material to the thesis to explore the relevant aspects of the operation of the formula producers. This is relevant not least as formula feed for babies has not always been dominated by commercial concerns. National Dried Milk was once supplied by the Ministry of Food in the UK, as part of early welfare provision from 1940 to the mid-1970s (Bryder, 2009). It was during the 1970s that alarm was first expressed about the marketing practices abroad of Nestlé (Muller, 1974), one of the corporate entities whose packaging and ‘club’ homepages are studied here. The present chapter will then move on to offer an account of the social semiotic framework which has been chosen for the analysis, following the discussion of discourse/ Discourse (Gee, 2014) and multimodality (Jewitt, 1998; Kress and van Leeuwen, 2006) in the previous chapter. The chapter ends with a position on the ethical considerations which have a bearing on the present study.

3.2 The birth rate of the target market in the UK

One broad aspect of the background of formula milk promotion and its integrated discourses is the nature and size of the potential market, or audience. It is important to include this context before embarking on the discourse analysis of the data because it demonstrates that the infant milk packaging designs change as the manufacturers’ target groups of babies age and develop. In order to remain profitable, the formula milk makers have to make commercial marketing efforts to maintain or increase turnover, for example by finding ways to broaden their target and to promote formula milks for older babies and toddlers (Mintel, 2016). The last Infant Feeding Survey in the UK showed that in 2010, amongst those surveyed, ‘the prevalence of breast feeding fell from 81% at birth to 69% at one week. At six months, just over a third of mothers (34%) were still breastfeeding’ and the latter group included those who were breastfeeding and bottle feeding in a mixed regimen (McAndrew et al., 2012: 1). The infant milk corporates therefore have a large

target market of parents and carers who are bottle feeding babies, shown by a snapshot of the population statistics. In 2016 there were 696,271 births in England and Wales (ONS, 2017); 54,488 births in Scotland (NRS, 2017), and 24,076 births in Northern Ireland (NISRA, 2017). The UK birth rate is falling, however (ONS, 2017). The current regulation of the infant milk formula industry's promotional campaigns prevents the advertising of milk formulas for babies under six months except in trade or scientific journals, nor can there be promotional displays, coupons, free samples, discounts or gifts relating to formula for the newborn cohort (UK Government, 2007). These legal restrictions mean that in the UK, packaging and the manufacturers' websites bear much of the burden of the industry's marketing load.

3.3 The regulatory framework

An historical tension that separates international public health discourse which promotes breastfeeding from infant formula marketing is acknowledged in the development of the regulation of infant formula and follow-on formula (UK Government, 2007; European Commission, 2015). The history of international policy making upon infant feeding codes can shed some light on the development of the regulatory guidance schedules which are designed to limit the promotional activities of the manufacturers. The 1981 World Health Organisation (WHO) International Code of Marketing Breast-milk Substitutes came about because of concern that an increase in infant mortality in the 1970s was caused by malnutrition and diarrhoea, in the developing world, and was connected with the powerful marketing of formula (Brady, 2012). The controversial promotional behaviour of formula milk marketing entities was uncovered initially by journalists working for a non-governmental organisation (Muller, 1974). This attention led to a campaign in the West to boycott Nestlé products, and contributed to the development of regulation controlling formula marketing in the UK as well as elsewhere in Europe.

Campaigning organisations, for example the International Baby Food Action Network and the Breastfeeding Manifesto Coalition, continue to monitor the advertising and promotion of formula milks that may violate the WHO Code (McFadden et al., 2015: 5). For example, a successful complaint was made in 2014 to the UK Advertising Standards Agency by the Baby Feeding Law Group against a promotional campaign run by the British supermarket Asda in cooperation with Nestlé (McFadden et al., 2015: 15). A more recent report by the Changing Markets Foundation found that in 2017

Nestlé marketed its infant milk formulas as “closest to”, “inspired by” and “following the example of” human breastmilk in several countries, despite a prohibition by the UN’s World Health Organisation (Neslen, 2018: 10).

This international context for the discourses to be seen operating through the texts of packaging and ‘club’ homepages, in the UK, is relevant because it demonstrates that concerns about some infant food promotion have not yet abated. The context of this regulatory framework has been discussed by discourse analysts (Cook and O’Halloran, 2000; Nyssönen and Cook, 2000; Cook and O’Halloran, 2008). In particular, Cook and O’Halloran argue that the regulation has limits:

[a]t the moment the legislation is text-based. So long as wording relating to the legislation is somewhere on the text, the manufacturer has complied. The introduction of prohibitory legislation would make the current legislation less text-based and more discourse-based. In other words, it would take account of the likelihood of non-obligatory information predominating in the parents’ mind over obligatory statements (2000: 34).

Cook and O’Halloran here make an important distinction between meaning at the locutionary level and the many implied meanings and allusions which emerge in illocution and perlocution at the broader level of discourse. Manufacturers’ websites, such as the ‘club’ homepages, moreover, are not mentioned specifically in the current Infant Formula and Follow on Act, 2007. In May 2016, WHO presented further guidelines for legislative bodies in the countries who have signed up to the Code (World Health

Assembly Secretariat, 2016); the ‘Guidance on ending the inappropriate promotion of foods for infants and young’ includes the use of imagery on formula manufacturers’ marketing material, including packaging, and also concerns the promotion of baby clubs (see section 7.6.1 for further discussion). The present study extends the analysis of packaging to multimodal discourse, and takes into consideration the discourses which can also be found in the ‘club’ homepages texts.

In practice, adjectivally modified descriptive terms on the bottles and cartons are ‘First Infant milk’, ‘Hungry milk’, ‘Hungrier milk’, ‘Follow-on milk’ and ‘Growing up milk’. The phrase ‘Breastmilk substitute’ is used on all the brands of milk formula which are sold as suitable for feeding from birth. This term has been co-opted from the World Health Organisation guidance on the promotion of formula feed, a document which led to the adoption of regulations which curb the advertising and sale of formula milks. As Cook (2010) argues, ‘[r]egulation adheres to a view of communication as propositional – concerned with facts – but fails to regulate either the linguistic realisation of those facts or the multimodal aspects of communication’ (2010: 173).

Every carton and bottle of milk formula for infants must by law include a table of nutrients and ingredients, and the ‘Important Notice’. Before signing up to join the producers’ baby ‘clubs’, furthermore, the reader/ viewer is invited to read the ‘Important Notice’. The latter uses the declarative wording that ‘breastfeeding is best for babies’, with a complex statement that: [brand name] ‘should be used on the advice of a doctor, midwife, health visitor, public health nurse, dietitian, pharmacist, or other professional responsible for maternal and child care’. Graddol (2007) argues that label design aligns texts which are for different readerships, including the regulator, the shop owner who has to position and sell the labelled goods, and the shoppers. The arrangement of the design features, including contrasts in colour use, typeface shape and size, and outlining, may trigger attentiveness in different readers, including the reader’s awareness of allusions to or quotations from other texts. For example, the web addresses of the infant formula

milk ‘club’ websites are printed on the containers, so the two formats are linked by the producers. The ‘Important Notice’, a short statement which is legally required on formula milk packs for newborns, and is discussed further in the analysis, is also integrated into the layout of the packaging and websites.

The law pertaining to infant milk formula marketing in the UK has a bearing on the argument in this study because it regulates the text and, to a much lesser extent, the imagery which can be used by producers. The later analysis thus tests the relevant sections of the law as they can be applied to multimodal food promotional discourses.

3.4 Dataset 1: infant formula milk packaging

The first dataset to be scrutinised for this research was the packaging of milk formula products for babies and toddlers, with the aim of investigating whether, and, if so, how, discourses of health promotion and food promotion are multimodally presented on the packs. The data I collected comprise the packaging for infant formula milk which was locally available in the UK market for the seven months from March to October 2016. Seven months was an extended enough period to observe the market, yet not so long that the collection lost its coherence as a set (Silverman, 2013). All the infant formula milk which was then available to be bought in the UK was branded, and forms the dataset. The ‘process of making a collection’ was guided by van Leeuwen’s notion of the social semiotic ‘inventory’ (2005: 8) which includes the hypothesising of a semiotic range in the data, in a form which exhibits some coherence. After detailed consideration of dairy food packaging, a first sample was viewed of the promotion of infant milks in the largest UK supermarkets by revenue (Aldi, Asda, the Co-op, Lidl’s, Sainsbury’s, Tesco’s, Waitrose) and high street health product retailers (Boots, Superdrug). From this early activity of examining the packaging of dairy foods in the UK, and from reading the small body of literature that deals with discourses of dairy and functional foods (Koteyko and Nerlich, 2007; Koteyko, 2009) it was clear that, as van Leeuwen suggests, infant milk packaging has

‘semiotic potential’ (*ibid.*: 23–24), can be delimited as a class of multimodal objects, and importantly, could be the site of complex multimodal discourses pertaining to infancy as well as health. As suggested by reviewing the relevant literature (see chapter 2), a research gap emerged. Thus, this critical, social semiotic study of these sets of data is intended to add to the emergent scholarly work on multimodal discourses of food promotion, health and infancy.

The rationale for the duration of the collection period from March to October is that in this time the different types of infant milk packaging could be accumulated, meaning that there was a breadth of data of this kind in order to address the research questions about packaging. All the brands then available could be acquired in this time, and gaps in the data collection could be filled. This collection period and source location allowed me to bring together a grouping with the scope of ‘recognizable types’ (van Leeuwen, 2005: 11) for this data set. The packaging designs did not appear to be altered throughout the seven-month period of collection, and there were no brand entrants or departures. The sample of packaging data is therefore comprehensive, and is listed in tables 3.1 to 3.4, below. The packs were displayed and labelled on the retailers’ shelves, and an example is shown in figure 3.1, below.

Rose (2012) describes layout and labelling as technologies, and in this sense the packs had ‘frames’ to emphasise their recognisability, as van Leeuwen argues (2005: 11). To ensure cohesiveness as a set, the collection only includes packs whose formula is based on dairy cattle milk, and thus excludes soya and goat milk infant formula packaging; non-bovine based infant milks then accounted for 4% of the UK market (Intel, 2016). Formula milks for preterm and low birth weight babies, or for those infants with special dietary needs, were also excluded because these special feeds can be obtained in the UK through prescription (Pinder, 2017) and so lie outside the scope of this study.



Figure 3.1 ‘Try Aptamil follow on milk with Pronutra–advance recommended by 84% of mums’. Retail display with labelling, photographed in the Boots store, Cambridge.

The brands of packaged infant milk are the following: Aptamil, Cow and Gate, HiPP organic, Similac, and SMA (see figures 3.2 to 3.4 and tables 3.1 to 3.5, below). The North American brand, Similac for newborn babies, was on sale during the relevant months in 2016 and thus has been included in the study (see figure 3.2 and table 3.2, below). Similac was withdrawn from the UK market in 2017 and has not yet been re-introduced by its North American producers, Abbott (Cahill, 2017). A notable feature of the market for formula milk for infants in the UK is that it is dominated by two large multinationals (Lee, 2017): Danone (the producer of the Aptamil, and Cow and Gate brand names), and Nestlé (using the SMA brand name). The market has been described in a Save the

Children Fund Report (2018) in this way: ‘[e]ven by the standards of the food industries, infant and young child nutrition remains highly consolidated...The big global players also tend to capture the top spots in national markets’ (Mason and Greer, 2018: 17). The remaining producer of packs in the dataset, the Hipp Group (the maker of the HiPP Organic brand) is a family owned, limited company. It has captured a minor share of the UK formula milk market (Euromonitor, 2017). The manufacturers’ context will be discussed further below, in section 3.6. The dataset comprising packaging therefore includes all the brands of standard dairy cow based infant formula milk which were on sale during the seven month period in 2016. The first supermarket own-brand packaged infant milk products were not introduced to the UK market until the end of 2016 (Best, 2016), i.e. after the relevant data collection period for this study.

Formula milk is packaged by the manufacturers according to babies’ and toddlers’ ages, with numbers on the packs signifying the grouping. The photographs and tables below set out the collection in this study, and illustrate the complex segmentation of the market. The wording in tables 3.1–3.4 (below) follows the relevant titles and descriptors which can be seen in the largest fonts on the packaging labels, and hence there is some variation. As can be seen in tables 3.1–3.4, the milk formulas are promoted not just for newborns, but for babies who are at the weaning stage, and for older, more independent infants whose digestive systems are mature enough for mixed diets (Fuentes and Brembeck, 2017). For this older group of infants, it is important, from the perspective of the targeted parent or carer, to note the difference in price between formulas which are marketed for the age group, and ordinary milk which this cohort can consume with the rest of the family. Full fat cows’ milk, the standard liquid dairy milk which children and adults can drink, was 7 pence per 100ml in 2016 (First Steps Nutrition, 2017; Wunsch, 2018), whereas the cost per 100ml of ready-to-feed Growing up milk was in the range of 23 pence for 100ml (SMA) to 40 pence per 100ml (Aptamil) in the data collection period (First Steps Nutrition, 2017: 10–11). For convenience, each table is accompanied by a photograph of the packaging which forms this dataset.



Figure 3.2: Formula marketed for ‘hungry babies’ from birth

Table 3.1: Formula marketed for ‘hungry babies’ from birth

Brand	Formula
Aptamil	Hungry milk from birth
Cow & Gate	infant milk for hungrier babies from newborn / ready to feed
HiPP organic	Combiotic hungry infant milk from birth onwards
SMA	Extra hungry infant milk from birth

‘Hungry milk’ is marketed on the packaging as a formula which is suitable to feed to babies from birth, with a different recipe from ‘infant milk 1’ for newborn infants (see below). The use of the adjectives ‘hungry’, ‘hungrier’ and even ‘extra hungry’ implies that a baby may require different or more milk in order to be satisfied. The ‘Types of formula milk’ page on the NHS website (2016) questions the benefits of this formulation. The NHS website lists the different infant formula milks in generic terms, i.e. not by brand but by the terms commonly found on the packaging. In the NHS guide, hungry milk is described as a formula which ‘contains more casein than whey, and casein is harder for babies to digest. Although it is often described as suitable for “hungrier babies” there’s no evidence that babies settle better or sleep longer when fed this type of formula’ (NHS, 2016). This NHS webpage does not cite references for the research which is alluded to in



Figure 3.3: Formula marketed for babies from birth to six months of age

Table 3.2: Formula marketed for babies from birth to six months of age

Brand	Formula
Aptamil	Profutura First infant milk 1 from birth
Aptamil	First infant milk 1 / Ready to feed
Cow & Gate	1 first infant milk from newborn / Ready to feed
Cow & Gate	1 from birth first infant milk for bottle fed babies
HiPP organic	Combiotic first infant milk 1 from birth onwards
HiPP organic	Combiotic first infant milk 1 from birth onwards / ready to feed
Similac	First Infant Milk From birth 1
SMA	Pro First infant milk 1 from birth
SMA	Ready to Use First Infant Milk 1 from birth

Infant milk formula ‘1’, promoted on the packaging as suitable for new-born babies, is described in a Unicef UK guide as:

...based on the whey of cow’s milk and the ratio of proteins in the formula approximates to the ratio of whey to casein found in human milk (60:40)...There is no evidence that changing from whey-based first milk to any other type of formula is necessary or beneficial – at any point. First milk is the only food bottle-fed babies need for the first six months of life (UNICEF UK, 2014: 4).

Sales of infant formula 1 are the highest in volume in the UK compared with hungry

milk, follow-on, and toddler formula sales (Baker et al., 2016; Mintel, 2016). This category of formula for infants under six months is closely guided in both its composition and marketing by regulations which apply in the United Kingdom (Hampson, 2013). The manufacturers have to abide by regulations guiding the ‘purity’ of ingredients; the inclusion on labels of ‘instructions for preparation, storage and disposal’; the avoidance of ‘idealising the product’ and the duty not to ‘discourage breast feeding’ (Hampson, 2013: 5–11).



Figure 3.4: Formula marketed for infants from six months of age

Table 3.3: Formula marketed for infants from six months of age

Brand	Formula
Aptamil	Follow on milk 6–12 months 2
Aptamil	With Pronutra Follow On milk / Ready to Feed 2 6–12 months (large and small sized bottles)
Cow & Gate	2 follow-on milk from six months / Ready to Feed (large and small sized bottles)
HiPP organic	Combiotic follow on milk 2 from 6 months onwards
SMA	Pro Follow-on milk 2 6+Months
SMA	Ready to Use Follow-on Milk 2 6+months

Follow-on formula promotion is also regulated in the UK (Hampson, 2013), with the intention of preventing confusion between infant milks for babies from birth with these products. The formula milk powders and liquids that are marketed for babies from six months are highly contested products (Taylor, 1998; Berry et al., 2010; Brady, 2012). It is argued in the Unicef UK guide, for example that:

[p]arents do not need to change from first milk to follow-on milk when their baby reaches six months of age. There is no published evidence that the use of any follow-on formula offers any nutritional or health advantage over the use of whey-based infant formula among infants artificially fed (UNICEF UK, 2014: 5).

Equally, formula milk '3' or '4' (below) is designed to be marketed for older infants and toddlers from their first birthday onwards, and so can capture a wide age range. The NHS website for parents (2016) argues that there is no need for children in this age group to drink formula milk. With the rest of the family they can consume standard, whole, liquid cow's milk which is cheaper and equally nutritious (NHS, 2016).



Figure 3.5: Formula marketed for toddlers

Table 3.4: Formula marketed for toddlers from one year old

Brand	Formula
Aptamil	Growing up Milk 1-2 years 3
Aptamil	With Pronutra Growing up milk / Ready to use 3 1-2 years
Cow & Gate	3 from 1-2 years growing up milk / Ready to use
HiPP organic	Combiotic growing up milk 3
SMA	Pro Toddler Milk 3 1-3 years
SMA	Ready to Use Pro Toddler Milk 3 1-3 years
Aptamil	With Pronutra Growing up milk 4 2-3 years
Aptamil	growing up milk 2-3 years 4 / Ready to Drink
Cow & Gate	4 growing up milk 2-3 years / Ready to drink

The dataset covers all packaging for the formulas on offer during the collection period in 2016, spanning all the infant age groups targeted by the manufacturers. The later analytical chapters explore how visual and written communication on the packaging may be associated with the aim of promoting differently packaged formula milks for the various age groups. As the political scientist Kent (2015) argues about the connections between the different age-segmented formula offerings:

[m]any different kinds of formula are available ... One of the linkages [between formula for babies up to six months and older infants] is through the manufacturers' interest in establishing brand loyalty. The manufacturers press families to start their brand as early as possible, and stay with them, not only for "toddler formula" but also for other forms of baby food (2015: 7).

This points to the complexity of the offering which the different formula manufacturers make to parents and carers. 'Brand loyalty', or the maintenance of buying behaviour by a consumer favouring a particular brand over time, is argued by Kent to be a key aim in formula companies' promotional efforts. Not only do the manufacturers wish to capture the parents and carers' attention at an early stage of the baby's life, but the corporates wish to maintain that allegiance, with the potential for parental buying behaviour to

be extended to other products in the range. All of the formula manufacturers, Abbott, Danone, HIPP Group, and Nestlé, are large and complex enough in their operations to make and promote branded foods apart from formula milk. In order to contextualise the datasets, a short profile of the industry is set out in section 3.6.

3.5 Dataset 2: formula milk manufacturers' 'club' homepages

The 'club' pages differ from the producers' company websites in that they offer no information about the manufacturing companies themselves. Downloaded homepages from each of the 'clubs' can be seen in appendix A, below. The context of these pages is informed by the history of infant milk promotion, in that they continue, in digital format, the tradition of infant formula milk companies' 'baby clubs'. Cutler and Wright (2002), a marketing academic and a pharmaceutical sales representative (2002: 39), describe the baby clubs which operated before the advent of online 'clubs' and operated promotionally through 'direct mailing'. According to Cutler and Wright:

[mothers] are encouraged to sign up for baby clubs, sponsored by infant formula companies... These direct mail programs will then send educational information in the mail on various topics that are of interest to the mother during pregnancy and during the baby's first year. In addition, the mother will often receive product information, coupons...toward the purchase of infant formula, and sometimes, free formula samples (Bird, 1993). Competition is fierce between these companies to try to gain exclusive rights to promotional activities... Gift packs containing infant formula and other baby or female related products will often be provided to mom as an incentive to fill out the enrolment cards (2002: 46).

The 'club' homepages, I argue, may operate as digital forms of the traditional direct mailed baby clubs. As discussed in Chapter 2, there is an existing literature of the critical digital discourse analysis (Thurlow, 2013; Thurlow, 2014), and social semiotically orientated studies of online health discourses (Koteyko and Nerlich, 2007; Thompson, 2012; Hunt, 2015). This study appears to be the first which analyses these company 'club' pages multimodally. The 'club' homepages differ from the companies' webpages. The former

invite membership and so attempt to build brand communities (Laroche et al., 2012). How relationships are built, in image and writing, between corporate authors and their readers/ viewers is a key question in my study. In order to examine the multimodal expression of discourses in the promotion of infant milks, it is important for the scope of this research project to attend to more than one semiotic resource so that the topic of different possible discourses can be examined in depth (Cleary et al., 2014). The selection of web pages within the rubric of 'club homepages' also provides a manageable and compact set, in consideration of the space of the thesis. A decision was made at an early stage to interpret 'homepages' as meaning the pages that are offered to the viewer on the screen before any link is clicked (Schneider and Foot, 2004). The videos that are indicated by a 'play' symbol on the homepages have therefore been excluded from analysis, save the still images derived from the videos which are presented on the 'club' homepages. Choosing to study web pages created by the different manufacturers of formula milk, rather than focussing on one website, provides a broad seam of relevant images and text. At the same time, the 'club' homepage dataset derived from the different manufacturers is homogenous enough to yield apposite information, without being overwhelming (Cleary et al., 2014). In order to make an account of the various visual and verbal texts associated with infant formula milk, I decided to limit the web pages to those owned by the corporates who also produced the packaging in the first data set. There is therefore a clear link between the two sets of data, and comparisons can potentially be made between the datasets about the promotional language and imagery in each.

The infant formula milk producers' 'club' webpages were read and downloaded in July and August 2017 and there are twenty seven pages in the dataset (see table 3.5, below). This period of collection may be viewed as appropriately close in time to the collection of dataset 1, and a period long enough in which to check for substantive alterations in the web pages. There were no changes. This was checked using the web archive, Wayback Machine. The Wayback Machine (Internet Archive, 2017), supplied the following details about the age and stability of the 'club' pages. This archive was searched on 30th October

2017. The Aptaclub originated in September 2012; Cow and Gate Babyclub in June 2013; HiPP baby club in February 2011; and the most recently designed homepage is the SMA baby club site, which started in December 2016.

The producer Abbott did not host ‘club’ pages on their company website, nor does their Similac packaging include a link to a ‘club’ webpage (www.similac.co.uk, (Abbott, 2017b)). The ‘club’ pages in dataset 2 are situated on the remaining manufacturers’ websites and the link addresses to the ‘clubs’, which are quoted on the infant milk packs, operate as landing pages or gateways. These pages are multimodal in hosting complex arrays of imagery and text, with overlays, and page sections which are not static. This means that there are parts of pages, or isolated images, which move left across the screen continually, without the need for scrolling. An important, defining feature of these pages is that the producers enjoin readers/viewers to affiliate to the hosted online groups by signing up and providing some private details: www.aptaclub.co.uk, (Danone/Nutricia, 2017a); www.cgbabyclub.co.uk, (Danone/Nutricia, 2017c); www.hipp.co.uk/hipp-baby-club, (Hipp Group, 2017); www.smababy.co.uk, (Nestlé, 2017).

Table 3.5: Summary of the second data set:

Producer	‘club’ links in August 2017	Formula milk brand name	Webpages
(Abbott)	(no ‘club’ and therefore not included)	(Similac)	n/a
Danone	www.aptaclub.co.uk	Aptamil	7
Danone	www.cgbabyclub.co.uk	Cow & Gate	6
Hipp Group	www.hipp.co.uk/hipp-baby-club	HiPP Combiotic	5
Nestlé	www.smababy.co.uk	SMA	9

I used these sign-in pages as the limit of the selection so that the data were restricted to the web pages open to public view, and they thus form a bounded, recognisable set (van Leeuwen, 2005). As background to the study it was important to gain an impression of

the volume of traffic to the homepages, to investigate whether there was an audience for the ‘club’ homepages. It was also necessary to have an insight into the comparative reader/viewer numbers visiting each ‘club’ homepage site. Relevant information about the numbers of visits by reader/ viewers to the different ‘clubs’ was found by me through the search analytic company, Semrush (www.semrush.com, (Semrush, 2017)). As shown below, the visits are separated by Semrush. A distinction is made between direct visits and views by readers who are linked to the homepages through other websites, when the link is paid for by the formula milk companies (paid visits). The Aptaclub direct views outnumbered the visits to other ‘club’ homepages; however visits via remote web links purchased by Cow and Gate to their cgbabyclub were greater in number on the snapshot day than direct visits. In short, on 15th August 2017, a snapshot was taken of visits to, or views of, the different ‘club’ homepages:

Table 3.6: Visits to ‘club’ homepages on 15th August 2017.

Source: Semrush (www.semrush.com).

	Visits	Paid visits via another advertising site	
www.aptaclub.co.uk	80,418	1,844	
www.cgbabyclub.co.uk	20,338	23,629	
www.hipp.co.uk/hipp-baby-club	20,702	1,332	
www.smababy.co.uk	19,043	4,726	
(www.similac.co.uk) (brand website)	(186)	0	

The ‘club’ home pages were downloaded, and a selection appears in appendix A. The wording of the links on search engines anticipate and define the webpages before the reader/viewer has visited the sites. For example, three of the four navigational links emphasise guidance. Whereas ‘HiPP Baby Club | HiPP Organic’ denotes the brand and the ‘club’, the Aptamil link is expressed thus: ‘Early Life Nutrition Expertise & Advice – Join Aptaclub today’; Cow & Gate use this link: ‘C&G baby club – Pregnancy advice

to baby weaning'; and the SMA search link is phrased as 'Home – Pregnancy and Baby Advice'. Formula milk products are not mentioned in these first links from search engines, with the baby 'clubs' given salience in three of the search engine links.

Table 3.7 and the screenshots (see appendix A, below), show that the 'club' homepages are restricted to images and links. They do not offer experiences such as games or online activities for the homepage users other than viewing static pages, rolling screens, or linking to short videos and further reading. The interactive element that is offered is to contact advisors through a 'live chat' online, or by telephone. The pages repeat signifiers of brand identity. Each 'club' home page has a logo placed on the first page, or placed prominently within the first page in the case of the 'C&G baby club'. The following table has been compiled by examining the homepages for commonalities for the purpose of an introduction to the sites, and then by drawing broad categories such as 'Advice' and 'Offers with links'. It can be noted, for example, that imagery is noticeable in the categories of club identity, of individual infants, and again when indicating other media such as smartphones, a magazine, and formula packaging. The table is not exhaustive, but offers a broad-brush impression of the homepages.

The images announce the identity of the web pages, and may remind the reader/ viewer of the brand which is also seen on the packaging. This is achieved through font choice, colour, and design: 'Aptaclub'; 'C&G baby club'; 'HiPP Organic', and 'SMA nutrition'. The Aptaclub, C&G baby and SMA baby homepages 'club' sets carry out certain similar functions of offering advice about pregnancy and childcare, yet each can be identified with its brand through the repetition of a colour palette which can be seen on the packaging (see figures 3.2 to 3.5, above). It is important to trace the signs from packaging to 'club' home pages because, as the designer and philosopher Kornberger (2010) argues:

[t]hrough advertising, packaging, design etc., the product-commodity transforms into a brand. This has two important implications: first, brands become mental constructs that evoke different meanings; second, brands are powerful because they influence the social and cultural fabric of our world (2010: 42).

Table 3.7: Summaries of the club homepages:

	Aptaclub	C&G baby club	HiPP baby club	SMA mums
Introduction	'Join Aptaclub/register	'Find us on Facebook	Logo	Logo
Club registration and logo	Sign in (/login) Logo	How we use cookies' Logo	'Join now Already a member? Sign in'	
Club identity photographic imagery	Pregnant women exercising	Women chatting/ pregnant women in profile	Women and infants playing	Couple with infant/toddler with parents
Direct address	'Pregnancy exercise is good for you and your baby'	'Prepare for your new life'	'The moment when you realise you're not alone'	'For parents, at all stages of your baby journey'
Offers with links	'Learn more: Exercise; Communication with baby; Breast milk'	Pregnancy calendar; Cuddly toy; Careline	Careline worker; infant; toy Calendar; Exclusive offers; Competitions; Baby development emails.	Articles: Pregnancy; Newborn; Baby; Toddler
Images	Pregnant individuals. Infant.	Careline worker; infant; toy	Mother and baby; packaging,toddler.	Toddler; older infant
Advice	'Tailored advice via email Aptaclub emails are helping mums-to-be through pregnancy'	Careline advice Join 1st Trimester 2nd Trimester 3rd Trimester'	Expert Advice Find out more HiPP baby club benefits	'Find out more Being a new parent can be overwhelming Chatline now open'
Products	'Preparing for Birth App Expert advice when you need it'	Discover more	'Exclusive offers shop hipp.co.uk'	'92% of parents would recommend SMA'
Images	'experts'; a smartphone screen.	'Baby steps' printed magazine	Packaging imagery	Packaging imagery
Closing	'Just get in touch. Live chat. WhatsApp Call us 24/7 Find us Site map'	'About us Email an expert sitemap Terms and conditions Privacy policy Cookie settings'	'HiPP's new range of baby care products Complete range of organic formula milks MORE'	'Staying in touch Sitemap About us Connect with us'

Kornberger makes a powerful claim that brands do not only exist in the material world of retailing, but that they have symbolic value which the consumer endows. In this way, the socio-cultural domain can be impacted by brands in intangible ways, altering the social world and its meanings. The Aptaclub homepages, for example, present a series of images which can be reached by scrolling down, followed by commentaries and links to pages concerning pregnancy, but each image includes a reference which may be associated with the branding. The

commentaries accompanying the images of pregnant women, in this Aptaclub homepage set, announce certain behaviours through slogans and links. These include exercise: 'Active for 2'; communication: 'talking-to-your-baby'; and breast feeding: '7 wonders of breast milk'. Links to pages which offer 'articles' on topics such as diet and pregnancy, feeding regimes; the physical care of newborn babies and advice about toddler behaviour, are frequent on the 'club' homepages and common to each. Links also operate as invitations to join or register for the 'club', through the reader/viewers supplying their details. In the C&G club, Aptaclub and SMA baby pages, there are also images of women who appear to represent the manufacturers in some way, with roles which are referred to as 'baby care advisor' or 'nurse' in the accompanying captions. These connections between text and image will be discussed in detail in chapter 6.

The online phenomena of the 'clubs' may, to some extent, fill the gap in marketing effort. Subsection 2 of clause 23 of The Infant Formula and Follow-on Formula Regulation (2007) now prevents the circulation of coupons or samples of formula for infants under six months in the UK (Hampson, 2013). The relevant section reads:

No manufacturer or distributor of any infant formula shall provide for promotional purposes any infant formula free or at a reduced or discounted price, or any gift designed to promote the sale of an infant formula, to—

- (a) the general public;
- (b) pregnant women;
- (c) mothers; or
- (d) members of the families of persons mentioned in sub-paragraphs (b) and (c), either directly, or indirectly through the health care system or health workers (UK Government, 2007: Clause 23, section 2).

Thus, samples of formula milk for babies from birth to six months and accompanying promotional literature should not be included in the 'Bounty' packs which are distributed to pregnant mothers and families in maternity wards. The homepages have adopted the same specification, 'club', with its connotation of a community, and set out to provide forms of edification, despite the regulatory restriction on coupons and promotion

(Hampson, 2013). The chapter now turns to brief background descriptions of the infant milk companies themselves.

3.6 Manufacturers' profiles

In order to contextualise the packaging and 'club' homepage data, the manufacturers will be outlined in turn. They are large companies which operate internationally, and which make and promote wide ranges of food products including infant formula milk. In an online marketing magazine, the competition between companies for parents' custom is termed 'the battle for baby bucks', with 'plenty at stake' (Nielsen Insights, 2015).

According to market research reports (Mintel, 2016), in the UK the value of sales in milk, food and drink for babies, taken as a whole sector, was £694 million in 2015. Danone (producer of the Aptamil and Cow and Gate brands of formula milk), and Nestlé (SMA brand) spent £11,265,000 in the UK alone in 2014 on promoting follow on, growing up and toddler milks (Mintel, 2016). By 2015, the figure had risen to £15,983,000 (Mintel, 2016).

3.6.1 Abbott

In 2016, the company had 94,000 employees, or 'Abbott people', as the company calls them in their annual report (Abbott, 2017a). They worked in 153 countries in 2016, and made \$20.85 billion (over £17 billion) worth of sales, not including their largest selling pharmaceutical product (*ibid.*: 4). Revenue comes from developing and making medical devices, diagnostic tests, pharmaceuticals, and nutritional products (Abbott, 2017: 8-9).

Abbott's account of the company is the following:

[w]e offer a broad portfolio of market-leading products that align with favourable long-term healthcare trends in both developed and developing markets. Building on a strong foundation of almost 130 years of success, our company is poised to deliver continuing growth, expanding margins, strong cash flow, and increasing returns to shareholders (Abbott, 2017a: 1).

Within a commercial entity called Abbvie, the company produces Adilimumab, branded as Humira, a drug to treat auto-immune diseases such as rheumatoid arthritis; it is the biggest selling pharmaceutical drug in the world, and the annual revenue from Humira sales alone is \$19.9 billion (Grilo and Mantalaris, 2019).

The Abbott nutrition unit produces Similac infant formula, which was marketed in the UK in 2016 with a campaign run by the advertising and public relations company, Thinking Juice (Abbott, 2017a: 1). The Annual Report from 2016 includes this statement, '[w]e are also a leader in pediatric nutrition. Similac, one of our most successful brands, is just one of Abbott's science-based nutrition products designed to make every stage of life a healthy one' (*ibid.*: 13). The brief position in the UK market, for only a year, is not mentioned in the Report.

3.6.2 Danone

The history of Danone is one of twentieth century multinational mergers and acquisitions. The company claims it started in 1919 as 'a small, yoghurt making dairy' in Barcelona. Through expansion, in 2017 it was '[p]resent in over 130 markets... Danone generated sales of approximately €4.7 billion [approximately £22 billion]' (Europa.eu and Danone, 2018). Danone describes itself as a 'company dedicated to achieving health through food for people of every age, in every social and cultural environment and in every part of the world' (Danone, 2018).

Danone has provided an entry about its lobbying activity in the European Commission and European Parliament's Transparency Register, including a summary of its brand and development:

Danone's brand portfolio includes both international brands (Activia, Actimel, Danette, Danonino, Danio, Evian, Volvic, Nutrilon/Aptamil, Nutricia) and local brands (Oikos, Prostokvashino, Aqua, Bonafont, Mizone, Blédina, Cow & Gate, Les

2 Vaches). Thanks to the acquisition of WhiteWave (with brands including Alpro, Provamel and Silk) 2016, Danone is now present in the organics and plant-based alternatives to dairy sectors (Europa.eu and Danone, 2018).

On the company websites, the manufacturers invoke 'health' prominently. For example, Franck Riboud, the CEO of Danone, is quoted in 2018 as describing the 'company's mission' as:

[b]ringing health through food to as many people as possible. Today, this mission guides 100,000 Danoners motivated by the belief that nutrition can and must contribute to bringing health to consumers of all ages, in all countries, of all cultures (Danone, 2018: main page).

It is also noticeable that health here is a value which is brought by the company, presented as part of a campaign which is analogous to a crusade. This is couched in vocabulary which derives from religious roots: 'this mission... the belief... all countries...all cultures' (*ibid.*).

3.6.3 Hipp Group

Hipp is a limited company owned by the founding family which does not provide links on its company website to its annual financial reports. It does publish reports about sustainability there, where it states that the number of employees who were directly employed was approximately 2,000 in 2015, and 6,000 farmers were contracted by the Hipp group as suppliers (Hipp Group, 2018) .The company reports which can be found in the *Bundesanzeiger*, or Federal Gazette, published by the BMJV (the German Ministry of Justice and Consumer Protection) show that in 2016, the most recent year that is accounted for, Hipp's sales were in the order of €861,818,432.00 (approximately £764 million) (Bundesministerium der Justiz und für Verbraucherschutz, 2018). The Bloomberg website provides the following summary:

HiPP GmbH & Company Vertrieb KG manufactures food products for families. The Company offers cooked purees and meals, dairy products, cookies, soft drinks, baby-teas, children-biscuits, bars, flakes, instant food, baby care cosmetics, and crisp cereals, as well as natal for pregnant and breastfeeding women. HiPP operates in Germany (Bloomberg, 2017).

The company included the following summary in its management account in the Federal Gazette:

[t]he quality of food is a top priority at Hipp. For more than 60 years, Hipp has been producing baby food from organic raw materials, fulfilling parents' growing desire for a healthy diet for their babies and children. The proportion of organic products in the Hipp range is continually increasing. Sustainability is an important part of business policy for Hipp. For over 60 years, we have been committed to organic farming and have pioneered sustainable standards...Hipp GmbH & Co. Produktion KG operates in Germany as a production company of the Hipp Group, which exports its products to more than 50 countries (Bundesministerium der Justiz und für Verbraucherschutz, 2018).

It is clear that the brand which Hipp is developing relies on the terms 'organic' and 'sustainable', with some emphasis on the company's history, associated with length and breadth of experience in farming (cf. Cook, 2009). The manufacturing basis of the company is not addressed; however, health is referenced, with a claim that this meets a need and is in response to parental demand.

3.6.4 Nestlé

Nestlé describe themselves on their current company website as 'the world's largest food and beverage company. We have more than 2000 brands ranging from global icons to local favorites, and we are present in 191 countries around the world' (Nestlé, Undated). Referencing their 'history', the company continues: 'We want to shape a better and healthier world. This was how we started more than 150 years ago when Henri Nestlé created an infant cereal that saved the life of a child' (*ibid.*). In 2016, Nestlé's sales revenue from all their products and operations was 88.7 billion CHF (Swiss francs), or approximately £67 billion.

Nestlé, like Danone, have an entry on the EU Transparency Register of lobbyists.

Amongst details that Nestlé have chosen to include are the following:

[s]ales for 2017 amounted to CHF 89,8 bn worldwide [approximately £70 billion] (CHF 16,5 bn in Zone Europe, Middle East and North Africa–Zone EMENA). We employ around 323 000 (2017) people (84000 (2016) working in Europe) and have factories or operations in almost every country in the world (115 (2016) factories in Europe)....

The Nestlé brand portfolio covers practically all food and beverage categories: milk and dairy products, nutrition (infant, healthcare, performance and weight management) (sic) ice cream, breakfast cereals, coffee and beverages, culinary products (cooking aids, sauces etc.), chocolate and confectionery, petcare (sic), bottled water. The total number of brands – including local brands – reaches into several thousands (Europa.eu and Nestlé, 2018).

It is interesting to note that in a recent financial statement (Nestlé Finance International Ltd., 2018), after listing the main categories of products that the Nestlé **group** make and sell, their other activities are described as the ‘sale, exchange, issue, transfer or otherwise, as well as the acquisition by purchase, subscription....of stock, bonds, debentures, notes, debt instruments or other securities’ to sustain the business (2018: 2). This serves as a reminder that the highly complex organisations which produce infant formula milk, and who describe their mission as related to health, are orientated to the creation of profit for shareholders.

As Kent (2015), a political scientist, argues about the formula industry:

[i]ts primary concern is the profitability to parties at various stages of the value chain, and not cost and benefits of various kinds to the final consumers or to their societies. The high economic benefits to the manufacturers explain why infant formula is a growing globalized industry (2015: 3).

Jaworski and Coupland (1999) remark that critical analysis can orient itself towards changes in society, for example by shedding light on the commercialisation or marketization of social practices such as, for example, the feeding of infants. This aspect

relates strongly to the development of the framework which will be used in the analytical chapters, analysing formula packaging and ‘club’ homepages together for the first time.

3.7 Analytical approach

Iedema (2003) has pointed out that developments in multimodal analysis have largely coincided with a growing awareness of the ‘complex social and cultural discourse practices’ influencing, and influenced by, such late-industrial phenomena as digital communication media, increased speeds in financial and trade markets, and cultural internationalisation (2003:33). It is not surprising, then, that scholars have investigated and theorised multimodality, drawing on art historical, cultural, media, social scientific, literary, and linguistic scholarly traditions in the West (Rose, 2012). The approach to the multimodal texts in the data sets here builds on multimodal critical discourse analysis, or MCDA (Machin and Mayr, 2012; Harvey, 2013; Hunt, 2015; Machin et al., 2016). This approach has been selected as an overarching framework because the apparently smooth, colourful surface appearance and meaning of the packaging and ‘club’ web pages are indisputably set within the problematics of a globalised infant formula milk industry. In particular, intertextuality, modality, evaluative positioning and the representation of social participants have been employed in the analysis in order to engage with the research questions. These aspects will be described below, relating them to examples from the datasets.

A social semiotic, critical approach is requisite in the analysis of multimodal discourses of health and infancy because, as Machin and Mayr argue, a ‘process of revealing the discourses embedded in texts ... is seen as one important step in bringing ideological positions out into the open’ (2012:207). Underpinning this framework is the understanding that discourses such as these not only reflect social practices, but are able to construct them too (Machin et al., 2016)2016. It is this duality which produces the amenability to critical analysis of data such as that discussed in the later chapters. This

means that it is possible to examine the ideological choices which can be traced in texts by identifying visual and verbal connotations, collocations, saliences and absences.

A premise of these forms of analysis is that '[p]atterns of discourse control and access are indeed closely associated with social power' (van Dijk, 1995: 20), including organisational control of everyday communicative media systems such as packaging and e-commerce. An explicitly critical perspective is indicated because an aim is to uncover, systematically, the particular discourses which are at work in, and through, the packaging and homepages. In particular, these critical approaches to language and other semiotic forms examine 'structures as strategies of text ... in order to discover patterns of elite dominance or manipulation "in" texts' (van Dijk, 1995: 19). Fairclough (2001) frames the critical approach in this way:

...in seeing language as discourse and as social practice, one is committing oneself not just to analysing texts, nor just to analysing processes of production and interpretation, but to analysing the relationship between texts, processes, and their social conditions, both the immediate conditions of the situational context and the more remote conditions of institutional and social structures. Or...the relationship between *texts*, *interactions*, and *contexts* (2001: 21. Italics in the original).

MCDA has roots in critical discourse analysis and in the social semiotic analytical work of Kress and van Leeuwen (Abousnnouga and Machin, 2008). Chapter 2 looks at critical discourse analysis (CDA) in general terms; here there will be a discussion of its application, within a multimodal critical approach, in this thesis. A critical analytical approach has been integrated into MCDA (Mayr, 2008; Machin and Mayr, 2012), however, language and images are not viewed as isolated instances of text. These semiotic resources are seen as communicatively related, and woven into the broader organisation of power. The link between MCDA and CDA involves examining 'how the microstructures of language are linked with and help shape the macrostructures of society' (Mayr, 2008: 9), part of the MCDA research project. Similarly, CDA has been drawn on here in readings of the website data and in looking at packaging texts, because it is conceived as a model which

is able to produce a description of textual properties, as language is conceived of as a resource; and, crucially, to offer an explanation of the relationship between this resource and the broader sociocultural context.

To enable a close and systematic examination of the language and images which are used in the packaging and in the 'club' home pages, use will be made of concepts from Hallidayan Systemic Functional Linguistics (SFL). As well as placing their approach to multimodal discourse within the SFL tradition of linguistics, van Leeuwen and Kress (2001) acknowledge the influence of O'Toole's (1994) *Language of Displayed Art*. This work employs Hallidayan linguistic terms to model a particular perception of visual art works. When O'Toole (1994) investigates Botticelli's painting, 'Primavera', he applies three functions which are used in the analysis of language in SFL. These are: the interpersonal function, which operates to gain attention and can encapsulate social relations; the experiential (or ideational) function, which can communicate information about perceived reality; and the textual function, which may give structure to the content of the other two functions through the visually formed equivalent of textual coherence (O'Toole, 1994: 5-26). There has been a transfer of these functions from SFL, and from O'Toole, into the analysis of multimodal texts (Kress and van Leeuwen, 2006; Machin, 2007; Harvey, 2013), enabling the interpretation of potential meanings in signs other than language, which are implicated with language and can appear in association with language.

The CDA approach employs SFL to examine language in use, and MCDA follows Kress and van Leeuwen in broadening the use of SFL to systematically investigate images, and the relationships between language and image in texts. SFL helps in ordering questions about the uses of semiosis in the packaging and webpage data. Halliday and Webster use the term 'environment of the text' and this aids in early, higher order interrogation of the datasets to locate their purpose, media, and the presence of the participants and actors in the texts (Halliday and Webster, 2009: 240). As Kress and van Leeuwen (2001) indicate, meaning can be communicated visually by means of layout and typographical design.

Elements of layout such as positioning, and the relationships between word and image, and between objects in the visual field, are considered in the analysis of the packaging and 'club' homepages. The focalisation on the 'participants', or the objects and people who are depicted visually (Kress and van Leeuwen, 2001), is examined. An aspect of this is that social distance can be subtly communicated by means of the angle, framing, and closeness of a photographic shot (Jancsary et al., 2016).

From an overview of the data, intertextuality, modality and evaluation, and the representation of social participants emerged as relevant in answering the research questions (section 1.3, above). These will be briefly described next.

3.7.1 Intertextuality

Machin (2007; 2009) notes that cohesive multimodal texts can be achieved by an author/producer's use of intertextual references when these weave discursive elements subtly through a text. The analysis in chapter 4 looks at how lexical fields associated with graphic design elements may be transposed from other sources. Examples of such recontextualization may be identified in the use in the data of biomedical verbal and visual items. Promotional health claims can be lent plausibility, for example, through a food producer's use of terms and images that have been derived and adapted from scientific sources (Goldacre, 2007; Jurafsky, 2014; Scrinis, 2016)

In its simplest form, intertextuality can be defined as the referencing in one text of another, through allusion, borrowing, or direct quotation (Fairclough, 2003; Machin, 2014; Mooney and Evans, 2015). In connection with the infant milk packaging and web data, it is taken that such intertexts may be expressed linguistically and visually. Fairclough (2001) suggests that intertextuality necessarily implies an historical view of discourses, in the sense that any interpolated text must have a precedent. In the case of the data here, the legal framework within which the producers are meant to work is a source of phrases which apply to milk content, feeding regimes and so on. This example is discussed in

greater detail in the analytical chapters.

The significance of the use of legal source material in texts found on the packs, for example, is that such dialogicality can be employed strategically. This means that legal phraseology may lend legitimization through its appeal to, or connection with, authority (Fairclough, 1992c). Another important aspect of intertextual, discursive practice is the reformulation of texts which can take place. This reshaping can include the arranging of elements to foreground or delete certain actions or actors, or the addition of other elements, including evaluation and negation (Fairclough, 1992c). As van Leeuwen (2005) argues, '[s]uch transformations tend to be motivated by the interests the discourse represents' (2005: 288) and can thus carry out ideological communicative work. Fairclough also argues that presupposition, or the part of a text that is understood to be agreed as 'common ground' between author and reader/viewer, can be an indicator of intertextuality (2001: 127). As Johnstone (2008) observes,

[t]exts can bear intertextual traces of other texts in many ways, ranging from the most direct repetition to the most indirect allusion...A text can quote another text, or represent it through paraphrase. A text can be worded in such a way as to presuppose a prior text...definite articles often introduce condensed forms of propositions handed down from previous discourse (2008: 164).

For the datasets in my collection, it is noted that fragments and phrases may have travelled between the packs and the web pages, carrying 'intertextual traces' as suggested by Johnstone (*ibid.*) . This presupposition can be cued by the use of the definite article and that-clauses to signal coherence with the discourse in the other medium, with the authorial assumption, perhaps, that certain knowledge is taken for granted. As Fairclough (2001: 127) argues, 'having power may mean being able to determine presuppositions'.

Presupposition can be simply defined as an assertion which includes 'something the speaker assumes to be the case' (Yule, 1996: 133). As Yule emphasises, it is the text

producer who has presuppositions, and not the sentence. It is therefore important in the analysis of stance and meaning in persuasive texts, such as the packaging data and 'club' homepages, to discern what elements of assertions include presuppositions. A test of negation of the main verb will be used when analysing texts, as a property of presupposition is that it remains constant when negated (Levinson, 1983; Yule, 1996; Grundy, 2008). A short extract from a formula milk bottle can illustrate how presupposition can be viewed as positioning the writer:

'This Aptamil Growing Up milk is specially formulated to help meet the increased nutritional needs of toddlers from 2 years onwards.'

The presuppositions here are that:

1. There is a milk called Aptamil Growing Up,
And that
2. toddlers from the age of 2 years have increased nutritional needs.

The second presupposed element survives negation of the passive verbal phrase 'is formulated to help'. This can create a persuasive, almost invisible argument (Yule, 1996). Speech acts can be said to be concerned with form and function (Yule, 1996), in that there may be a mismatch between the form at a surface level of the sentence, and its function in meaning. For the analysis in later chapters, it will be valuable to look at the form and function of texts because levels of meaning can be teased out in this way. An example can demonstrate how this will be carried out. The following is extracted from a 'club' homepage:

'at the HiPP Baby Club you will find everything you need to know about pregnancy and your new baby including lots of helpful feeding advice'.

The first dimension of the text to note is that it has the form of a declarative present tense sentence, stating that the Club has all the information that a reader/viewer can possibly

require about pregnancy and newborns. This is known as the locution, or locutionary act. The sentence also functions as an invitation, and this illocutionary force operates implicitly. Involved in this illocution is the presupposition that ‘you’ have a necessity to garner knowledge – it may be then that the perlocutionary effect, desired by the company marketing the ‘club’, is for the addressee to join the ‘club’.

To return to health and food discourses, a touchpoint which is considered in the analysis originates in an investigation by the sociologist Scrinis (2013) into food consumption and production patterns. The research programme led to scholarly work by theorists about ‘the reductive scientific focus on and interpretation of nutrients’ (Scrinis, 2013: 237) in the Western world, including the study of the origins and social effects of this nutritionist discourse. Health claims may be couched in phraseology and imagery derived from nutritionism discourse, focussing on individual nutrients and their implied effects on a child’s body. Such intertextuality may be an example of the ‘colonisation’ of ordinary social practices by the market, and its significance is that what appears to be common sense communication is, on the part of the producer, strategic (Mayr, 2008).

3.7.2 Modality

The examination of modal use in the two sets of data is pertinent because the attitudes of the author/producer can be expressed through modality, and because the positioning of social actors can be subtly communicated. This term can, of course, refer to the genre form a representation takes, as in ‘multimodality’, but here modality is used to denote the scalar expression of certainty and probability. Modal auxiliaries, including will, shall, can, and may, are described as epistemic because they convey estimations of the validity of a statement (Thompson, 2004). A high level of commitment may be shown in the use of ‘will’, for example in the phrase ‘your toddler will need...’. The parent is addressed and positioned by the phrase. Deontic modality expresses obligation or duty (Thompson, 2004). This deontic inflection can be demonstrated, for example, by the word ‘should’ in

the phrase, 'toddlers should be supervised at all times when feeding' (Aptamil 3 Growing up milk package).

The epistemic modality complex has been extended to the analysis of images (Kress and van Leeuwen, 2006; Machin, 2007). Machin's definition introduces the notion as it applies to photographs and graphical imagery:

[m]odality means how real a representation should be taken to be. Modality can be decreased or increased depending on how much the image departs from how we would have seen the image had we been there (2007: 46).

The definition makes clear that image modality is on a scale, and elements in the club home pages such as colour saturation, lighting, detail, background focus, depth articulation, and light and shadow are all evaluated in this study to assess the high or low modality of the images (Machin, 2007: 57). These features of imagery presentation can impart naturalism, for example, through the use of sharp focus, the presentation of light and shade differentiation to suggest perspective, and the display of bold colour. The representation of human participants on the 'club' homepages, for instance, will be examined using this modality test of naturalism. This is because such images, as well as being arresting visually, may suggest that reality is being depicted, and thus a producer stance which may be ideological is being quite subtly communicated. These categories will also be applied to the packaging. There are image elements evident on examples of packaging which appear to present toy or cartoon-like animals, and these will also be interrogated using image modality analysis. The degree of muted focus with which the toys are drawn or photographed, for example, will be investigated in order to judge whether there is evidence of the idealisation of social actors in any images, or is used as a method of foregrounding. It can also be argued that deontic modality is implied through various images which involve icons. In these images there is some perceived resemblance between the signified and the signifier, although as van Leeuwen suggests, these too are 'motivated signs' (2005: 49). These are deployed on some infant milk packages to illustrate

feeding instructions, and can also have implications for the subject positioning of the reader/viewer.

The images on packaging and on the ‘club’ homepages do not exist in isolation from written text, and this relationship can also be probed through modality analysis. This part of the investigation will look at which parts of the packaging and web page data tend to be modalised, and which are presented as ‘beyond qualification’ (Thompson, 2004: 82). Related to this authorial stance, defined as ‘speakers’ positioning with regard to both the content and the form of their utterances’ (Jaffe, 2007: 53), hedging is examined in the analysis of the data. This can employ modals to minimise a statement, or introduce defensiveness about an expression, for example, about a health claim in the packaging. Hedging can be strategically used to limit authorial responsibility (Mooney and Evans, 2015).

3.7.3 Evaluative positioning

It is argued here that packaging and the ‘club’ homepages are mediated multimodal forms, with editors and developers acting as mediators on behalf of the manufacturers. It is necessary to examine the communicative means at the disposal of these mediators, and the use of facets of evaluation are important in the presentation of the products to the public as attractive (Martin and White, 2005). Evaluation operates in the use of pre- and post-modifying adjectives and adverbials, and thus is a system of semantic choice (Halliday and Webster, 2009) for example by describing mothers and their babies as ‘happy’. Martin and White (2005) clarify this in their definition of appraisal as follows:

[it] is concerned with the construction by texts of communities of shared feelings and values, and with the linguistic mechanisms for the sharing of emotions, tastes and normative assessments ... with how writers/ speakers construe for themselves particular authorial identities (2005: 1).

The orientation towards ‘sharing’ in this quotation indicates how appraisal analysis is apposite when considering web pages in which a ‘club’, or artificial online community, is being presented by commercial entities, with the potential for the development of shared attitudes to infant health. The expression of authorial attitudes and values may have power in constructing a position claiming ‘common ground’, as Fairclough puts it (2001: 127) for marketing purposes. This is because the evaluations may be realised in ways which encourage the viewer/reader to see the appraisal as not open to questioning. The validity of a value related to certain nutritional elements such as vitamins can be realised, for example, through juxtaposition in layout, or through the use of bold and large font to create emphasis. More generally, Thompson (2004) argues that appraisal can reflect and reinforce ‘the ideological values of a culture’ (2004: 76).

The close reading of images can reveal that ‘[e]valuations and legitimations can also be realized visually’ (van Leeuwen, 2005: 105). This system may operate through connotations that can be construed, and in van Leeuwen’s examples (*ibid.*), the images of a recognisable social practice (in the figures in his book, images of weddings) include extraneous elements which he argues suggest value judgments. Appraisal can also be communicated through the nature of the gaze and the angle selected to portray social actors (Machin, 2007); do we, the viewers, meet the eyes of a social actor, and do we look up to or down at the participant?

3.7.4 The representation of social participants

The consideration of social participants in the data is crucial in addressing the research sub-question about the linguistic and visual presentation of infants and adults, and their subject positioning in the data, as discussed in chapter 1. As well as lexical items which clearly present and thus position actors in a certain way: ‘mum’, ‘baby’, ‘our expert’ for example, in SFL the forms of process types (verbs) which are used in the clause are also key. Analysis examines the author’s choice of material, mental, verbal, existential or

relational processes (Halliday and Webster, 2009) to represent something that is enacted in the world, as well as describing aspects of the actor and beneficiary where these are present. Royce's (2002, 2007) model of visual and lexical complementarity analysis will also be adapted. His questions use the categories of identification, activity, circumstances, and attributes in the following way:

[w]ho or what are the represented participants, or who or what is in the visual frame (animate or inanimate)? What processes are there, or what action is taking place between the actor(s) and the recipient(s) or object(s) of that action? What are the elements that are locative (i.e., concerned with the setting), are of accompaniment (i.e., participants not involved with the action), or are of means (i.e., participants used by the actors)? What are the participants' qualities and characteristics? ... The next step is to look at the writers' lexical choices to see how the visual ideational choices relate semantically to the verbal (written) ideational choices (Royce, 2002: 193).

The grammatical use of transitivity is applicable in the analysis of the presentation of participants because this demonstrates how, and whether, an action carried out by one participant has an impact on another (human or not) within a clause and as Royce indicates, in the relation between image and writing. Distinctions of power and authority can be expressed in the use of these process types. Material processes, often expressed as communicating physical actions, may foreground the operation of an actor on the world, for example, and can be contrasted with mental processes which can render forms of consciousness such as thought or feeling (Halliday and Webster, 2009). Behavioural processes, as in 'two 150ml beakers every day help your toddler' (Cow and Gate 4 growing up milk package. Emphasis in the original) can position a social actor. As Mayr (2008) suggests, transitivity analysis can also show what is 'ideologically significant', for example 'if agency is backgrounded, obscured... or omitted' (2008: 19). Thus, transitivity analysis focuses on the processes in the texts, or the use of verb forms and what goes-on in the text can tell the reader/ viewer about the representation of participants.

It is important in the data, moreover, to examine the language and imagery that is used to address the reader/ viewer. Of particular relevance are the use of participants and the circumstances with which they are associated. How participants are realised as Actor or Beneficiary (subject and indirect object), and how they are described adjectivally, with an Attribute, may communicate much about their positioning by the authors (Halliday and Webster, 2009). Familiar, informal language, including the choice of pronouns ('you', 'we'), alongside visual stimulus which is meant perhaps to reflect the viewer, can hail the reader/viewer (Thurlow, 2013). These uses are argued by Mooney and Evans (2015) and Fairclough (2001), after Althusser, to be examples of interpellation. This occurs when 'we are positioned or hailed by an ideology which underlies these positionings and ways of being addressed and can reveal some ... taken for granted values' as Mooney and Evans (2015: 17) argue. This can apply for example to consumerism, or a 'well-being' health promotional discourse. Thompson also points to 'interaction through text' (2004: 80-81). Interrogatives can be used to determine the respective roles of author and reader, in what Thompson suggests is a 'response-demanding function' (*ibid.*).

Burgin (1982) discusses the ways in which images of joyous family life are ubiquitous, arguing that these also contribute to the acceptance of ideology as 'the sum of taken-for-granted realities of everyday life' (1982: 42). This observation relates to an analytical study of formula feed texts because of the close connection which marketers may attempt to forge with families, for instance in the formula milk manufacturers' 'club' homepages. Not least, images may establish a set of ideals of 'the family', perhaps equated with notions of health which can be associated with a brand, but that may also lead to feelings in the viewers of inadequacy (Hunt, 2015). The discursive representations of human participants on the packaging and website homepages are thus examined in this study, as these can be viewed as crucial in 'the relationship between texts, processes, and their social conditions' (Fairclough: 2000: 21).

3.8 Ethical considerations

The first part of this section may be termed consequentialist, in that it deals with the matter of my responsibility to the intellectual property owners of the data. Following this discussion, there is a brief, more deontological account, with some researcher-reflexive considerations.

The packaging examples are commercially produced and publicly available. This information cannot reasonably be deemed sensitive or confidential, as understood in the University's guidance (Tendler, 2014). The registered trademarks which cover the infant formula milk brand names, and neologisms such as 'PRAEBIOTIK', prevent the copying and use of those names for commercial gain (UK Government). My use of the packaging data for the purpose of social semiotic analysis does not appear to breach privacy or the intellectual property rights of the producers.

Scholarly literature on the ethics of research using internet data (Hamelink, 2000; Mann and Stewart, 2000; Markham and Buchanan, 2012) rightly emphasises privacy. Ethical decision-making about this entails not harming individuals. There must also be consideration of the divide between the private and public domains. As Markham and Buchanan suggest:

[i]ndividual and cultural definitions and expectations of privacy are ambiguous, contested, and changing. People may operate in public spaces but maintain strong perceptions or expectations of privacy. Or, they may acknowledge that the substance of their communication is public, but that the specific context in which it appears implies restrictions on how that information is -- or ought to be -- used by other parties (2012: 6).

In the study, no '[i]ndividual participant personal information [was] obtained as a result of research' (Tendler, 2014: 6). This is because my data were restricted to the online material which is made available publicly before individual 'club' membership registration

is required. In the interests of due process, however, the producers' terms and conditions of use were read to ensure that my research activity complied. The survey showed that there was some conformity amongst the producers' approaches to their terms of use. This allows browsing, and the downloading of the webpages for uses that are not commercial and do not infringe copyright.

Danone Nutricia state that:

[u]sers may download materials for their own personal, non-commercial use, provided all copyright and other proprietary notices are kept intact (2017b).

The Nestlé group's statement is the following:

[y]ou are permitted to browse this website, reproduce extracts by way of printing, downloading to a hard disk or for the purposes of distribution to other individuals. This is only to be done on the proviso that you keep intact all copyright and other proprietary notices and that the above trademark notice appears on such reproductions. No reproduction of any part of this website may be sold or distributed for commercial gain nor shall it be modified or incorporated in any other work, publication or website (2017).

Hipp state that:

[w]e grant you a nonexclusive, non transferable, revocable and limited license to view, copy, print, and distribute content retrieved from the site only for your personal, non-commercial use, provided that you do not remove or obscure any copyright notice, trademark notice, or other proprietary rights notices displayed on or in conjunction with the content (2017).

Reading the statements of terms satisfied me that the 'club' homepages are intended by the producers for public viewing, and these are not private groups. The homepages are freely available to view by anyone, and thus, on balance, the research using that data was carried out ethically, in accordance with University ethics regulations.

4. Data analysis: discourses of nutritionism

4.1 Introduction

The framework that I will apply in this analytical chapter is drawn from a critical cluster of ideas known as nutritionism (Scrinis, 2013; Sturdy, 2014; Clapp and Scrinis, 2017).

Theorists had previously noted the influence of nutritional science on food and health discourses, including Barthes (2008/1975); the sociologist Lupton (1996); and the political scientists of food, Fine, Heasman and Wright (2002). It is Scrinis, a sociologist, who has sought to identify an organising principle of nutritionism. This is both a term denoting a set of theoretical categories and, according to Scrinis, the name of ‘an ideology’ (2013: 13). The central concepts have been developed and brought together by Scrinis (2013; 2016) through his observation of Western eating patterns; public and private nutrition science; and food manufacturing, in the late twentieth and early twenty first centuries. The original contribution which I intend to make here is to apply close discourse analytical approaches (Kress and van Leeuwen, 2006; Machin and Mayr, 2012) to investigate any textual and visual evidence of nutritionism as a discourse in infant milk packaging, and especially that which may invoke the use of language and imagery relating to health promotion (Jones, 2013; Harvey and Koteyko, 2013).

The nutritionism critique of our current foodways, or food practices and habits, brings together several notions. Food promotional health claims broadly include assertions about the enhancement of well-being, or the reduction in illness risk, through the consumption of certain foodstuffs (Scrinis, 2013). This promotional discourse can, in turn, involve the de-contextualisation of scientific information and the simplification of science knowledge, and its separation from a broader, explanatory model, which is accomplished for marketing effect (*ibid.*). A reductive focus on nutrients may also channel attention to foodstuffs towards their apparently health inducing properties, as can be seen in the increase in the availability and marketing of functional foods (*ibid.*). Nutritionism has been more fully

explicated above, in the chapter about methodology. It is important to trace and discuss these ideas in their discursal forms because, as Barthes (2008/1975) suggests:

[i]n the developed countries, food is henceforth *thought out* ...even if this thinking is done within the framework of highly mythical notions. Nor is this all. This nutritional rationalizing is aimed in a specific direction. Modern nutritional science ...is not bound to any moral value, such as asceticism, wisdom, or purity, but on the contrary, to values of *power*In the final analysis, therefore, a representation of contemporary existence is implied in the consciousness we have of the function of our food (2008/1975: 33. Italics in the original translation).

One connection between power and health beliefs, as indicated by Barthes, is formed through the influence of agents, including marketers and advertisers, over ‘what might be called nutritional consciousness’ (*ibid.*). Nutritionism can potentially aid commercial entities to assert authority in knowledge about well-being and health promotion (Goldacre, 2007; Scrinis, 2013; Clapp and Scrinis, 2017). A communicative effect of this may be the subject positioning of recipients of such discourses, because of the ‘asymmetrical distribution of argument resources’ (Hutchby, 1999: 586) this entails. It is therefore relevant to undertake an investigation of the language and imagery that may be used in the commercial marketing of food because these may stimulate and circulate contemporary beliefs linking health and nutrition.

This analytical move will be made, systematically, because, as Hodge (2017) notes:

[m]eanings construct reality as well as conveying and referring to it. Reality exists outside semiosis, but semiosis constructs versions of reality which guide semiotic agents to act on reality and change it. A normal part of semiosis is to construct and interpret signs of how meaning and reality are related (2017: 229).

A major claim made by Scrinis is that nutritionism, as a paradigm, builds a version of reality which can have a powerful impact on the way we view food, undermining traditionally received knowledge (2013: 14). Rather, nutritionism as an ‘ideology’ can advance the social agents of bio-medical scientific, nutritional, and industrial food expertise (*ibid.*: 21). As Naccarato (2012), an English Studies academic, and Lebesco

(2012), a former food writer, suggest, food discourses can serve ‘as a bellwether for a range of prevailing values and ideologies, including normative attitudes and assumptions’ (2012: 7). A key observation from nutritionism, as a framework, is that normative attitudes to health are circulated. A detailed look at ways in which this process of meanings may be carried out through discourse, using infant milk packs as the dataset, will begin in section 4.3, below.

The analysis in relation to the infant milk packaging data will broadly follow the order in which the ideas appear in *Nutritionism: the science and politics of dietary advice* (Scrinis, 2013). The concepts which are derived from nutritionism will be paired with analytical tools from multimodal critical discourse analysis, and these will be employed to analyse extracts from the infant milk packaging data. As described at greater length in the Methodology chapter, the data that have been selected for inclusion comprise packaging sold in the UK which is used for infant formula manufactured from dairy cows’ milk. The arc of the analysis largely moves from examples of growing-up milk packaging in the early sections, to an examination of follow on milk packs, to a focus on first milk packaging for newborns in the last section

4.2 Functional elements

Clapp et al (2017) suggest that a feature of the paradigm of nutritionism is the emphasis which is placed on the functional element of foods. Henderson and Johnson (2012), who are organisational communication specialists, note that, since the 1960s, manufacturers have been able ‘to create and market food products that claim physiological benefits beyond the need for basic nutrition’ (2012: 71). This definition highlights the action and ability of food producers to make claims about the efficacy of their products. Scrinis’ (2013; 2016) perspective is that in the West we are moving towards an era of functional nutritionism, in which the body itself can come to be understood in a particular way:

[b]odies are now encountered as “functional”, because there is a greater focus on the links among nutrients, foods, and internal bodily functions. The *functionalized body* is also characterized as being nutritionally enhanced, since functional nutrients and foods are understood to target and optimize the functioning and performance of the body (2013: 48. Italics in the original).

Scrinis here alludes to ways in which the body itself is viewed and experienced when foods are introduced and represented as related to physical performance targeting. It is possible to understand how food corporates can help to construct this representation, and make profits with products which can be marketed as ‘functional’. Mephram (2012), a bioethicist, suggests that the ‘highly profitable developments in food marketing’ (2012: 361), such as those for functional nutrients, resonate with a neo-liberal, individualistic approach to nutrition: ‘[w]hereas traditionally food has been considered healthy or safe in terms that are universally applicable, this new perspective focuses on individual needs’ (*ibid.*: 360). These developments create ethical problems, according to Mephram (*ibid.*), such as the exaggeration of expectations about well-being.

The new research which I will bring to the discussion of nutritionism is to investigate how a discourse of food functionalism may be manifested in infant formula packaging.

4.3 ‘Growing Up’ functionally

All the formula products, in the data, which are called ‘Growing Up’ milks for toddlers aged two and over, include claims on the packaging about the dietary requirements of small children. For example, Aptamil 4 with Pronutra+ Growing Up milk includes in its branding, on the front of the package, the assertion that it is ‘Tailored to toddlers’ nutritional needs’. See figure 4.1. The front-focus on the verb ‘Tailored’ presents the product as in some way personalised. Scrinis (2013), like Mephram (2012), argues that there has been a move away from universalised standards of nutrition towards a concern focussing on the individual and their relationship with diet, body size, and responsibility:



Figure 4.1 Aptamil 4 Growing Up milk

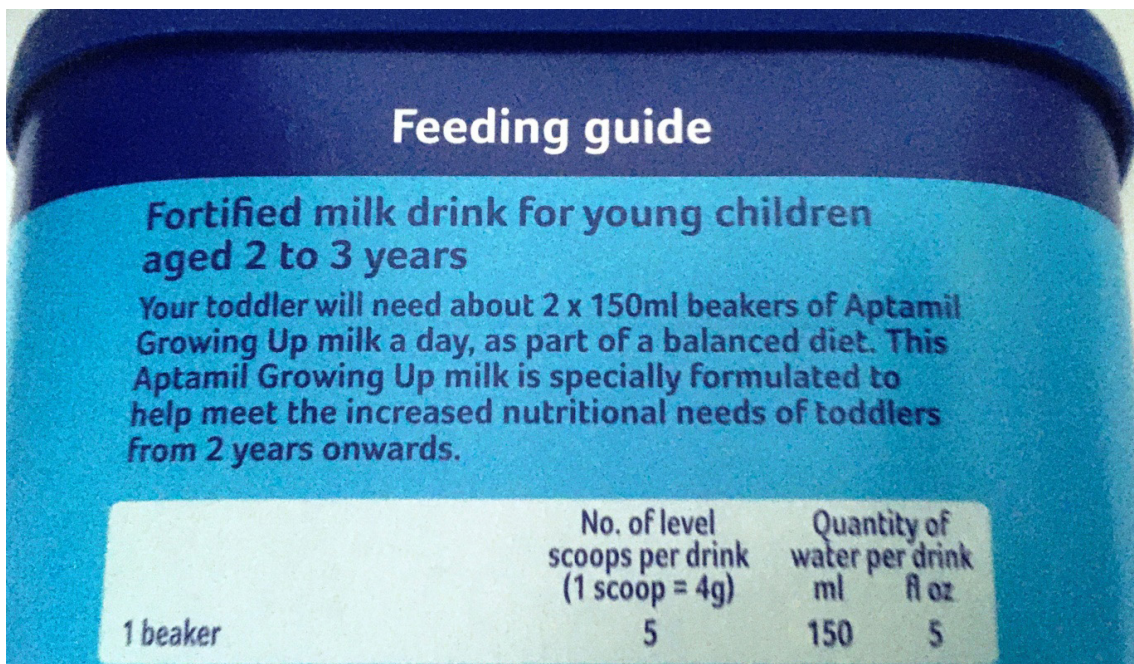


Figure 4.2 Aptamil 4 Growing Up milk

‘[i]n the functional era...there has been a greater emphasis on diets tailored to individuals and their “unique” bodily requirements and health concerns’ (Scrinis, 2013: 187).



Figure 4.3 HIPP organic 1 and
HIPP organic 2 milk packs

This possible meaning of ‘Tailored to toddlers’ nutritional needs’ on the Aptamil packaging, a phrase which appeals to a parent’s sense that their child is unique, is supported by a further text in extract 4.1, on a side panel of this pack:

Extract 4.1: Aptamil 4 with Pronutra+ Growing Up milk

Feeding Guide

Fortified milk drink for young children aged 2 to 3 years

Your toddler will need about 2x 150 ml beakers of Aptamil Growing Up milk a day, as part of a balanced diet. This Aptamil Growing Up milk is specially formulated to help meet the increased nutritional needs of toddlers from 2 years onwards.

This passage appears in the Ideal position in relation to the layout of the side of the package. See figure 4.2. Van Leeuwen comments that this is a multimodal concept:

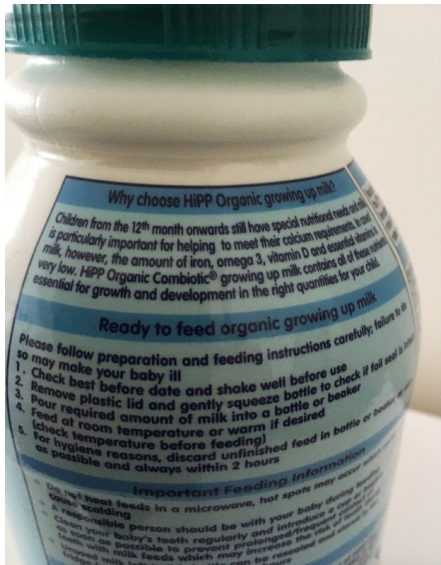
[f]or something to be ideal means that it is presented as the idealized or generalized essence of the information – and that means that it is usually also its ideologically most salient part (2005: 205).

The subheading, 'Feeding guide', is a phrase which immediately creates the impression that children in this age group do have a dietary requirement for this particular milk. This impression is cemented by the high level of commitment expressed in the use of 'will' in relation to the child's need, a use which seems to combine epistemic and deontic modality (Thompson, 2004). The specification of '2x 150ml' as the quantity of milk per day that is recommended is authoritative, but lacks any explanation or supporting text. The claim that the milk is enhanced in some way is communicated twice, through the careful use of undefined predicates, 'Fortified' and 'specially formulated', and these take on a positive evaluative meaning in the context of this passage. The predicates both link, through textual coherence, with the presupposition that toddlers have 'increased nutritional needs', in the second sentence. In other words, a functional nutrient 'need' is created and an offer is made to satisfy it, through discursive means.

The brand name, Pronutra+, a neologism, references nutrition with a positive evaluative prefix and a graphically designed version of the suffix, plus '+', framing the texts on the packaging. In another example from the data, Hipp organic 3 Combiotic® growing up milk packaging, there are other neologisms in evidence. Apart from 'Combiotic' in the product name, the adjectival form 'Præbiotik' is used. The ligature in the prefix and the 'k' final consonant mark the word as unusual, and the communicative effect may be intended to suggest the prestige of a Germanic loan word and thus enhance brand recognition (Danesi, 2007). However, although the neologism is employed, thus avoiding the use of the term 'prebiotic', it is clearly claiming that the milk includes a functional ingredient. This is in use on the packaging even though there is Department of Health guidance on the EU Regulation of infant formula promotion by manufacturers. This guidance states that:

...claims relating to 'prebiotics', such as 'contains prebiotics', are considered health claims because they describe a function and are not permitted. The term prebiotic cannot be used as an alternative wording for the nutrition claim "contains fructo-saccharides / oligosaccharides" (Hampson, 2013: 13).

These terms suggest that marketing claims about functional nutrients are being made by the manufacturer and text producer, because of the association of functional foods with dairy probiotics (Koteyko and Nerlich, 2007; Koteyko, 2009). The terms are also used on the packaging for HIPP organic milk for newborns and for babies who are six months and older (see figure 4.3,).



Left: Figure 4.4 HIPP Organic 3 Combiotic® growing up milk – close up

Figure 4.5 HIPP Organic 3 Combiotic® growing up milk

Kress and van Leeuwen argue that the Real presents ‘more “down to earth” information..., or more practical information’, as opposed to the ‘promise of the product’ (2006: 187). In the Real position, at the bottom of the front of another HIPP organic product, called HIPP 3 Combiotic® growing up pack, is placed the following slogan: ‘Gentle satisfying organic growing up milk for active toddlers Nutritionally superior to cows’ milk’. These unsubstantiated descriptions on the HIPP 3 package are interesting, communicatively, because they appear to be exceptions to the chosen multimodal analytic framework. One warrant for their inclusion on the packaging may be the slogan, ‘science and nature hand in hand’, which appears in a rainbow-like graphical arc in the middle of

the package face. The presentation of ‘nature’ as a discourse will be discussed in chapter 5. Another side panel (see figure 4.4,) has the following passage in the Ideal placement, at the very top of the bottle, below the neck:

Extract 4.2, HIPP organic 3 Combiotic® growing up milk

Why choose HIPP Organic growing up milk?

Children from the 12th month onwards still have special nutritional needs and milk is particularly important for helping meet their calcium requirements. In cows’ milk, however, the amount of iron, omega 3, vitamin d and essential vitamins is very low. HIPP organic 3 Combiotic® growing up milk contains all of these nutrients essential for growth and development in the right quantities for your child.

The argument in Extract 4.2 proceeds through four rhetorical moves which draw in the reader. A question is posed to the reader in the subheading, to which the persuasive passage in the extract is designed as an answer. Next, it is posited in the passage, through the use of the indicative mood, that the target group, i.e. children above a year, are exceptional in their dietary requirements. The adverb ‘still’ allows the inference that it is generally accepted that younger infants have special diets, which are framed as: ‘special nutritional needs’. An illocution is that children above a year continue to require formula. Calcium is cited and emphasised, again through the use of an indicative mood form, as an example of toddlers’ special nutritional needs, although there the claim is hedged. In the rhetorical move which follows, doubt is cast on one of the competitors to the formula for the target age range, i.e. standard full fat cows’ milk. The connector, ‘however’, anticipates the foregrounded assertion that ordinary milk contains few of the specified nutrients. The apparent lack of nutrients in cows’ milk is emphasised through the strategic use of the intensifier, ‘very’. In extract 4.2, the Hipp organic brand name is repeated and therefore given salience, in the last move in the argument. This gainsays the assertion in sentence two, through a presupposition that the nutrients in the formula are required, not just by all children, but specifically by ‘your child’. This claim also makes a strong appeal to the reader, through the use of the second person possessive pronoun.

There is no substantiating evidence advanced in the passage about the digestibility of nutrients in either cows' milk or the formula, and the possibility is therefore absent that young children can derive those nutrients from a variety of foods after weaning and when being weaned (Skinner et al., 2003; Dare and O'Donovan, 2009). Scrinis argues that a history of focusing on functional vitamins in nutrition science has led to 'the myth of nutritional precision...and the perception of nutrient scarcity' (2017: 71). Another example from the data helps to illustrate this point. A short passage in Cow and Gate 2 follow on milk packaging asserts that the product 'has been tailored to deliver hard-to-get nutrients'. The formula milk is conceptualised by the text producers, reductively, as a delivery method for supplying scarce substances. The exposition in Extract 4.2 appears to be designed to create and maintain apprehension in parents about feeding small children (Lee, 2007b; Lee et al., 2014). The discursive tactic of focussing on functional nutrients for commercial ends, and on an apparent risk of a shortage of certain essential substances in a toddler's diet, allows the manufacturer to promote their own product to quell parental anxiety.

4.4 Making health claims

Closely associated with the marketing of functional food elements, is the presence of health claims on packaging. Simon (2006), a public health lawyer, suggests that this is a food corporate marketing strategy, often drawing on the discourse of public health awareness campaigns. Health claims can successfully distract from the relationship between foods and the manufacturing industry, and the highly processed content of food products (Scrinis, 2016), although resistance from consumers to the language of food label health claims has also been documented and insightfully discussed (Cook et al., 2009; Jovanovic, 2014). Health claims in food promotion take the form of postulations associating the brand with broad notions of well-being, and have been widely documented (Heasman and Mellentin, 1998; Coveney, 2006; Freedman and Jurafsky, 2011). Moreover, Henderson and Johnson (2012) note that:

[a]s the boundaries between foods and medicines are simultaneously becoming blurred and being reconstructed, the resulting complexity of medical and market information draws on multiple alternative discourses, and creates challenges that are played out rhetorically (2012: 71).

Over and above the disparate discourses of well-being and ‘healthy food’ promotion which packaging designers can draw on, the packs themselves display complex arrangements of features in order to communicate health claims. Here I will argue, for example, that compliance with the current regulation of infant formula marketing allows packaging designers to encode nutritionism health claims in euphemism. This can occur through the placement of promotional references to products for older children on packs for newborns.



Figure 4.6 Cow & Gate 1 first infant milk powder pack– close up

The ‘[u]se of nutrition and health claims in relation to infant formula’ is, at present, limited, in law, by European Union Regulation 17(4) Directive and Annex IV (Hampson, 2013: 41). This regulatory framework prevents a manufacturer from making explicit health claims on the packaging, or in other promotional material, when selling formula milks for infants who are *less than* six months of age. The Cow & Gate 1 first infant milk pack, for newborn babies, is an example demonstrating how this regulation can apparently be

flouted, because it includes health claims.

This Cow & Gate 1 first infant milk container (see figure 4.6) displays a panel with an interrogative subheading, all in upper case for communicative salience, clearly addressed to the parent: 'What's next?'. The text passage and two promotional illustrations, of follow on milk products of the same brand, take up a quarter of the space on the back of the package. These texts clearly have significance communicatively, as they use more of the layout on the pack than do the preparation instructions for the milk, or the list of ingredients. The latter cases are in smaller type and are less prominent. The passage under discussion here, reads:

Extract 4.3 Cow & Gate 1 first infant milk

WHAT'S NEXT?

Sitting, clapping, crawling – as they do more, they need more. From 6-12 months your little one will be developing new skills at an amazing pace. Our Follow-On milk can help support your baby's changing needs at this special time in their development, as part of a varied, balanced diet (emphasis in the original).

As in earlier extracts above, 'need' is emphasised through repetition, and through the end focus of the first sentence. A case is made that older infants are exceptional. This is argued through the use of the future indicative, 'will be developing'. The packaging is thus being used as a form of advertising hoarding for formulas for older children. These formula milks for babies over six months are not as strictly regulated as milks for newborns, as: '[c]laims made in relation to follow-on formula are controlled by European Regulation (EC) No 1924/2006, on nutrition and health claims made on foods' (Hampson, 2013: 40). This is a regulation which applies generally to foodstuffs, and which is itself subject to an on-going debate and to the lobbying of the regulatory institutions by food corporates to be weakened (Heasman and Mellentin, 1998; Brownell and Koplan, 2011; Kurzer and Cooper, 2013). In extract 4.3, the claim about the efficacy of the milk is hedged by the modal, 'can' and by the entailment in the final phrase that older infants do eat other foodstuffs. The use of the phrase 'a varied, balanced diet' derives from a scientific nutrition discourse of 'healthy eating' and has entered the mainstream media

discussion of food as a goal for the responsible citizen (Naccarato and LeBesco, 2012). Its communicative force here, in the formula text, is to suggest that the formula makes a necessary contribution to that balance and variety in the infant diet, and thus draws in the parent to the healthy eating discourse as a potential buyer. The hedges are present, presumably, because of regulation which prevents direct claims being made on first milk packaging for newborns. Cook and O'Halloran (2000) have pointed out that the use of references to formula for toddlers on first milk packaging is controversial and potentially confusing for parents.

Visually, the passage in extract 4.3 is set apart by thin lines above and below, which frame it. The passage is set in relatively large type, with a highly saturated green font colour which contrasts with the pale green background, and stands out from the strong red background on its right. Bold type emphasises some of the keywords about infant well-being in the passage including: 'do more', 'need more', 'new skills', 'changing needs', and 'development'.



Figure 4.7 Cow & Gate 1 first infant milk powder pack

Italics in the panel are used to foreground the phrases 'amazing pace', 'support' and 'special time'. These lexical choices serve to associate the product with the needs of the child,

which are denoted as distinctive with particular requirements. The framing lines also act as vectors towards the small representations of follow on milk packs aimed at older infants, which are positioned as the New in relation to the Given of the passage in extract 4.3. (See figure 4.7, above.) In multimodal discourse analysis:

[b]roadly speaking, the meaning of the New is...“problematic”, “contestable”, “the information ‘at issue’”, while the Given is presented as commonsensical, self-evident (Kress and van Leeuwen, 2006: 181).

In this way, the visual representations of follow on milk packs are endowed with ‘status or value for the reader’, while the ‘What’s Next?’ infant well-being passage in extract 4.3 is presented as ‘agreed upon’ (*ibid.*).

4.5 Foregrounding well-being and child development

It is noticeable that words whose root is ‘develop’ are used repeatedly on follow on and growing up milk packages. Machin and Mayr suggest that ‘[o]verlexicalisation gives a sense of over-persuasion and is normally evidence that something is problematic or of ideological contention’ (2012: 37). In extract 4.3, moreover, found on a first milk package, the word ‘development’ is typographically given stress through emboldening. ‘Development’ can be seen to equate to ‘well-being’ in extract 4.3.

The case of another example from the data, the Similac 2 follow on milk pack, also includes health claims. These link ‘key nutrients’ with ‘development’, ‘growth’, ‘normal functioning’ and immunity, derived from bio-medical lexical fields:

Extract 4.4 Similac 2 follow on milk (emphasis and upper case letters in the original).

Developed by dedicated scientists, our palm oil free formula provides key nutrients like omega 3 & 6, vitamin D, calcium and iron, to support your baby’s growth and development at every stage, plus vitamins A and C to support the normal functioning of their immune system.

Nutrition Start: IMMUNITY – Vitamins A and C to support normal immune system function GROWTH – Linoleic acid (LA)/ α -linolenic acid (ALA) to support normal growth* COGNITION – Iron to support normal cognitive development DEVELOPMENT – Calcium and vitamin D to support normal bone development (*sic*)

Here there is a presupposition that immunity, growth, cognition and development are amongst the priorities of the packs' readers, positioning parents as sharing in these 'pre-constructed' elements of the discourse argument (Fairclough, 1995: 6). This is persuasive, rhetorically, (Machin and Mayr, 2012). The food is being simultaneously endowed with, and reduced to, a collection of health-giving functions. Scrinis (2013) suggests, moreover, that health claims on food labels can serve to distract consumers from the artificiality of food processing, and in this extract the nature of manufacturing is side-stepped, discursively, through the scene-setting orientation (Labov, 1972/1999) towards 'dedicated scientists'. This is suggestive of a scientific laboratory, a more prestigious image to project for the origin of this product than a factory. The double meaning of 'dedicated' can be played on by text writers here, to enhance the status of the product and producers and to bring together the lifeworld and the technical arena. The scientist group is presented as 'devoted to his aims or his vocation; single-minded in his artistic or professional integrity' (*sic*) and 'available only for a particular purpose or a particular category of user' (Burchfield, 1987: 400). The device of referring to scientists early in the passage establishes the foregrounding of the bio-medical lexical strings which follow it. The evaluative pre-modifier, 'normal', and the infinitive, 'to support', are used repeatedly, and, hence, strategically. 'Support' softens the claims with which it is connected textually. It is lexically linked to the genre of health counselling; as used in combination with a freighted notion of child developmental 'normality', it engages the reader. Scrinis (2013) makes the strong proposal that promotional nutrient content claims 'should be prohibited', and goes on to comment on agency:

[h]ealth claims – whether in the form of structure/function or disease prevention claims ...make definitive claims regarding an ingredient's health benefits. Consumers could instead draw their own conclusions (2013: 251).

This has relevance for the agency of parents.

SMA 2 packaging, further, includes the following health claims:

Cognition: with iron to help support normal cognitive development/

Growth: with omega 3 & 6 to support normal growth and development (sic).

These phrases are laid out with graphically designed devices in a light bronze tone, outlined to resemble cog wheels with interlocking teeth below the neologistic caption, 'Nutri-Steps™'. (See figure 4.8, below). The cog wheels are given a soft halo effect through the use of contrasting background shading in white, which serves to make the section foregrounded on the formula tin. These layout features draw in the viewer's attention, and perhaps connote the nutrients as contributing to a smooth running machine. The machine, with quantifiable inputs and outputs, is an established, and reductive, metaphor in discourses of nutrition and health (Turner, 1982; Jones, 2013; Scrinis, 2013). The body as machine is an example of a persuasive discourse metaphor (Harvey and Koteyko, 2013). Another powerful frame is that of nutrient deficiency and the role of vitamins (Horrocks, 1995), which will be explored next in the context of infant milk packaging.



Figure 4.8 SMA PRO 2

Follow-on Milk

Vitamins, according to Apple (1996), a Women's Studies academic, accrued an iconic value in our society. She comments that '[i]n our consumer culture, vitamins became a symbol of the benefits of science available to all' (1996: 179). The modern history of food manufacturing and food promotion in the West provides the socio-cultural context for a nutritionism discourse of a diet deficit, which Scrinis describes here:

[f]ood manufacturers played on [the] new fascination with vitamins and concerns over vitamin deficiencies in advertisements that highlighted the health benefits of the vitamins naturally occurring in their foods or those added during processing.... Some advertisements warned parents that vitamin deficiencies might be undermining their children's growth and that deficiency diseases could be developing that were not immediately visible to the naked eye (2013: 67).

It is possible to understand, through Scrinis' argument, how parental anxiety about the nutrients in a child's diet can be exacerbated through such advertising, especially as the discourse suggested that a dietary deficit may not be immediately obvious. The theory of vitamin deficiency can be traced in the promotional language and imagery presented on contemporary children's formula milk packs. The layout on the side of the 1 litre Cow and Gate 4 pack, shaped like an ordinary milk carton, has the visual organisation of a triptych, with the particular vitamin given prominence in each of the three sections (see figure 4.9, below). The Ideal position, where the vitamin is described as 'for normal bone development', and the Real placement, are Mediated by an image of two red feeding beakers, one with 'vitamin D' emblazoned on it, in the Centre (Kress and van Leeuwen, 2006: 198-199). The colour of the beakers is complex, semiotically. It is visually demanding of attention and it links the brand with the health message concerning vitamins. Highly saturated red, however, can also connote a warning rather than reassurance (Kauppinen-Räsänen and Luomala, 2010), and perhaps this helps to emphasise risk as a component of the vitamin deficit discourse of the text. The Real is represented by a stylised representation of sunrays arranged around a lower case letter 'd', set textually beside the following announcement: 'Vitamin D Mission/ Find out how much vitamin D your little one is getting at vitamindmission.co.uk'. This aligns the

manufacturer overtly with a health campaign. Scrinis (2013) refers to ‘nutrient fetishism’ as the ‘worship of particular nutrients thought to be exceptionally health enhancing’ (2013: 259), a practice which can endow marketers with power and orientate consumers towards their products.

This example in the data demonstrates how the development of nutrient fetishism is accomplished discursively. In the largest type, in a contrasting green, the illogically exaggerated claim, ‘Delivers at least 100% of your toddler’s daily vitamin D needs’, can be found beneath the illustration of children’s beakers.



Figure 4.9 Cow and Gate

liquid formula 4: side

The different textual and multimodal emphases make it clear that this health claim is the brand’s unique selling point, playing on, and helping to construct, parental anxiety about vitamin D in toddlers’ diets (Apple, 1995; Clapp and Scrinis, 2017).

4.6 De-contextualising scientific information

The medical historian Bufton (2005) argues that the history of modern nutritional science demonstrates that advice about the diet, communicated to the public, has been contradictory and has changed over time. This is an argument concerning nutritionism (Scrini, 2013: 26–30). In addition, the complexity and mutability of nutrition science research and evidence fall away (Albala, 2013; 2015), when elements which seem to

be associated with diet are simplified and isolated by later authors and editors, and are redeployed in text. The original contexts, providing discussion and nutritional evidence which can be challenged, are not re-presented. The relevance of the phenomenon of scientific decontextualization to an analysis of packaging texts can be shown by a simple example from the work of the linguist Jurafsky (2014). With colleagues, he examined ‘the overall flood of health talk’ (*ibid.*: 110) on crisp packets in North America, and found that although the crisps (or chips in North American English) did not contain a substance called trans fats, this was still referred to on packets, ‘pretending, or at least actively encouraging the belief, that the chips are good for them, or at least healthy enough to overcome the guilt’ (*ibid.*). Decontextualised dietary advice can thus be re-framed (Ensink and Sauer, 2003) for promotional effect.

It is marked that terms with a scientific aura are not only listed in the tables of ingredients in the formula milk packaging data, but are featured more prominently in the layouts. Several small lexical units appear on the packaging. One of these terms occurs at least once, in all but one example of infant milk packaging. (See table B.1 in appendix B.) Space dictates, however, that a selection be made, and thus two extracts from packages that are produced by different manufacturers, and that are marketed for different age groups, will be analysed in detail.

The first is from Aptamil 1 First Infant milk from birth, and the second can be found on SMA PRO 2 Follow-on Milk 6+ months packaging. The lexes and abbreviations which form the objects of study in this first section are ‘GOS/FOS’ or ‘Galacto- and Fructo-oligosaccharides’; ‘DHA’ or ‘Docosahexaenoic acid’, also referred to variously on packs as ‘LCPs’ or ‘Long Chain Polyunsaturated fatty acids’; ‘Nucleotides’; and ‘Omega’ or ‘Omega 3 and 6’. These all appear to be technical terms derived from bio-medical or scientific fields. Bonotti (2015), a philosopher, suggests that ‘normative problems’ arise through such a reductive approach:

[n]utritional reductionism is, in many ways, dependent on health and food reductionism. In other words, we need to have already prioritized health more than other food-related goals, and decontextualized foods from overall diets, before we can start being concerned with the nutritional composition of each specific food and focus on those nutrients which are allegedly most conducive to healthy outcomes (2015: 407–408).

If health is given a focus, however ‘health’ is defined and represented (Jones, 2015) in comparison with values which historically may have had precedence, such as enjoyment, then health-giving nutrients are selected and decontextualized. It is interesting to note how packaging texts can attempt to shift the focus of the reader onto ‘nutritional composition’. For example, technical lexes and abbreviations are noticeable in the dataset. These salient scientific terms have been chosen for analysis because they appear to have been taken out of their original context, and demonstrate intertextuality. Because the terms have been selected by packaging writers and designers to be repeated and highlighted, separately, in the packaging layouts, it is clear that they hold communicative salience (Machin and Mayr, 2012).

Extract 4.5, for example, is from a side panel of Aptamil 1 First Infant milk:

‘Contains Docosahexaenoic acid (DHA): A type of Long Chain Polyunsaturated fatty acid (LCP).
Contains GOS/FOS: Our patented blend of Galacto- and Fructo-oligosaccharides (9:1).
Contains Nucleotides’

The font size that is used by layout designers draws attention to the words. More will be discussed below, in the next section, about multimodality and these extracts. A feature of the phrases which indicates that they are from a scientific register in origin is that they are polysyllabic, including morphemes from Greco-Latinate derivation, as in ‘Fructo-oligosaccharides’. The reader is offered an elaboration of ‘Docosahexaenoic acid (DHA)’, after the colon in the line in extract 4.5, but that supplies an opportunity to the copywriter for a display of more technical terminology on the package. The

definition does include the polysyllabic compound adjective, ‘Polyunsaturated’, which, like ‘Omega 3&6’ in extract 4.4, may be familiar to readers through their circulation as terms in nutrition discourse in magazines and TV advertising (Friedman, 2004; Counihan and Van Esterik, 2008; Nestle and Ludwig, 2010). However, the pre-modifier, ‘Long Chain’, is marked by being technically, chemically descriptive and is given upper case initials. The expansion of GOS/FOS, in extract 4.5, is ‘Our patented blend of Galacto- and Fructo-oligosaccharides (9:1)’. The phrase uses the first person plural possessive pronoun, a feature of marketing and advertising discourse which creates a sense of false familiarity and draws in the reader (Cook, 2001). This is associated with an adjective + noun construction, ‘patented blend’, a phrase that is derived from marketing discourse and which presents a claim concerning uniqueness. The bracketed numeric expression, ‘9:1’, presumably refers anaphorically to the proportion of ‘-oligosaccharides’ in the ‘blend’, but this is not explained overtly. The last line introduces another polysyllabic term, ‘Nucleotides’, which connotes (Barthes, 1977) some scientific significance through its similarity to the more familiar word, ‘nucleus’. Johnstone argues that expressions can be pre-constructed, as ‘formulas that circulate from text to text in ready-made form’ (2008: 164–165). In this way, lexis derived from popular media, advertising and scientific discourses are aligned intertextually, even in a packaging text which is fragmentary in nature (Graddol, 2007).

On the topic of discursal intertextuality, as Gee (2014) observes, allusions to external texts can endow a document with ‘authority’ which has been derived from unacknowledged sources (2014: 76). Gee asks ‘[w]hat function does this [intertextuality] serve in the text?’, referring to any text under analysis (*ibid.*: 78). In extract 4.5 the technical words which have been borrowed create a focus on single, complex-sounding ingredients which may endow the manufacturers with expertise and create an aura to surround a premium, i.e. expensive, product.

De-contextualisation which foregrounds single nutrients can also be seen here, in Extract 4.6 – SMA PRO 2 Follow-on Milk:

‘NUTRI-STEPSTM
Omega 3&6 +GOS/FOS’

GOS/FOS appears in the word string on the front of the tin. It has also been transcribed by the packaging copy writers into its long form, ‘Galacto-oligosaccharides/ Fructo-oligosaccharides’, but this has been disconnected from ‘GOS/FOS’ and placed on the back of tin. The noun phrases are neither further explained nor scientifically contextualised in the layout by the packaging designers. In extract 4.6, the subheading of the ‘NUTRI-STEPSTM’ trademark may only partly help a reader to make a supposition about ‘Omega 3&6 +GOS/FOS’. The neologism ‘NUTRI-STEPSTM’ clearly denotes nutrition in the prefix, and connotes infant development through the metaphor of a walking progression. These are connected through the truncated form of a trademark in superscript (TM), another advertising and copywriting feature.

On the packaging, in extracts 4.5 and 4.6, above, the terms ‘Fructo-oligosaccharides’ and ‘Nucleotides’ stand alone, without their bio-scientific context. This contributes to a text on the infant milk packaging which has few discourse markers to render coherence, and thus relies on the reader/viewer’s genre knowledge, experience and expectations of packaging (Johnstone, 2008; Jones, 2015). The imagery thus has an important role in creating meaning, in which the prominent use of under-defined, complex technical terms apparently needs no explanation or justification, when marketing formula milk. Scrinis (2013) makes the pertinent observation that:

[t]he obsessive and reductive focus on nutritional and health dimensions of food – and the reductive focus on health in general – has tended to overwhelm the pleasure of eating and to promote a range of anxieties around food (2013: 234).

Scrinis here mentions the potential concealment of other views at the broader, societal level. It is also possible to observe concealment at the micro level of packaging texts. In this sample of packaging from the data, the lexical items in extract 4.5 are repeated three times. In extract 4.5, a subjectless third person present tense Material Process verb (Matthiessen and Halliday, 2013), 'Contains', appears to the left of the noun phrases on each line. At the experiential level (Matthiessen and Halliday, 2013), the specification of the Actor on the packaging itself would perhaps have been redundant, as the empty slot is clearly understood to be the name of the milk product in the package: [Aptamil] 'Contains Nucleotides'. However, at the textual level (Matthiessen and Halliday, 2013), the erasure of this Theme, or the Given, achieves an effect of placing textual and phonological stress on the Rheme, onto the New scientific sounding terms. They can be said to be overlexicalised through repetition and emphasis (Fairclough, 1992b). As Halliday and Martin argue:

[a] form of language that began as the semiotic underpinning for what was, in the worldwide context, a rather esoteric structure of knowledge has gradually been taking over as the dominant mode for interpreting human existence. Every text, from the discourses of technocracy and bureaucracy to the television magazine and the blurb on the back of the cereal packet, is in some way affected by the modes of meaning that evolved as the scaffolding for scientific knowledge (1993: 12).

In the data, the placement of such terms as 'oligosaccharides' and 'nucleotides', words which can be described as obscure and specialist, has communicative meaning over and above their definition.

This use of such terms, ironically, thins the discourse of this food as experienced in families and wider communities. An obvious social benefit, as reported by parents in Lee's study (2007a), is of other members of the extended family, including grandparents and even older children, being able to offer a bottle to the baby, strengthening their bond with the infant. Parents can share night time feeding. Cook and O'Halloran (2000) provide

an example in relation to formula when they report that a tradition of choosing to bottle feed runs through families, to the extent that a new parent will seek out the brand of formula she was given by her mother. This is corroborated in the report by Hoddinott et al (2012). Parents in their study referred to the use of formula milk to feed babies over generations with ‘no evidence of harm’ (2012: 9). That comment signals the context of formula milk as stigmatised in a dominant discourse of breastfeeding promotion (Knaak, 2006; Lee, 2011; Brookes et al., 2016). It is perhaps unsurprising, then, that there is a seam of accounts of the pleasure gained by mothers who defy the breast feeding advice offered in ante-natal and maternity units, and who associate formula milk with ease, rest, and some freedom: ‘“it’s true, once she’s had her feed she’s as happy as Larry, goes down with it and that’s it” ’ (Murphy, 2000: 39). There is also a description of midwives working with mothers to help them use formula in acts of support, portrayed by the authors as ‘local cultural practices’ (Furber and Thomson, 2006: 369). A lexicon of ‘rule bending’ was developed in that context, including the use of the phrase ‘a special cup feed’, to refer to the ‘deviant’ use of formula milk (*ibid.*). Hoddinott et al 2012 argue that the meanings in families and their wider communities of formula milk and formula feeding have been under-researched. The recourse to a scientific discourse on the packaging transforms a food, with these many potential, rich socio-cultural meanings (Coveney, 2006; Bonotti, 2015) into an amalgam of single nutrients.

4.7 Singling out nutrients

In this sub-section, the multimodal elements which also serve to re-contextualise the scientific terms will be analysed. In complicated textual entities such as packaging, designers have a wide range of semiotic resources from which to draw (Ambrose and Harris, 2011), and which can be chosen from in order to create the salience of certain communicative features (Kress and van Leeuwen, 2006). In Aptamil Profutura 1,

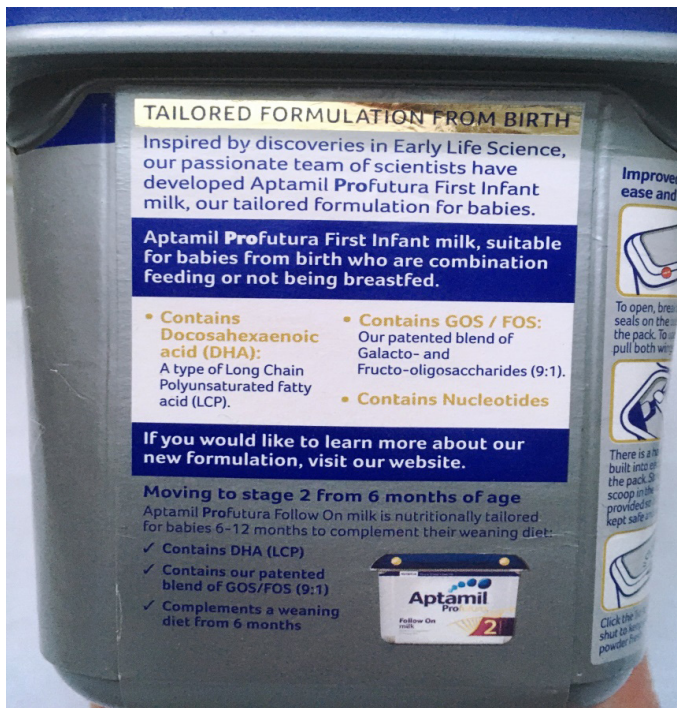


Figure 4.10 Aptamil Profutura First Infant powder formula milk: side panel view.

columns of text, placed within white space, are used to separate extract 4.5 from other visual elements on that face of the packaging. This layout choice gives contrast to the text, making it emerge visually from its surrounding elements. (See figure 4.10.) The initial letters in the scientific-sounding phrases are set in upper case, lending them the status of proper nouns. Moreover, in the Aptamil 1 milk text, extract 4.5, bullet points indicate ‘subheadings’, and these are printed in gold lettering, set within a silver package background. This is a design choice which connotes a premium through its association with ‘strength, luxury’ (Ambrose and Harris, 2011: 107). The font is sans serif and bears similarities in style to the Futura type face, appearing modern because of its ‘no frills appearance’ (Dawson, 2013: 181). It is notable that the easily legible type is at odds with the lack of clarity of the technical lexes which has been used on the package. Another graphical device (see figure 4.11, below) is used on the front of the Aptamil 1 powder formula milk pack, forming a vector (Kress and van Leeuwen, 2006) which leads from the brand name (Given) to the side of the pack, and has connotations of pointing to the future, beyond the packaging. The text in extract 4.5 is thus indicated by the vector, and becomes the New in relation to the brand name.



Figure 4.11 Aptamil Profutura First Infant powder milk package: front view.

In another example of packaging, in this case made by Nestlé, the phrase ‘Omega 3&6 +GOS/FOS’, from SMA PRO 2 Follow-on Milk packaging, is embedded in a graphical device which is seemingly formed to resemble a cogwheel (see figure 4.12, below). This emblem is set apart from the organisation of the remainder of the front of the tin, towards the bottom right of the main brand name, and so it can be said to take up a Real position in the Real/ Ideal placement (Kress and van Leeuwen, 2006).



Figure 4.12 SMA PRO 2 Follow-on Milk: side view

The other ‘cogwheels’, made salient through their metallic colouring, operate as vectors to the single nutrient phrases in the grouping. The weighty typeface, in blue, has thick strokes, exaggerating the legibility and giving emphasis (Dawson, 2013). The group of graphical devices includes references to other more recognisable nutrients, such as Vitamin D, although the largest wheel is given over to ‘Exclusive Protein Process’, a promotional, evaluative phrase with no explanation. They are also dominated by the trademark, ‘NUTRI-STEPSTM’, which stands out because of its contrasting band of blue upper case type on white. All these layout resources foreground these lexical choices of ‘Omega 3&6+GOS/FOS’, connoting high status, and, as Scrinis says, exaggerating ‘the importance of single nutrients within the context of the whole food product, regardless of the scientific evidence of their benefits’ (2013: 251).

To conclude this section, it can be said that the word strings, ‘Omega 3&6+GOS/FOS’, ‘Nucleotides’ and ‘LCPs’ may have little or no semantic, locutionary meaning, for some readers and paying customers. No overt effort is made to communicate their relevance to the contents of the packaging, or to the lives of the parents and carers. Although the lack of clarity and the obscurity of the wording flouts the maxim of Manner (Grice, 1975), their illocution can be inferred from the context. Bonotti (2015) observes that nutritionism as an ideology has a ‘scientistic nature, which overlooks those dimensions of eating which are not scientifically quantifiable or functional to the pursuit of health’ (2015: 409). A reader can perhaps assume that such a thing as ‘Docosahexaenoic acid’, for example, must be beneficial for health and therefore is not to be avoided by babies, despite its alarming sound. This is because it achieves such prominence, multimodally, on packaging for infant milk. In this case, the parent who is a layperson is positioned as having to place trust in the manufacturer.

In the section concerning de-contextualisation, the isolation of bio-scientific sounding words and short phrases was found to operate to give them salience. Emphasis on abstruse words was found to be accomplished multimodally, through the use of graphical elements:

type face, font size, colour, and the use of vectors. These all lend themselves to salience, and to the foregrounding of these single bio-scientific elements. Recontextualization in the whole communicative text of infant milk packaging has also to be considered, and it is against this background of the genre that the important discursal meanings of dislocated bio-scientific words can be sought. The illocutionary function of stressing the technical terms, in a nutritionism discourse, is also important for the milk manufacturers and retailers as a method of persuasion. This can position them as expert technicians, capable of producing a complex and sophisticated assemblage of nutrients; this assurance is what, in a way, the customer is socio-culturally encouraged to pay for (Madden and Chamberlain, 2010; Nestle and Ludwig, 2010). This may help to explain the foregrounding of single nutrients on the packaging in the data.

4.8 Reductionism focussing on nutrients

The analysis here is closely related to the types of de-contextualization that were discussed in the last section because it involves the legitimization of a focus on nutrients by allusions to science (Halliday and Martin, 1993). Scrinis' (2013) definition of reductionism is that it encapsulates the promotion of the engagement with food at the level of nutrients (2013: 28). An important aspect of this is that a reductive relationship with food can affect one's sense of embodiment, as:

[w]e generally do not engage with nutrients through our unaided senses. Instead, scientists bring to bear technoscientific instruments that mediate their understanding of food and its effects on the body (*ibid.*).

Packaging editors and developers can also act as mediators. In this mediation between manufacturer, or text producer, and reader, infant formula milks can be presented as special and attractive products of scientific expertise.

An example of a reductive approach to these milk products is the 'Nutrition Information' table which appears on every package of infant milk. Graddol (2007) suggests that labels bring together texts which are designed for different audiences: the legal checker, the retailer, and the consumer, and that layout and font size act as signposts to the different readerships. In this way, the texts found on the infant milk packages can also be said to be dialogical in setting up 'relations between different "voices"' (Fairclough, 2003: 214). The 'Nutrition Information' tables, for example, set out lists of nutrients such as fats, carbohydrates, vitamins and minerals, and these are set apart and emphasised in the layout through font size and framing (Kress and van Leeuwen, 2001). All the ingredients in a foodstuff have to be stated on a food label, because of a European Union Directive (EU, 2003). The legal 'voice' interacts with the consumer requirement (Graddol, 2007). However, the 'Nutrition Information' tables are only required by law in certain circumstances, for instance when a claim about a food constituent has been made elsewhere on a label. The inclusion of a 'Nutrition Information' table, in the layout, can therefore indicate that a discursive move has been made in the packaging which draws attention to a particular nutrient or group of nutrients. The oligosaccharides and nucleotides which were discussed in the last section, for example, have to be accounted for by producers, and their 'typical values' detailed, in a separate table of 'Nutrition Information', because of the 2003 EU Directive. On the Cow & Gate 1 first infant milk pack, for example, oligosaccharides and nucleotides are prominently and separately featured on the package, and thus they must be listed in a 'Nutrition Information' table under a subheading of 'Others'. The vague language of the subheading does not help a reader to understand the information that is offered (Cook and O'Halloran, 2000). As Myers (1994) notes about such 'strategic' language use in advertising, the 'aim of the words...is not to claim any particular advantage..., but to mark it vaguely as set apart' (1994: 67). It can be conjectured that these abstract entities are 'Other' than fats, carbohydrates, vitamins or minerals.

It is also interesting that ‘Vitamins’, ‘Minerals’, and ‘Others’ are given emboldened and larger font than the other subheadings in the ‘Nutrition Information’ table, and thus have salience. Commenting generally on the phenomenon of detailed labelling, Scrinis (2013) notes that:

[d]espite the level of detail the Nutrition Facts label presents, its nutrient level information is also limited and incomplete. For instance, it fails to distinguish between nutrients intrinsic to the ingredients in food and those added during processing (2013: 32).

The presence of the table further delineates the potentially reductive nature of infant milk packaging texts, because while some nutrient information is made salient, other ‘nutrition facts’, for example about the processing and packaging system which may prove controversial, are absent. This becomes, as Fairclough suggests, ‘part of the focus on building up an image of the product as a quality product’ (2003: 137).

There are further examples of what is a reductive approach to infant milk and these will be analysed next. The extracts which will be analysed are from packages of Similac 1 First Infant Milk From birth (*sic*); Cow and Gate 1 first infant milk; and Aptamil Hungry Milk. One way in which the role of mediation can be identified is through evaluative phrases (Martin, 2005), as in Extract 4.7 below, with reference to science:

Extract 4.7: Similac 1 First Infant Milk From birth. The bold emphasis is in the original.

Happy baby – happy mum. Developed by dedicated scientists, our palm oil free formula is nutritionally complete and provides all the key ingredients to support your **baby’s nutritional needs**. We’re committed to giving babies around the globe a **strong, happy start in life**. And have been **since 1925**.

The use of positive adjectives in the passage is striking. Pre-modifying adjectives can operate as presuppositions (Kiefer, 1978). Thus, scientists are ‘dedicated’; the ingredients are ‘key’; a start in life is ‘strong’, which, as well as ‘baby’ and ‘mum’ at the beginning of the

extract, are ‘happy’. Bold type is also used in this frame on the packaging. The text writer is able to communicate an evaluative stance, and to lay stress on certain key phrases which then become linked in meaning through this typographical choice. Happiness, science, nutrition, and tradition have become connected, implicitly. A position is thus taken up, with the tone set by an evaluation of positive affect, ‘happy baby – happy mum’, which begins the passage. A limiting and gendered attitude is communicated in this phrase. It presupposes that a mother’s happiness is reliant on a baby’s state of mind, which, in turn, the text implies, is the responsibility of the nutritional efficacy of the formula, which has been ‘developed by dedicated scientists’. The use of a possessive pronoun, ‘your’, and the informal register of ‘mum’, indicate that the text is an attempt to appeal directly to her (Cook, 2001). Fathers, and other carers, are excluded from the text.

Further, it is presupposed that a baby has nutritional needs which can be met by ‘key ingredients’. Whereas the baby is positioned in the text as having ‘needs’, the formula, in contradistinction, ‘provides’. This is expressed in an active third person Material process verb (Halliday and Mathiessen, 2004). Similarly, babies are positioned as the Beneficiaries (Thompson, 2004) of the producers’ active commitment. Nutrition is repeated, and thus foregrounded, in the form of a pre-modifying adverb as well as an adjective. The text of extract 4.7 is placed at the top of the package, in the Ideal position (Kress and van Leeuwen, 2006). It is placed in dark blue font on a white background, and thus contrasts with, and stands out from, the rest of the layout beneath it (see figure 4.13, below). For example, the legally required Important Notice, which can be seen immediately below the text of extract 4.7, and which states that ‘[b]reast milk is best for babies’, is less legible because it is set in a smaller typeface, with less contrast between its mid-blue background and its dark blue font. The ‘Happy baby – happy mum’ passage is multimodally given salience, relative to the ‘Important Notice’, suggesting the priority of the producer in promoting their formula, through focussing on their techno-scientific knowledge and associating this with positive emotion. The promotional approach is not just ‘analytical’ and designed to appeal to the intellect, but to feelings as well.

To return to extract 4.7, two graphical representations can be seen within the border of the text. One refers to the claim that the formula is ‘palm oil free’, and the other is a shield shaped device (see figure 4.13).



Figure 4.13 Similac 1 first infant milk

It constitutes a smaller version of a device which appears on the front of the tin, and which itself repeats the shield-like shape surrounding the main Similac brand name. In the centre, the phrase ‘Complete Nutrition’ appears in white type on a dark blue background, surrounded by three golden bands on which can be read, ‘DHA/AA; NUCLEOTIDES; GOS’. Three vectors point from each of the golden bands. The vector associated with DHA/ AA, for example, points to the phrase ‘Contains LCPs DHA/ AA (omega 3 & 6)’, which only offers more technical terminology. In this way, the graphical device can be seen to act as a textual link between the brand, with its prominent shield in gold, the text of extract 4.7 and the isolated, decontextualized, abstract nutritional

elements which are foregrounded by the device and through positioning on the package. A shield has cultural connotations of strength and protection, and thus may invoke a discourse of risk aversion (Jones, 2013).

Extract 4.8, below, from the Cow and Gate first infant milk package, also focuses on nutrients. Scrinis describes such a focus as the ‘reduction of the understanding and the practical engagement with food *to* the nutrient level’ (2013: 258. Italics in the original). In this extract, ‘nutrients’ are included as the direct object or Goal of the first sentence; an adverb that is formed from nutrition occurs in the second, and nutrients are invoked in the list of different substances which completes the passage.

Extract 4.8, Cow and Gate first infant milk package

For the first few months of life, your baby will get all their nutrients from milk. Cow & Gate first infant milk from newborn is a nutritionally complete, whey based, infant milk, suitable from birth onwards. It can be used for combination feeding or if a baby is not being breastfed. It contains our unique blend of oligosaccharides (GOS/FOS) similar to those found in nature, key vitamins and minerals, nucleotides, LCPs and antioxidants.

Left-shifting the phrase, ‘For the first few months of life’, in the opening sentence, also means that the Theme (Matthiessen and Halliday, 2013) includes ‘first few months’, echoing part of the product name. It anticipates and thus emphasises the subject, Theme and Actor in the second sentence, the slot filled by the full product name, ‘Cow & Gate first infant milk from newborn’. Through this structuring of the passage, the product itself is associated with nutrients. It is interesting that the Actor has been erased from the third sentence, ‘It can be used for combination feeding or if a baby is not being breastfed’. The parent is absent. In contrast, ‘It’, a pronoun we can take to refer to the formula, actively ‘contains’ a ‘blend’ of substances. These nutrients have been positively evaluated as ‘unique’, ‘key’ and, in one case, almost natural. (Allusions to nature will be discussed in chapter 5).

Immediately underneath the stretch of prose, within the same section of layout, there is another list of features. Each is set out with a green ‘tick’, perhaps also alluding to a notion of the ‘natural’, to its left: ‘LCPs...Oligosaccharides (0.8g 100ml)... Nucleotides... Nutritionally complete...Halaal approved’. The whole section is set in white type against a red background. The typeface that has been chosen by the designers, for Cow & Gate, and has rounded terminals and curves, giving it an informal appearance (Bringhurst, 1992). This semiotic choice aligns with the ‘fun’ appeal of Cow and Gate red with which the brand would like to be associated (Euromonitor, 2013). These aspects of the branding appear to be at odds with the technoscientific terms for nutrients that are emphasised on the packaging, except if the nutrient-centric approach is in the process of being naturalised, in the sense of being taken for granted as part of the discourse (Machin and Mayr, 2012).

4.9 Legitimizing science as expertise

An extract from Aptamil Hungry Milk packaging, will now be discussed in relation to a ‘focus on the nutrient level’ through the warrant of scientific involvement (Scrinis, 2013: 28). Fairclough refers to legitimization as the social order requiring ‘a widespread acknowledgment of the legitimacy of explanations and justifications for the way things are and how things are done’ (2003: 219). This will be considered in relation to the following: Extract 4.9, Aptamil Hungry Milk

Making the right feeding choices for you and your baby

With over 50 years of experience in baby nutrition, our passionate team of over 250 paediatricians, nutritionists and scientists, continue to take inspiration from the benefits of nature, to develop our unique formulas, tailored to support your baby’s nutritional needs at every stage of development.

As in extracts 4.7 and 4.8, scientific experts are invoked and enumerated in this passage.

The first phrases, in the long sentence that forms the body of the extract, are designed to impress the reader. There is a presupposition in the form of the positive evaluative adjective, 'passionate'. The comma following 'scientists' acts to group the different experts together and lays further emphasis on them. The affect of these experts is also described here: they do not only have passion, but they are also inspired. This use of emotional exaggeration, as employed in advertising (Williamson, 1978; Myers, 1999), flouts the conversational implicature maxim of Manner. It is, perhaps, an effort to engage the reader by presenting the unnamed 'team' as real people who can be trusted. As in extract 4.8, nutrition is a repeated word root form. The noun phrase 'your baby's nutritional needs' serves as the direct object and Beneficiary (Matthiessen and Halliday, 2013) in the dependent relative clause which closes the passage. The scientists, however, are positioned as Active (Matthiessen and Halliday, 2013), and thus dynamic in their textual relationship to the 'unique formulas'. The heading, 'Making the right feeding choices for you and your baby' is subjectless, and uses the progressive aspect without an auxiliary verb. It is thus left to the reader to infer by whom the choices are continually made on her or his behalf, and on behalf of the baby. The heading carries a slightly moral tone about this social practice, through the explicitly evaluative adjective 'right'. This demonstrates how the role of manufacturer as expert is positioned, in relation to the reader, as a mediator in the feeding of infants.



Figure 4.14
Aptamil Hungry Milk

The passage of extract 4.9 is positioned in the Ideal place on the back of the package (see figure 4.14). Kress and van Leeuwen suggest that,

[f]or something to be ideal means that it is presented as the idealized or generalized essence of the information, hence also as its, ostensibly, most salient part (2006: 186–187).

It is adjacent to a frame in which three circles have prominence, apparently connected by a ring. ‘GOS/FOS’; ‘LCPs (DHA)’ and ‘Nucleotides’ each appear separately as text within the circles, employing the same tone of saturated blue as is used for the typeface in extract 4.9. Vectors point out from each circle and nutrient towards text fragments with technical details such as ‘With DHA (Omega 3)’. The circles resemble a three dimensional molecular model, with spheres and connectors. The proximity in the layout of the panels, of the passage in extract 4.5 and the ‘molecular’ graphical device, demonstrates that the meanings of scientific expertise and isolated, decontextualized, abstract elements can be visually linked with baby food. The presupposition of the strapline on the front of the Aptamil packages, ‘Nutricia – Bringing Science to Early Life’ – is that this is self-evidently a benefit.

4.10 Summary

A close reading of semiotic choices in infant milk packaging demonstrates that features of the de-contextualisation of scientific information; reductionism and the focus on nutrients; functional elements, and health claims are in evidence.

In the sections concerning de-contextualisation and reductive focus on nutrients, the isolation of bio-scientific sounding words and short phrases was found to operate to give them salience. Emphasis on abstruse words was found to be accomplished multimodally, through the use of graphical elements: type face, font size, colour, and the use of vectors.

These all lend themselves to salience, and the foregrounding of these single bio-scientific elements. Recontextualization in the whole communicative text of infant milk packaging has also to be considered, and it is against this background of the genre that the important discursal meanings of dislocated bio-scientific words, and the accentuation of nutrients, can be sought. The illocutionary function of stressing the technical terms, in a nutritionism discourse, is also important for the milk manufacturers and retailers as a method of persuasion. The food marketing developments of the 'functional food' and health claims can also be seen as influential in the extracts from infant milk packaging in the data. These were expressed persuasively through a discourse invoking parental apprehension about the growing infant's needs and about nutrient scarcity in an ordinary diet, which the product was presented as being able to assuage. Scrinis (2013) and others (Nicolosi, 2007; Rangel et al., 2012) contend that the circulation of such a discourse can have an important effect of sanctioning an overly fastidious personal interest in nutrients, or the construction of the 'nutricentric' individual (Dixon, 2009: 323), in its extreme form. Scrinis notes that the 'language for talking about foods has itself become nutrient dense' (2013: 37). This may be too sweeping a statement; however in the data studied here it may be applicable as an observation. The analytic discursive atomisation of food components, growth, and child development into smaller units can be used by producers to create and meet 'needs', because these are identified then 'satisfied'. There are further multimodal expressions on infant milk packaging to explore. The themes of infancy, nature and science are in evidence, and the ways these may be linked semiotically to messages about nutrition will be discussed in chapter 5.

5. Data analysis: discourses of science, infancy and nature

5.1 Introduction

The previous chapter discussed a theme of nutritionism linked with a discourse of health, towards which written and visual messages in the analysed infant milk packages, I argued, are seen to be orientated. There are also images on some examples of the packaging which appear to work peripherally to a nutritionism discourse. Whose interests are served by the colourful representations of toys and infants, and of science and nature, which can be seen? In this chapter, these visible promotional efforts, which may be made by designers in order to *differentiate* between products, will be examined. By differentiation, I mean the use of signs to create an illusion of consumer choice (Williamson, 1978; Baudrillard, 1981/ 2010; Kornberger, 2010). Instances of hybridity (Fairclough, 2003), it will be argued, can be seen in single examples of the packaging for Aptamil Pronutra formula milk; Aptamil Profutura; Cow and Gate powder and liquid milks; and Hipp Organic liquid milks. These images have been selected by applying the criterion from critical discourse analysis concerned with intertextuality (Fairclough, 2003; Gee, 2014), which I have interpreted in the widest sense to encompass both language and image-based texts. Fairclough defines intertextuality as ‘the presence within ...[an object of study] of elements of other texts (and therefore potentially other voices than the author’s own) which may be related to (dialogued with, assumed, rejected, etc.) in various ways’ (2003: 218. Parentheses in the original). The work of Cook et al. (2009) on the packaging of organic foods, and of Cook and O’Halloran (2000; 2008) on infant milk and baby food labels, will be used as foundation literature in this chapter. That scholarly work will also help in developing an analysis which can account for the use of the intertextuality in the data. There is a discussion of intertextuality, as a lens through which to look at these data, in the Methodology chapter, above. Because the texts which will be analysed are largely visual, the analysis here will again require building upon the MCDA approach, developing the social semiotics of Kress and van Leeuwen (2006) and van Leeuwen (2003). Royce’s

model (2002; 2007), which examines the cohesive ties between image and verbal text in multimodal discourse, will also be drawn on. Royce's argument is that in any multimodal layout:

...the authors and graphic designers place the various kinds of images, as well as the writing, on the page not at random but for various semantic purposes....although the visual and verbal semiotic systems utilize meaning-making resources in ways that are specific to their particular modes, they also collaborate to realise complementary intersemiotic meanings when they co-occur on the page or the computer screen. They work together to produce a coherent multimodal text for the viewers and readers, a text characterised by intersemiotic complementarity (2002: 192-193).

In response, and building on Royce's model, it can be argued that it is also meaningful and noteworthy, from a critical standpoint, when there appears to be a lack of complementarity between image and writing, for example when there is concealment or elision. These approaches to the analysis will be employed especially to investigate how themes of infancy, nature and science are linked semiotically to messages about nutrition in order for companies to promote and sell formula milk products.

5.2 The notion of choice

Barber (2007), a scholar of politics, discussed the concept of consumer sovereignty using a metaphor of the restaurant to illustrate where the real communicative decision-making may lie, in this way:

[a]s private consumerism spreads around the world, the idea that liberty entails only private choice runs afoul of our actual experience as consumers and citizens. We are seduced into thinking that the right to choose from a menu is the essence of liberty, but with respect to relevant outcomes the real power, and hence the real freedom, is in the determination of what is on the menu (2007: 139).

In other words, having a range of options, for example in a supermarket, can persuade the consumer that they have freedom whereas the aim of the manufacturer and retailer

may be to gain and keep attention. The formulas are promoted by a small group of manufacturers in the UK, creating a façade of choice. The visual, promotional small 'd' discourse on infant milk packaging, which expresses 'what is on the menu', employs a collage of signifiers (van Leeuwen, 2003; Wagner, 2015), or a grouping of the sign vehicles (Chandler, 2007: 261). The communicative texts which will be discussed here are 'discontinuous', although they are presented as 'a coherent whole' (Barthes, 1977: 35) on each example which will be examined below. There is an overarching promotional aim of the manufacturers, I submit, of attempting to communicate unique branding (Machin and Thornborrow, 2003; Kornberger, 2010). These include signifiers derived from a scientific theme (Halliday and Martin, 1993); and an idealised notion of the infant (Urbancic, 1998) and naturalness (Williamson, 1978), which are placed as adjuncts to nutritionism texts. These designs, of course, all allow different packs to be recognised by consumers, which is a key element of the promotional role of packaging design (Ambrose and Harris, 2011). In designing packages to be distinctive in colour and imagery, however, it can be argued that important ideological work is also accomplished (Kress and van Leeuwen, 2006; Machin and Mayr, 2012).

I do not, however, make a claim that the mix of verbal and visual texts in this promotional discourse is an aspect of a totalising creed of consumerism which cannot be resisted. There is evidence that people do find ways to resist, however difficult it may be. These strategies of resistance include ignoring and questioning corporate brands, by 'filtering out propaganda' and 'denying aesthetics' (Holt, 2002: 74–75), and by disengaging from beliefs which privilege health in relation to food and eating practices (Naccarato and LeBesco, 2012). Cook et al. (2009), moreover, state that in their research on organic food: 'focus group discussions suggested a degree of immunity to marketing and promotional language' (2009: 168). Nevertheless, even such a commonplace as the intertextuality on infant milk packs deserves attention, it is argued here. It is important to subject the results of certain design decisions to analysis because:

[v]isual communication, as well as language, both *shapes* and *is shaped by* society. ... [T]he visual semiotic choices in themselves...play a part in the communication of power relations (Machin and Mayr, 2012: 10. Italics in the original).

Discursive moves which are typified by images on the formula packages can, perhaps, push into the background the contradictions inherent in commercial branding (Machin and Thornborrow, 2003). Brands thrive on apparent diversity, according to Machin and Thornborrow, and this is a source of their power, yet this heterogeneity is aimed at a monoculture of consumption and a form of individual conformity. Kornberger (2010), moreover, argues, quoting the anthropologists Douglas and Isherwood (1979/ 2005) that:

...consumption cannot be understood as the rational buying decisions of individuals – it is a far more complex phenomenon than that...every object carries social meaning and is used as a communicator. Goods are markers of social roles, flags at the ‘visible bit of the iceberg which is the whole social process’ (2010: 19).

Here the notion of branding as a means of interfacing the practice of consumption and the performance of social roles is commented upon. Promotion has a key role in creating the relationship between the perception of a brand and views of one’s identity. This is the case in the promotion of food brands, even when commentators argue that there is something amiss with the food system and yet health and ‘naturalness’ are advertised (Scrinis, 2013; Clapp and Scrinis, 2017). The incongruities of marketing and corporate food production have been discussed widely (see sections 2.6.3 and 2.6.4), including by linguists (Cook et al., 2009). One visible way in which producers manage perceptions of their products is through pricing. This will be briefly discussed next.

5.2.1 Creating a distinct image: cost and branding as differentiating signs

An awareness of price variation can have an effect on the way the brand packaging of food is read (Jurafsky, 2014). I had an expectation, when surveying all the formula packaging, that there would be many more of the prized ingredients (Apple, 1996) from

the following listed nutrients in the most expensive brand: ‘energy, fat, carbohydrate, fibre, protein, vitamins, minerals and other’. The major contrasts between the packaged formulas, however, are in presentation. Jurafsky (2014) notes the correlation between the number of words on a menu and its price range. When the packaging examples in the data are interrogated using this approach, it emerges that Aptamil Profutura 1 for newborns, the most expensive infant milk, includes twenty three words on its front plane, compared with the cheapest brand, Cow and Gate 1, which has fourteen words. There is thus a sense in which the presumed customer for the expensive infant milk has to pay more, merely to ‘reassemble’ and ‘rework’ (Holt, 2002: 87) the symbolic work in parts of the promotional text.

In contrast, there is more white space, or, rather, open space, between design elements on the Aptamil Profutura 1 package than on the cheapest brand product. This can lend an impression of sophistication and clarity (Pracejus et al., 2006). As design historians Pracejus et al. (2006) note, the organisation of space also helps to focus the eye on particular arranged elements in a scheme. In the case of this Aptamil package, a reference to nutrition, the brand name, and the declarative phrase ‘Bringing Science to Early Life’ are given salience. The latter is a promotional expression (Cook et al., 2009) which draws, intertextually, on cultural knowledge of a (‘big D’ [Gee, 2014]) Discourse which associates science with prestige (Halliday and Martin, 1993). The detail of how science is being brought to ‘Early Life’ is not explained. The use of a Material process verb, ‘Bringing’, operating like a non-finite dependent clause, without an explicit Actor, supplies a sense of impetus and dynamism to the phrase, while suggesting a specific process and, possibly, a Goal (Halliday, 1994). The reader must labour to supply the Actor’s identity (Nutricia? Aptamil? The scientists?) in order to give the phrase coherence, however. The choice of the nominal group ‘Early Life’ as the Beneficiary is marked in being indeterminate. Again, the reader can provide an interpretation of the epithet ‘Early’ in the context of the package: young infants or babies rather than the collocation of primordial origins. The nominal ‘Science’ in the phrase represents so general and broad a category that

the manufacturing processes and any artificiality in the product can be pushed into the background, or in this instance, framed elsewhere in the layout as a list of ingredients on the side of the package in very small type. In Cook's view, 'advertising thrives on meaning which is both predictable but unprovable' (2001: 51). Kress and van Leeuwen (2006) argue that 'Ideal and Real and Centre and Margin are often the most significant compositional dimensions in three-dimensional visual composition' because of the ability of viewers to change the angle from which objects are viewed (2006: 256).



Figure 5.1 Aptamil Profutura 1 First Infant milk: front view

Information situated in the Ideal placement in a layout can relay the 'promise of the product' (Kress and van Leeuwen, 2006: 186). The phrase 'Bringing Science to Early Life' can be found in the upper, Ideal position on the Aptamil Profutura 1 packaging, and sets the scene for the use of other visual affordances on the front face, in which signifiers of science and nutrition are aligned.

This formula milk powder is packed in a rectangular plastic tub which is itself wrapped in a metallic, shiny card cover. (See figure 5.1.) There are two gold labels, on which is printed "quality seal", thus making explicit the denotation of the use of gold here. On the front-facing plane, there is gold embossing in the lettering of "-futura" part of the brand name, in the central position of the composition. This gold lettering forms

a vector to a graphic representation of a shiny, dynamic, curved ladder-shaped device which resembles the DNA symbol of the double helix. This draws the eye from left (Given) to right (New) at the margin, and could be understood to further encode a process (Royce, 2007), such as the meaning of future time denoted by the brand name. Modernity, progress, discovery, dynamism and science are possible connotations which are now connected semiotically, through the use of open space, and the visually cohesive ties of an arc of five blue ovals and the (DNA) ladder which frame the brand name. These devices, for example, occupy the New placement on the layout in relation to two Given subheadings. These are 'Nutricia', a neologism referencing nutritional health, and 'Breastmilk substitute', a nominal phrase loaned from the international Code concerning the regulation of infant formula promotion (Hampson, 2013).

The whole package lid; the background band for the phrase, 'Bringing Science to Early Life'; and the largest lettering on the package, are all printed in matching, highly saturated blue. Machin and Mayr (2012) suggest that 'more saturated colours have the meaning potential for bolder passionate visual statements' (2012: 19). Blue, and its impact in combination with gold, can be viewed as a resource for constructing text through examining its actual use as a carrier of socio-culturally embedded meanings (van Leeuwen, 2011). As van Leeuwen (2011) notes, there are socio-cultural practices which have developed communicative associations between certain colours and uses. The art historian, Gombrich (1972), for example, says of a medieval Western painting practice that the artists 'loved to spread out the purest and most precious colours they could get – with shining gold and flawless ultramarine blue as a favourite combination' (1972: 248). Blue and gold are here expressive of opulence. However, van Leeuwen (2011) stresses that some values which are connected with particular colours can change. One way to approach the conundrum is to refer to the literature which investigates the contemporary use of colour for promotional purposes. It is this, as a form of the cultural practice of colour beliefs (van Leeuwen, 2011) associated with marketing, which can help to locate some possible connotations of the use of saturated blue in the packaging data.

The significance of blue and its promotional potential have been widely researched and discussed (Jacobs et al., 1991; Madden et al., 2000; Miller and Khan, 2005; Singh, 2006; Kauppinen-Räsänen and Luomala, 2010; Amsteus et al., 2015). This discussion in the scholarly marketing and consumer response literature concerns the use of blue in brands; after all, it is a form of cultural capital (Bourdieu, 1979/ 2010). The business scholars Labrecque and Milne (2012), for example, suggest that the frequent use of this colour in branding may be explained by such readings of blue as ‘linked to competence, as it is associated with intelligence, communication, trust, efficiency, duty, and logic’ (2012: 714). It can then be said that there is an amorphous, yet identifiable, discourse expressive of the standing of science, and more particularly the status of nutrition as a science, which is communicated through the semiotic choices connected with the Aptamil Profutura 1 packaging. These are betokened, multimodally, in an attempt to imbue the brand, and the values it suggests, with sophistication and superiority. These are values associated normatively with luxury, connoted by the composition, colour choices and the cost of the product; and the prestige of science associated with nutrition, expressed in graphics as well as explicitly in language.

Alongside the attempt to communicate a high-value ‘brand identity’ (Ambrose and Harris, 2011), a text is circulated which associates ‘Nutricia’ with science, competence and cultural cachet. It can be said that there are unspoken assumptions at play which the promotional effort requires in order to sustain itself. Whereas consumers pay extra for packaging (Freedman and Jurafsky, 2011) which disseminates a discourse of science as a brand value, the producers of the cheapest formula milk interpolate cartoon-like figures of toys into the discourse of nutritionism messaging on their packaging. This will be discussed next.

5.3 A discourse of ideal infancy

Images of represented participants in the packaging data, including small children and soft toys, automatically recall infancy and childhood in the lifeworld (Barthes, 1973; Urbancic, 1998; Kress and van Leeuwen, 2006). This introduces an emotional appeal to the viewer in infant milk packaging (Vandenberg et al., 2000; Cook and O'Halloran, 2000). The images which denote and invoke sentiment in this way can also be seen to correspond with nutritionism messaging, discursively, through layout design. Scrinis described such promotional activities as constructing a commercial 'façade' (2013: 262). This can mean for example that the use of imagery, including that of soft toys, differentiates the packaging of milk formula products vertically in age groups. Following on from this, it can be seen that producers strive to create and widen the potential markets for formula feeds for older children. Thus, the producers have attempted, through promotion, to capture a new market, while the birth rate in the UK has fallen and thus the markets for first milk for newborns, and for formula for infants from six months, could stagnate or decline, affecting profit margins (Euromonitor, 2013). This expansion of the range to older infants is despite the lack of evidence that milk other than ordinary cow's milk is needed in the diet by toddlers (Wharton, 1990; Cook and O'Halloran, 2000; Crawley and Westland, 2018). The price difference between cows' milk and infant formula has been calculated and studied by nutritionists and statisticians (see section 3.4, above). The stylised images on the packs include the following: Aptamil 1, 2, 3 and 4, in powder and liquid forms, have an image of a bear; Cow and Gate 1 has a lamb and bears; Hipp Organic 1, 2 and 3 each include an elephant. These, intertextually, recall images from the world of animation. Social scientists of food have found that characters such as these are referenced on a variety of cereals and sweets promoted to children (Hill and Tilley, 2002; Elliott, 2008; Elliott, 2013). Barber (2007) suggests that such marketing infantilises us all. The drawn or photographed images on the infant milk packs are consistently presented in pastel or white tones, in soft focus, with the represented participants striking different poses according to the age of the target baby consumer. See an example in figure 5.2, below.



Figure 5.2 Aptamil toy bears : front plane view

The Aptamil bear and Cow and Gate represented participants, although all recognisable as soft toys, have facial features whose proportions more resemble those of human babies than young animals. The pose of the bears resembles the growing infant at each stage of development. This is also symbolised by the numbers on the packaging: from the young infant who lies down, to the sitting infant who appears to have support from the shield device in purple, to the ‘growing up’ toddler who is mobile and even appears to be pushing the shield which displays ‘our unique blend of ingredients’. It is noticeable that the Aptamil group is presented as uniform in one aspect. A highly problematic part of the marketing message appears to be that families are, by default, white (Burton, 2009).

The representation of soft toys is also complex on the Cow and Gate range (see figure 5.3). The seated bear on the first infant milk pack on the left of figure 5.3 is shown centrally positioned in a green triptych between a health claim, ‘√Nutritionally complete breastmilk substitute’ which is contained and circled in gold, and the formula description, ‘1 from birth first infant milk’. The bear thus mediates between the two texts, with its ears and paws forming vectors to each claim (Kress and van Leeuwen, 2006). The environment, or that which is ‘concerned with the setting’ (Royce, 2002:



Figure 5.3 Cow and Gate formula pack bears: front panel views

194), of this triptych is formed by background participants, designed to denote an idealised domestic nursery: a pastel carpet and softened green walls, a window opening onto a beautiful sky and, significantly, an empty cot. For the viewer, the texts can both float in front of the ‘nursery’ and occupy it. The bear can simultaneously connote both the nursery which awaits its human infant occupant, and the baby itself, with its pose and infant-like proportions, its soft, white contour and its human expression. This is all enhanced by the appealing tilt of the head. The bear is repeated as a motif on the package on the right of figure 5.3, seen appropriately enough for ‘growing up’ milk, in a standing position in a demand pose, with the observer ‘being invited into an interaction’ (Machin and Mayr, 2012: 73), in a field of daisies denoting an idyll of nature and outdoor play. (This image can be compared, for example, with the layout organisation of human participants, including a baby, in figure 6.3). In the middle of figure 5.3, the bear is supported in a seated position in the cot itself, with its arms outstretched as if waiting to be picked up.

The bear/ infant is in this way is associated strongly with the brand. The linguists Nyssönen and Cook (2000) note that:

[b]ecause EU legislation forbids pictures or texts which might idealize the use of bottled milk on infant formula labels, these depict baby bears, bottles and other pictures (sometimes soft landscapes) instead for product identification. Some parents interpret the pictures of baby bears as pictures of a 'baby'. What legislation wanted to avoid (direct association between infants and feeding bottles) does not seem to be effective. Producers anticipate the association with babies by picturing bears which look very much like children (smiling, with baby clothes, with dummy etc.). The whole atmosphere of softness, evoked by pictures...is meant to bring about association with babies (2000: 9).

In addition to the possible circumventing of the international Code on the representation of human babies on infant milk packaging, as discussed by Nyssönen and Cook above, I argue that the imagery disseminates a discourse of idealised infancy, 'reshaped by advertising' (Urbancic, 1998: 102). There can then be constructed, by marketers, an unalloyed message that associates two discourses in an approach that could be viewed as unscrupulous. These discourses include an unrealistic, mediated ideal which is designed to appeal to parenthood, reinforcing norms of the family and domesticity, juxtaposed with nutritionally-orientated health claims.



Figure 5.4 Cow and Gate 3 liquid formula carton, front plane view: heart icon

The idealisation of parenthood can be seen as a complex cultural referent both in the Cow and Gate vivid red heart which forms part of the brand logo, indeed the heart encircles the brand name (see figure 5.4), and in the saturated pink SMA heart and 'embraced child' packaging typographics (see figure 5.5). These are in the Ideal

placements in the upper part of the layouts of the front-facing aspect on the respective packs, a positioning which thus gives them salience (Kress and van Leeuwen, 2006). The heart icons, on both the SMA and Cow and Gate packaging, are presented in connection with rounded, broad, relatively large letter forms, with few sharp edges and varying counterforms (Dawson, 2013: 348). The descender of the w overlaps the ascender of the t in the Cow and Gate logo, suggesting a contrived hand-drawn quality. These stylised fonts can be said to reference informal and ubiquitous script typefaces, potentially communicating accessibility and warmth (Dawson, 2013).



Figure 5.5 SMA Pro 3 toddler milk,
front plane view: embraced child icon

On SMA 3 Pro Toddler Milk boxes, the highly emotive texts of the heart, an ‘embraced child’, and terms derived from a discourse of nutritional science are all linked dynamically, through the use of a dramatic turquoise ribbon-like device. Above the ribbon or swag is the evaluative phrase, ‘our most advanced formula yet’. The introductory pronoun both focuses on the brand and makes a claim for familiarity with readers (Fairclough, 2003). Its use also hedges or delimits the product development responsibility of this manufacturer compared with their competitors. The question of whether this promotional gambit

therefore contains the implication that their previous formula preparations were not ‘advanced’ is avoided in this way, through the use of the superlative. The position of the phrase in its own frame, in the Ideal placement, with the choice of a large typeface for ‘ADVANCED’, dramatises a suggestion of scientific progress. The use of the homographic noun, ‘formula’, is perhaps ambiguous. The ribbon encircles the brand name, and places the claim, ‘nutritionally tailored for toddlers’, in the Centre of the layout. Below, in the Real placement, the ribbon-like device forms a vector which points to ‘Nutri-steps / Vitamin D & Calcium/ Iron/ Iodine/ Omega 3 & 6. The heart icon, traditionally a symbol of love and tenderness in the West (Watts, 2004), and the use of the embraced infant, seen since the Renaissance in Madonna and Child religious representations (Gombrich, 1972), work bilaterally. These possible connotations of maternity and emotion reflect on the brands: these graphics are repeated on, and therefore associated with, all the lines of branded infant and toddler milk packaging as well as on some older children’s food labels. Their use as represented participants is meant, it could also be argued, to connote a particular construction of idealized maternal caring which is intertextually associated through layout vectors and positioning with the ‘Nutri-steps’ that are promoted as a feature of this product. In the toddler milk example in figure 5.5, the arm of the ambiguous M acts as a vector to the branding conceit of ‘PRO’, which can be read both as part of the formula name, or as an indication of a positive attitude from the manufacturers towards the target group.

As the literary scholar Urbancic (1998) notes, some Western promotional techniques:

...have succeeded only in proliferating cherub-based, mass-produced artefacts; far too many to be totemized or cherished; far too ubiquitous to be considered seriously. In terms used by Baudrillard, they have become simulacra of simulacra, hyperreal images with no grounding in reality (1998: 91).

Here, Urbancic draws attention to the idealisation of children in imagery, while commenting that such imagery is so familiar that it cannot be viewed as remarkable. Infancy in this way has become commodified, and as noted by Urbancic, representations

are so derivative as to be disconnected from childhood. Simultaneously, such imagery helps to construct and diffuse ideas of infancy which are also based on a commercially-based fantasy. In being representations of images of toys, themselves iconic representations of baby animals, and of the heart and the mother and child, the intertextual relation between signifier and signified is made complex (Chandler, 2007) in examples of infant milk packaging.

The choice of the soft toy is interesting, semiotically. As Barthes (1973) noted, toys construct and naturalise an adult world for children, they do not only reflect it. The white, fluffy, appealing, toy lamb on the Cow and Gate 1 first infant milk bottle ('Ready to Feed'), for example, is posed as though it is animate. It leans towards the viewer, as if within reach, from a baby's cot which can be seen in the background (see figure 5.6, below). The surrounding participants, including a cushion, and the trees which are seen apparently through a bedroom window, are all presented in light, soft-filtered, unsaturated shades of green, a colour denoting nature. The close social distance that is created by the organisation of the image of the toy lamb, 'as if the viewer is engaged with it' (Kress and van Leeuwen, 2006: 127) interacts with the low modality of the image. The idealization of infancy is performed by the characters, as Machin and van Leeuwen (2009) say of the packaging for toy soldiers, 'as if they must retain a certain degree of unreality, of fantasy modality, even when they depict the kinds of settings where actual operations take place' (2009: 55). These images of soft toys serve to disseminate an identifiable and potent discourse of sentimental domesticity, borrowed intertextually from children's animation and narratives, and from TV and print advertising, as described ironically by Urbancic:

...the subtext here is that "good things come in small packages". We are also confirming our expertise as parents by buying this product, and being rewarded with ... "smiles" deriving from happy, family-oriented activity (1998: 96).

In other words, a fantasy of soft-focus, pristine domestic family life is being promoted

along with the product, through these representations. It is noteworthy that in the images in the data, except in the case of SMA milk tins, the represented participant toys and child are seen in isolation, individualised and alone. As Machin and Mayr (2012) observe, images such as these invite the alignment of the viewer with the object, through the use of the demand portrait for example. Such images can also be said to ‘fit with the ideology of individualism that lies at the root of western consumerism and corporate capitalism’ (Machin and Mayr, 2012: 101). This commercial expediency may contextualise aspects of the organisation of the layout in the Cow and Gate 1 first infant milk bottle, because many messages are communicated simultaneously (see figure 5.6). There is little room for white space on the packaging, debatably because the over-lexicalised messages about health vie for the viewer’s attention. The soft feet of the lamb (the baby substitute) on the Cow and Gate 1 first infant milk bottle form vectors to a separate circular panel: ‘Complete Nutrition/ nutritionally complete breastmilk substitute/ for bottlefed babies/ key nutrients’, seen on the left in figure 5.6, below. The emotional appeal of the big heart icon, the sentiment attached to the small lamb, and a nutritional claim which incorporates legal wording (‘breastmilk substitute’) can thus be viewed as a coherent whole.

5.4 Constructing a normative notion of health

The same Centre and Given position, on a bottle of Cow and Gate 2 Follow-on milk, on the right in figure 5.6, is taken by a demand photographic portrait of a laughing, white-skinned baby in a white bib. Kress and van Leeuwen (2006) suggest that ‘Demand’ images ‘want something from the viewer’, encoded by the gaze of a represented participant addressing the viewers ‘directly’ (2006: 250). This package is audacious as a semiotic ensemble. It is created from a socially engaging image of a young child, arranged beneath a heart icon brand logo and next to declarative phrases concerned with health. The toys on other packs simulate infancy for the viewer through the use of soft toy imagery, but here is a ‘real’ child. The toddler is apparently happily enjoying ‘real’ formula milk,

which can be seen represented by a feeding beaker held by the child. The child and milk are thus visually connected (Kress and van Leeuwen, 2006). The baby is seen leaning winningly towards the viewer, with the beaker which forms a vector to the health claim: 'Complete Care/ Iron to support normal cognitive development/ vitamin d for normal bone development/ nutritionally tailored'. (See figure 5.6.)

Goldman (2002) argues that the mortise, or 'hollowed-out' insert in a page of advertising copy, 'functions to connect or join the named product to what is presented on the rest of the page' (2002: 63). The arranged information in the mortise operates to suggest the 'manifest ideological content' of the whole text (Goldman, 2002: 65). The health claims are positioned in such a mortise in this example, and, moreover, they are found in a Centre, New placement in relation to the baby's image. That soft-focus photograph of the infant is framed by low-saturated shades of pastel purple – a culturally neutral marker of gender in the West, perhaps, that makes its potential market inclusive.



Figure 5.6 Cow and Gate
1 and 2 liquid infant formula
bottles: front plane view

There are elements of the same stock image as in Cow and Gate 1 first infant milk, on the left in figure 5.6 above, denoting a spotless and tranquil domestic setting. In the arrangement on the bottle on the right in figure 5.6, in comparison, the happy looking child sits up in a chair with a beaker, behind a purple surface which apparently stretches towards the viewer, drawing in the customer, as it also forms the surface colour of that section of the bottle. There is a window in the background, through which greenery, denoting a garden, fertility, and ‘nature’, can be seen.

Next to this, the emotionally charged and salient noun phrase, ‘Complete Care’, has echoes of the heart icon above it, accomplished semiotically through the use of the same, eye-catching, saturated red, and the coordination of its rounded letter shapes, and the consonant sounds of the initial letters. These words exactly align with the baby’s small hands and its beaker, forming textual coherence to promotional claims in this way (Royce, 2007), and through the direction of the beaker spout creating a vector towards ‘follow-on’ above it. The connection runs between the signifier of the baby, to ‘Care’ and to the other health claims in the mortise, and to the brand logo. The adjective ‘normal’ is repeated in the health claim. There is therefore a circle of messaging, accomplished multimodally. These connect, I suggest, a representation of an appealing child with sentiment and ‘normal’ development, all offered by the brand through the product.



Figure 5.7 Cow and Gate 4
liquid infant formula carton:
front plane view

As Urbancic notes,

...cherubic infants...dressed in white, attract us in the print media; similar characteristics inform the newborns and toddlers of the electronic media. These children are beautiful, healthy, well-dressed, and of course, precocious. They have been idealized into hyperreality (1998: 92).

Another product which features an image of a child is Cow and Gate 4, Growing up liquid milk. (See figure 5.7.) In this image, on the front of the carton, a leaping, smiling toddler is dressed to resemble a toy, and in this way the image coheres visually with the whole of the rest of the range in the brand. In recalling formula milk products, including those for newborns, parents can transpose images so that the products can become identified together (Crawley and Westland, 2018). Nyssönen and Cook (2000) also note, in the light of the EU restriction on the use of idealising imagery, that in their study '[s]ome of the parents recalled there was a baby on the front of the package' (2000: 12). The significations, or simulacra, are complicated further in this way, although the 'image straightaway provides a series of discontinuous signs' (Barthes, 1977: 34). On the Cow and Gate 4 liquid growing up milk packaging, in figure 5.7, the viewer sees a demand image with medium social distance (Kress and van Leeuwen, 2006). The child's arms are outstretched to form vectors pointing to the words of the brand name subheading, 'growing up milk 2-3 years', and the feet align with a strongly persuasive health claim on the carton: '100% Vitamin D for normal bone development' (Wansink, 2003; Nestle and Ludwig, 2010). The child is photographed wearing a black and white tunic, boots, and a hat with small horns and ears. The costume evokes a Friesian calf or dairy cow. Presumably, this image has been included to reflect the 'amusing' toddler and to attract the parent/consumer market, and in this way is supposed to embody the values of fun and accessibility of the brand which make it distinctive (Euromonitor, 2013). Blommaert (2005) suggests that context is analytically important, and another reading of the image is that it acts as a distraction from the broader controversies involved in the promotion of expensive, and unnecessary, growing up milk for babies over a year (Crawley and Westland, 2018). The ethics of the agribusiness of dairy production, furthermore, and the

industry's representation in textual and visual discourses, have been discussed and called into question (Singer and Mason, 2006; Armstrong, 2007; Monbiot, 2015). This aspect of the analysis is explored further in the Discussion chapter. The controversial organisation of dairy farming makes the use of the child dressed in a calf costume somewhat ironic.

5.5 Representing nature

Aptamil Profutura 1 packaging appeals to science (as noted earlier in chapter 5) whereas the Cow and Gate range shows images of a domestic interior and features toys and children. This section will consider the visual references to nature in fragments of the packaging. These occur most strikingly on Hipp Organic boxes and bottles (see figure 5.8), although green credentials can also be seen as referenced on Cow and Gate branded bottles of formula, and on Similac tins. Cook et al. (2009) noted, in their study of organic food promotion in the UK, that various salient linguistic features were present in their data. These included alliterative and rhythmic poetic language; and the use of bucolic metaphors which appeal to the senses. Also remarked upon was the use of images on packaging, including a photograph of the 'rolling green countryside' (Cook et al., 2009: 155).

Hipp packaging employs vague language saliently on the front-facing side of the boxes.



Figure 5.8 Hipp organic 2 infant milk:
front plane view

The phrase, 'Science and nature hand in hand', offers no detailed information. There is a presupposition that a close relationship between these categories is relevant to its claims of being organic. As the cultural theorist Williamson (1978) observes of advertisements:

[t]he link between ...these qualities is that they all are seen as desirable, when nature is connected with them. So the precise *meaning* of nature as a symbol, i.e. of 'the natural', is less important than the significance of its being used as a symbol at all (1978: 123. Italics in the original).

Informality, and perhaps trust, are also suggested by the use of the idiom 'hand in hand' in the HIPP organic branding, and this is reinforced by the typographic choice of sans-serif, rounded letter strokes which derive some features from Comic Sans (Dawson, 2013). The phrase is organised in an arc, creating a mortise (Goldman, 2002). Within the arc, on Hipp Organic 2 follow on milk, health claims are listed (see figure 5.8). 'Nature' appears to be the underlying referent that the designers also wish to be noticed by viewers however, as all the background space on the box is taken up by an image denoting a rural landscape, containing a small, lone, cartoon elephant. According to Labrecque and Milne's (2012) research in the use of colours in marketing, green's primary association with nature 'creates feelings of security' (2012: 714). That this is an idealised landscape is also signified by the choice of an unsaturated green, which gradually fades to a horizon. Shades of pastel green can be found in the Real placement, and above it, pastel blue shades blend with the neologism 'Combiotic follow on milk' in the Centre placement. This evaluative branding phrase derives from a discourse of functional foods (Koteyko and Nerlich, 2007). The neologism is echoed by the term 'Præbiotik', which is last in the list of health claims, and is presented prominently in upper case lettering, viewed on the horizon, as it were, and immediately next to a blurred representation of sunshine. As noted above in Chapter 4, functional food health claims are regulated (Fine et al., 2002) and the neologisms, 'Combiotic' and 'Præbiotik' both suggest and hedge the relevance of that discourse to the brand, while semiotically invoking values that are associated with 'nature'. The technology of functional nutrition is thus also linked textually to greenness, sunshine, and

a rainbow arc (Royce, 2007). The corporate identity of the Hipp brand name itself has been ‘naturalised’, through the use of vivid floral colours. This impression is also achieved in the brand logo, and rendered sentimental, by means of the replacement of the usual typographic closed counter of the overlapping letter ‘p’ and the diacritic above the body of the ‘i’ with small heart icons. The heart icon is a repeated, powerful signifier in the formula packaging design repertoire (see also figure 5.6, above).

Using these multimodal means, signifiers of ‘naturalness’ and functional food technology can be seen to be merged textually. The cultural theorist Williamson (1978) describes the complex process through which promotional campaigns can place and replace nature, and reclaim ‘the natural’ as an integral feature of their products. She argues that:

[n]ature is on one level channelled through technological processes, the result of which is The Product – whether food or machinery or sex. But when this product is replaced in nature (...in a field or among flowers...) it can never be nature undifferentiated and raw, because a transaction of meaning is required, and ‘nature’ is supposed to invest the product, which was torn from it in the first place, with the status of ‘the natural’ (1978: 122).

A circular system of alteration of meanings takes place, through the manufacture of an object using elements which ultimately would have been derived from nature. This object is again associated through marketing with imagery which we have come to associate with an idealised representation of nature. Williamson’s hypothesis is that nature loses its referent in this semiotic system while ‘naturalness’ is sanctioned as an essential, attractive quality of the manufactured, de-natured object. It could therefore be said that a discourse of nature as a nebulous desideratum is drawn upon in the packaging design, while furthering a nutritionist agenda as a promotional gambit.

5.6 Summary

Various themes, it has been argued, are mobilised by infant milk packaging producers, with the promotional target of creating individual and separate brand identities. A technical theme enables a connection to be made by the producers, multimodally, between science, as applied to nutrition, and prestige. Images of soft toys, and small children, represent an incursion into the lifeworld by business and technical systems. At the same time, unachievable ideals of domesticity and infancy are communicated. The heart icon, and the embracing mother and baby, connote parental care and link this with the noun phrase 'nutritionally tailored milk'. Important ideological work, reproducing the status quo, can be performed through adjoining messages about nutrition with a direct appeal to the emotions of the buying public. The next chapter turns to the multimodal messaging about the lifeworld of the family which is accomplished by UK formula milk producers in a different mode, that of their 'club' homepages.

6 An analysis of subject positioning in formula milk manufacturers' 'club' homepages

6.1 Introduction

The mechanisms of money and power can be organised to increase profit through the colonisation of the private space of the lifeworld by the system of corporate and related organisations, according to Habermas (1984/1987). In the webpages which will be analysed here, it is argued that attempts are made by the web designers and authors to appropriate the lifeworld experiences of early parenthood. This strategy, it will be argued, is realized through a discourse of parental need and corporate expertise, expressed in the construction of a 'club' of parents; and through the representation of pregnancy, and of infant feeding. The overarching research question that will guide the analysis in this chapter relates to subject positioning. How are subject positions between the participants created, multimodally? Subject positioning refers to the roles which discourse can assign to participants (Fairclough, 2001). Are some participants and anticipated topics excluded or put into the background, and how is this strategy realized? Interestingly, and in contrast to the infant milk packaging which has been discussed in earlier chapters, manufactured infant milk is absent or minimally presented in the manufacturers' 'baby club' home pages, whereas breastfeeding is foregrounded strategically (Murphy, 2000; Knaak, 2010; Brookes et al., 2016), in language and images on the webpages, as an area of corporate expertise. The analysis is restricted to the pages on corporate websites whose addresses are advertised on Aptamil, Cow and Gate, Hipp, and SMA infant milk packaging. The two phenomena, of tangible packs and virtual 'clubs', are thus directly, promotionally, connected. The 'club' homepages enjoin readers to affiliate to online groups run by the companies (www.aptaclub.co.uk; www.cgbabyclub.co.uk; www.hipp.co.uk/hipp-baby-club; www.smababy.co.uk). I viewed these 'club' homepages during July and August 2017. Because the 'club' websites are integrated communicatively with the packaging through these addresses, it

is logical to continue with the analysis by closely examining the layout, imagery and text which support and express the discourses evident on the 'club' homepages. These are publicly available homepages, representing the 'landing' pages if the prompts entailed by the web addresses for the different branded 'baby clubs' on the packaging are followed up by consumers. The ethical aspects of this choice for analysis have been discussed in the Methodology chapter. These 'club' homepages are public, require no subscriptions, but act as gateways to the further membership web pages to which potential members must apply; the homepages thus form a subscription-free limit for the scope of this analytical chapter. On the 'club' homepages, the scopical power and commercial gaze of the firms is turned on representations of pregnant women, as well as on very young infants and their young female parents. Men can also be seen in a very limited number of images on the homepages – no images show couples of men or men in male groups. This articulates and naturalises heteronormativity (Ward and Schneider, 2009). In general, images dominate the space of the 'club' homepages in comparison with the formula packaging, and the language that is used on the websites can largely be described as interpersonal rather than experiential in function (Halliday and Webster, 2009). Branding is visible on each 'club' homepage, with varying degrees of subtlety, through the use of logos, colour, typefaces and lexical choices (Kornberger, 2010). It is crucial that an analytical framework which deals with images, text, and their interaction, is used, in order to help understand how discursive strategies are developed in the object of study, i.e. the 'club' home pages. Accordingly, Kress and van Leeuwen's (2001; 2006) social semiotic approach will be built on in this chapter.

Nutritionism discourses, it was argued in previous analytical chapters, could help explain the communicative import of the discursive approaches found in the formula packaging data. Elements of the 'club' homepages appear to deviate from such a discourse. In the nutritionism framework, however, the notion of the 'façade' is significant, because this is one way in which a food company's 'profile and characteristics [can be] constructed for marketing purposes' while less palatable underlying information, for instance about a

product, can be concealed (Scrinis, 2013: 262). With the extension of marketing to ‘clubs’ of consumers, I argue that a double façade is created: the illusion of a community, and the development of a marketing shop-front of the brand. The discursive strategies pertaining to pregnancy, the feeding of babies, and how these relate to the overarching discourse of persuasive corporate expertise, will be explored in this chapter. First, however, the communicative phenomenon of the virtual ‘club’ will be discussed.

Thurlow (2013) recounts a story from his ‘family breakfast table’:

[i]n the foggy stupor of one weekday morning several months ago, I was struck by the injunction on the back of my milk carton to “follow us on Twitter”. A little grumpily (to be honest), I found myself wondering why. Why would I want to follow my milk? Why would anybody want to follow their milk? It all begged the bigger question: What does it mean to be hailed by their milk in this way? (2013: 226).

Similarly, where the packs of infant milk formula form a tangible, material presence on the supermarket shelf, or in the kitchen cupboard, as it were reifying the multimodal promotional discourse of nutritionism, the ‘clubs’ they promote are virtual, entering the domestic setting, or potentially in any setting, through a mobile or computer screen. The marketing appeal is formulated, as Thurlow (*op.cit.*) suggests, by hailing the reader in order to draw them in to further advertising exposure. The invention of the Internet has allowed promotion and marketing texts to be disseminated more widely than in traditional media formats, ‘in nature, quantity, and effect’ (Cook, 2001: 6). The transition to a Web 2.0 based format potentially allows corporate multimodal advertising communication to appear to be at once more complex, sophisticated, personal, and social (Herring, 2013). The formula milk ‘club’ homepages are therefore part of the promotional effort visible on the packs, appealing to potential consumers to take a specific action which communicates with the corporate entity, other than specifically buying more of the products. For those people who do act and go to the ‘club’ homepages, they will see repeated, direct invitations to ‘join today!’ (www.cgbabyclub.co.uk); to ‘sign in’ (www.hipp.co.uk/hipp-baby-club) ; or to be sure of ‘staying in touch’ (www.smababy.co.uk).

Examples of corporate communication ‘lived with and through’ social media-like entities are increasing (Tannen and Trester, 2013: ix). As Thurlow asks:

[a]re we simply buying (*sic*) into cultural-corporate discourses of Web 2.0 and social media, or have we reserved spaces in which to reflect critically on the many ways we are hailed or positioned by these discourses? (2013: 227. Thurlow’s note in parentheses).

This question refers strikingly to interpellation which can obscure the ideologies underpinning the discourses and the media which transmits them. Thurlow also makes a plea for reflection on the methods of discursive construction which can have effects on the social and cultural context of lives. Because the discourses which the ‘club’ sites generate may impinge on people’s lives, in this instance encroaching on significant areas such as the feeding of infants (Cook and O’Halloran, 2000), it is important to try to understand how the multimodal strategies are presented.

6.2 Constructing the baby ‘club’

The opening page of HIPP organic’s ‘club’ home presents the viewer with a layout in which a large image of women and babies dominates the space. (See figure 6.1.) This photograph and its accompanying text appear below the Ideal at the top of the page, a position which is occupied by the HIPP organic brand logo in very large block type. The Real placement is occupied by a list of goods and services offered to viewers if they join the ‘club’, and by invitations, formed of imperatives, which directly address the reader to: ‘Find out more about Hipp Baby Club benefits’/ ‘Join now’/ or ‘Sign in /hipp-baby-club’. The central image of women and infants can be seen as mediating in this vertical triptych, or connecting the Ideal brand identity and the Real inducements to join the ‘club’. As Kress and van Leeuwen suggest,

[f]or something to be presented as the Centre means that it is presented as the nucleus of the information to which all the other elements are in some sense subservient (2006: 196).

The image is therefore key in communicating the promotional message. There are only two elements which draw the eye by the use of colour in the page, the photograph at the centre of the page, and the HiPP logo. This stylistic tactic also aligns the brand with the image. The itemised list of ‘HiPP Baby Club benefits’ includes ‘Exclusive offers’, a phrase which resonates with the image: there is no gender or ethnic diversity amongst the represented participants of smiling, young women and toddler-aged infants who are all white, well-dressed, attractive, and apparently happy. The domestic surroundings are in soft focus, undifferentiated and pristine. See figure 6.1.



Figure 6.1 ‘The moment when you realise you’re not alone’

<https://www.hipp.co.uk/hipp-baby-club> (captured 23rd August 2017)

Viewed as a statement or manifesto of the ideal ‘baby club’ membership to whom Hipp are appealing, the image is marked in being socially restricted, restrictive, and complex. The image includes an overlaid text: ‘The moment when you realise you’re not alone’, presented in exaggerated, rounded and broad strokes in large faux hand written font which denotes informality and personal communication (Dawson, 2013). The use of a direct address through the use of the second person pronoun in this clause is also evidence of ‘synthetic personalisation’, which is employed to draw in the viewer, and to create an illusion of a relationship between the corporate organisation and the reader (Fairclough,

1992a;Thurlow, 2013; Hunt, 2015). Here, a narrative technique of focalisation is used to suggest the author's apparent, and, of course, impossible, insight into the reader's consciousness and experience (Toolan, 2001): 'when you realise you're not alone'. This is accomplished through the use of the mental process verb 'realise', and serves to project the reader into the desirable image of the participants. It can also be read as an example of a subtle effort to colonise a reader's interior world. Here, in the embedded clause, 'you're not alone', there is a presupposition that the reader has felt isolated, prior to visiting the website. The image with which the text interacts (Royce, 2007) connotes sociability, and thus a message is communicated that such isolation can be dispelled by becoming part of the HiPP 'club'.

To emphasise the message, women and children are shown in close physical proximity to each other, denoting sociability and friendliness (Hunt, 2015). Four women and two children are apparently lying on the floor, presented in close social distance to the viewers. Some of the children, in the centre of the arrangement of participants, are positioned sitting on top of the women, thus dominating the image because the focal angle means the viewer must look up to the infants as they move towards the Ideal (Hunt, 2015). As if to underline the prioritising of the children, the face of the adult participant in the 'Given' position (Kress and van Leeuwen, 2006), to the left of the image, has been covered and deleted by the text overlay. The child facing the camera, in contrast to the representation of the woman, is fully visible. The text which accompanies the image uses a deictic of place, 'here', to extend the metaphor presented in the image of a 'club' that exists in a real spatial location:

Extract 6.1

here at the HiPP Baby Club you will find everything you need to know about pregnancy and your new baby including lots of helpful feeding advice (<https://www.hipp.co.uk/hipp-baby-club>)

The tone of the text can be interpreted as patronising, with the claim that information, not only about pregnancy in general, but about the reader's own infant, is within the remit of the company to offer. A possible illocutionary reading, again employing a mental process verb 'to know', is that the parent lacks knowledge. The viewer is thus partially aligned with the women, but fully aware of the significance of the children, and in this way a discourse of intensive parenting can be seen as invoked (Hays, 1996; Afflerback et al., 2013; O'Donohoe et al., 2014).

The Cow and Gate 'club' homepage, similarly, presents an image of women in a group, but without children. (See figure 6.2, below.) The image is of three smiling women who are apparently pregnant, sitting closely together on a sofa. It is noticeable that their hands form vectors to draw attention to their torsos, denoting the importance of their physiological status in the image. The photograph occupies the Ideal placement in page layout (Kress and van Leeuwen, 2006), again foregrounding the advertising appeal of this configuration. The advantageous social profile of the participants matches that of the women in the HiPP image; they all appear to be comfortable and at ease. Two of the women can be seen looking at another female, who is seen in profile in an 'Offer' shot (Kress and van Leeuwen, 2006). See figure 6.2:



Figure 6.2 Small group <https://www.cgbabyclub.co.uk/> (captured 23rd August 2017)

This form of image allows the viewer's gaze to rest on the images of represented human participants without any demand on the reader of friendly reciprocity or of confrontation (Kress and van Leeuwen, 2006). The offer shot of women for display is ambivalent and visually loaded, because of the Western culture of the male gaze (Berger, 1972; Mulvey, 1975; Rose, 2012). Significantly, all the women on the 'club' homepages I viewed were presented in offer shots, apart from those women who were introduced to the reader as 'experts'. This presentation of the parents for our perusal as if 'in a display case' (Kress and van Leeuwen, 2006: 43) can perhaps be read as constructing them as unthreatening and passive, lacking agency except when seen in benign interaction with other participants such as 'club' members and infants. This reading of the C&G Baby club image is supported by the domestic surroundings, which are shown in soft focus; indeed none of the women in any of the web pages were photographed in public or work settings, except in the case of those described as 'experts'. In this sense, the target women readers are constructed as ideal consumers (O'Donohoe et al., 2014).

The Cow and Gate brand in figure 6.2 is signified in the image of the women through the use of the exact tone of red as is used in the logo. This is used to clothe the cheerful looking figure who is shown on the left of the photograph, the Given placement in the layout. The strapline, 'Say hello to our COMMUNITY', immediately next to the image, is also presented in large font, with a rounded typeface resembling the Cow and Gate logo. There is some typographical emphasis on the word which creates an illusion of shared identity, a 'community'. Although both the HiPP and C&G baby club images are presented to appear spontaneous and relaxed, as if they are portraits of 'real' women rather than models, the images and texts are clearly staged and arranged to subtly remind the viewer of brand values (Thurlow, 2013). The text continues, and is aligned with the image of pregnant women on a sofa:

Extract 6.2

Whether you want to talk pregnancy boobs, bump size or cravings our Community has other mums at your stage who want to chat about it too – just come and say hello! (<https://www.cgbabyclub.co.uk/>)

Again, a metaphor of a tangible place and a real ‘community’ is suggested through the use of interpersonal function, in which readers can ‘talk’ and ‘just come and say hello!’. The lexical choices, ‘pregnancy boobs, bump size or cravings’, derive from an argot of pregnancy clichés (Bassin et al., 1994), used to create an atmosphere of cosiness which is also developed through the other informal register items of ‘other mums’ and ‘chat’. This is a form of linguistic accommodation, as ‘style- or code-choice can be strategic and motivated’ (Coupland and Giles, 1988: 175). The ‘shared meanings and understandings of the lifeworld’ (Finlayson, 2005: 52) can be seen as co-opted here by corporate authors to develop the strategy of false personalisation, but because the text appears contrived, it is perhaps not an entirely successful attempt to appeal to the readers.

The SMA club homepage employs a metaphor of a ‘journey’, and presents images of the traditional Western nuclear family to construct multimodally, and normatively, the notion of their baby ‘club’. The ‘1,000 Day journey’ of early parenthood is announced in bold 36-point font, using the same rounded, legible, sans serif type style which is in evidence in the SMA logo and on the packaging. This figure of speech enables the ‘club’ home page to make the claim that the brand is relevant ‘for parents, at all stages of your baby journey’ / pregnancy/newborn/baby/toddler’. This elliptical clause has its complete meaning, feasibly ‘this website is capable of supplying information...’, carried over or understood from the context (Thompson, 2004: 153) which includes the images it accompanies. The reader is called upon to complete the page’s promotional work as if it were a puzzle, drawing in the reader/ viewer (Cook, 2001). The ‘pregnancy/ newborn/baby/toddler’ parenting journey is perhaps a totalising concept, which is illustrated by images which take up the largest area of layout and, again, and these occupy the Centre position in a

triptych arrangement. These images move across the screen, so that the reading of the first ‘landing’ page can change approximately every three seconds, connoting the ‘journey’ from pregnancy to toddlerhood.

The families are also seen in dynamic, appealing images in outdoor surroundings which invoke verdant nature, throwing a toddler in the air or walking hand in hand through a beautiful field of long grass which is seen at the reader’s eye-level. See figure 6.3:



Figure 6.3 ‘Family’ in a field <https://www.smababy.co.uk/> (captured 23rd August 2017)

The latter image presents the family seen from behind, but there is no suggestion of a stigma that can be removed by the purchasing of a promoted remedy (Harvey, 2013). Rather, the child in the image, dressed in white, is positioned centrally to align with the reader’s eyes so that we may identify with the child. The child’s head can be viewed as at the same level as the green horizon in the distance, and this adjacency connotes innocence ‘in a network of romantic symbols’: the nuclear family, stability, and perhaps the ‘journey’ towards a ‘natural’ future (Williamson, 1978: 122). These unattainable ideals, as Williamson suggests, are adopted by advertisers in juxtaposition with nature because here, ‘“the natural” is itself perfect and can also be perfectly captured’ (1978: 125).

The sentimental representation of the ‘perfect’ family is only ruptured by a bathetic, overlaid moving text which reminds the reader imperatively to ‘Save up to £40 with SMA Baby Club/ Find out more’. This text floats across the back of the baby’s head, and his left arm is raised in a vector which points towards the SMA nutrition brand logo in the Ideal placement at the top of the page. Nature and innocence can be, after all, ‘transformed into objects for consumption...and into a representation’ (Williamson, 1978: 125) for profit.

The presence of men in images in the ‘club’ home pages is marked, in comparison with the imagery and appeal which can be seen, for example, in the C&G club homepage. The texts in the SMA club homepage are very brief, and are overlaid on the images in imperatives which urge the reader to ‘Explore our new website’, or to ‘Step into this new personalised experience’. These imperatives extend the metaphor of the ‘journey’ through these lexical choices to denote novelty and individuality, in an example of what Thurlow (2013) calls a ‘pseudo-social’ performance (2013: 232). As Thurlow comments:

...the line between commerce and the rest of life is often blurred – and, indeed, strategically blurred – in the rhetoric of social media (2013: 232).

The messages are overlaid onto an image, presented at very close social distance (Kress and van Leeuwen, 2006), of a couple holding and gazing at a baby in apparent devotion (see figure 6.4, below). The baby is in focus in the shot, closest to the camera, and the family triad are within touching range, as it were, to the viewer. As in the ‘club’ pages discussed above, the smiling ‘family’ could be members of the same narrow social grouping of happy and attractive young people. Their white ethnicity is emphasised by the white clothing they each wear, and may connote the purity and whiteness of milk formula itself.



Figure 6.4 Man, woman, and baby <https://www.smababy.co.uk>
(captured 23rd August 2017)

In the arrangement of the group, as part of this offer image, the woman leans on the man in a stereotypically gendered pose (Goffman, 1979). Indeed, she is in half shadow, takes less space and is positioned lower in the image than him, and while her head is canted towards the man, the male and baby are in the foreground (Bell and Milic, 2002). Another offer image of a couple, presented at middle social distance from the reader, arguably positions the viewer as a voyeur (see figure 6.5). This is because the interaction portrayed is intimate: a man places his hand on the woman's apparently pregnant torso while they both smile. The image is placed in the Centre of an arrangement which is displayed as a magazine layout, with the brand colour red repeated in each of the elements. Here, the adults are both focussed on the woman's pregnant body, with the phrase 'Prepare for your new life' overlaid on his hand on her torso.



Figure 6.5 Smiling ‘couple’ <https://www.cgbabyclub.co.uk/>

(captured 17th August 2017)

These images can be compared with a small advertisement for a hotel chain (see figure 6.6) which is featured on the Hipp web page as an inducement to join: ‘Find out more!’.



Figure 6.6 Hotel ‘family’ snapshot www.hipp-baby-club/snapfish-exclusives

(captured 25th August 2017)

In this idealised image of a group that we may take to be a nuclear family, a school aged, small child is shown face on, while her 'parents' apparently swing her towards the camera. The 'father' and child are presented in demand poses, making a relationship with the viewer, while the 'mother' leans towards the male in the background, in an offer shot, out of focus. In the image, a smiling group apparently enjoys a holiday through a connection with the formula manufacturer, although a fantasy has been created as the image is probably staged (Machin and Mayr, 2012). The impression of health created by the outdoors shot, with a blue sky and a halo effect of sunlight, also means we 'look up to' the family unit because of the perspective and focal distance created by the shot (Kress and van Leeuwen, 2006).

It is interesting to note that web pages organised by modern corporates such as Cow and Gate, HiPP, and SMA should seek to recreate an exclusionary, traditional, heteronormative, gendered model of 'club' membership, lacking in any diversity. Any adult or configuration of adults can provide bottled milk to the baby. Instead, the promotional effort in this 'club' homepage can be said to support and sustain the status quo of a certain Western, neoliberal, heterosexual and limited ideal of social relations (Machin and Mayr, 2012).

6.3 Representing pregnancy

The two screenshots from the 'Aptaclub' web home pages focus visually and textually on the pregnant torsos. See figure 6.7:



Active for 2

When you [exercise in pregnancy](#), your baby exercises too. Studies show that pregnancy exercise has many benefits for both of you, so pick a sport and find a trimester based workout for you today.

[Learn more](#)



Hello in There

Did you know your baby responds to your voice in the womb? Discover the benefits of [talking to your bump](#), and with the help of our experts, start a conversation that lasts a lifetime.

Figure 6.7 'Hello in there' <https://www.aptaclub.co.uk/>

(captured 24th August 2017)

In the layout of the page, a small, discreet brand logo of five ovals in blue, arranged to resemble a child's footprint, can be seen in the Given, Ideal position at top left. This accompanies a directive brand slogan in small font, using an imperative, and introducing the notion of time ahead with a third person plural possessive, 'Feed their future'. The illocution in the context is that the reader's child is the unnamed Beneficiary (Halliday and Webster, 2009). This slogan establishes a theme of intensive focus on the baby (Hays, 1996). There is, however, little in the remaining textual content of the page to suggest that this is a private, profit-making, manufacturer's web page and not a source of public health information or a baby care manual. The tone of the first text (see above) is advisory and assertive, using a declarative form and a Material process verb, 'exercise' (Halliday and Webster, 2009), to make a claim about 'you' and 'your baby'. This sentence is non-modalised, yet the claim is unsubstantiated. There is also a mix of informal language, in the sentence which follows, in 'workout', and bio-medical lexis, 'trimester', which accomplishes the simultaneous communicative effects of appearing friendly (Fairclough, 1992a) and scientific (Halliday and Martin, 1993). The second sentence does attempt to provide a warrant which references generalised research for the assertion about exercise in pregnancy, but the tenor of the next clause moves into instructional language, with the urgent use of imperatives, 'pick a sport' and 'find'... 'today'. No account appears to be taken of limitations, at a larger socio-cultural scale, on a person's ability to follow the advice, or, indeed, her preference for such activity. The woman is positioned as individually responsible, and so always risking the guilt of failure (Bunton et al., 1995; Jones, 2013; Theodorou and Spyrou, 2013).

The 'Hello in there' text (see figure 6.7, above) uses a narrative technique of free direct speech (Toolan, 2001), to control the voice of the supposed reader speaking to their baby. It is ambiguous, however; it is also clearly a corporate author addressing the reader (and child) at the same time. A rhetorical interrogative sentence, with a strategic use of the second person possessive 'your', draws in the reader in the first sentence about speaking to 'your baby'. A new participant is introduced here: the 'womb', with a more informal

usage employed in the next sentence, ‘your bump’, and these lexical choices refer to and foreground the image of the pregnant woman above. Corporate expertise is also explicitly invoked: ‘with the help of our experts, start a conversation’. The maintenance of this authorial voice, in both the ‘exercise’ and ‘talking’ texts, is important in suggesting that the corporate entity holds information concerning childcare which the reader needs to be apprised of.

The social psychologists Gross and Pattison (2007) argue that:

[p]regnancy thus represents one aspect of the “cult of the feminine” that predominates in cultural images of women. This may then reprise other discourses that underpin a more reactionary positioning of women. By separating pregnancy as an embodied experience from the women involved, it is easier for such commentaries to prevail. The discourse of containment is one that allows similar commentary on appearance, behaviour and lifestyle ...talking about risk more generally, highlights pregnancy as a means by which a public “web of surveillance” is enacted, exhorting restrictions in diet and behaviour for the sake of their unborn child (Gross and Pattison, 2007: 140).

This splitting of the pregnant body from the mother maintains a societal fixation on the foetus and, according to Gross and Pattinson, enables discourses which attempt to steer the woman’s self-care. In figure 6.7, for example, the pregnant woman is positioned, textually, as subordinate, while requiring advice and support; and she is visually positioned in a cropped photograph which ‘renders her anonymous’ (Matthews and Wexler, 2000: 43). The text and image modalities suggest that her focus must be on the unborn child, as must the viewer’s. The circular framing of the two profiles of pregnant bodies draws the viewer’s attention even more intrusively to the shape of their torsos, and suggests the representational convention of the ‘Madonna female archetype’ (Matthews and Wexler, 2000: 41). The photographer’s choice of an offer shot, and the close frame, remove any sense of ‘threatening’ sexuality by ‘tightly’ confining the images (Matthews and Wexler, 2000: 41).

The image which can be found on the Aptaclub homepage confronts the viewer with an uncomfortable close up photograph of three women's torsos. See figure 6.8.



Figure 6.8 'Active for 2'

<https://www.aptaclub.co.uk/> (captured 24th August 2017)

The link in the centre of the image, approximately positioned over the woman's navel above the slogan 'Active for 2', leads to a series of short films of pregnant women taking exercise. In figure 6.8, however, the women's identities have been deleted and replaced by a 'cathexis of maternal function – mother, woman, reproduction' (Kristeva, 1982: 91). The image is reminiscent of those equally strange and estranging images theorised by Skinner (2013) as stigmatised. As Berger (1972) noted, '[a] woman must continually watch herself. She is almost continually accompanied by her own image of herself' (1972: 46) and in figure 6.8 the pregnant women have been positioned as objects for perusal, their corporeality emphasised in swimming costumes.

On the one hand, this is a female space on the Internet, appealing apparently largely to women. This is potentially laudable (Carstensen, 2009). It acknowledges the importance and centrality of women's work in reproduction (Young, 1984). On the other hand, this image confounds this assertion because the women are absent as whole beings or people with identities in public settings (Matthews and Wexler, 2000). The image treats the woman as 'a *chora*, a receptacle', as Kristeva puts it (1982: 14). They are their wombs. These images can be described as bizarre, not least within the context of a corporate

website with a *raison d'être* of attracting parents.

6.3.1 Focussing on the scan

In the SMA club home pages, reference is made, multimodally, to an ultra-sound scan. In the home page, a text in large, bold, highly legible font size 20, blue type poses the following rhetorical question to draw in the reader: 'What happens during a baby scan?'. This is positioned in the Centre placement in the page layout, denoting communicative significance (Kress and van Leeuwen, 2006), and serves as a footer to an image of a pregnant woman sitting while holding a series of scan images. The viewer is at a close social distance from the image of the woman who is headless and anonymous. This may strike the viewer as odd. The scans are lent prominence in the photograph by being held against a white background, staged, perhaps, to connote clinical cleanliness. The woman's hand forms a vector both to her rotund form, and to the scan images. The female's torso, moreover, takes up the Given position, while the scans form the significant New information. See figure 6.9, below:



Figure 6.9 Scan images

<https://www.smababy.co.uk/pregnancy/>

(captured 25th August 2017)

In the separate C&G baby club home page, there is a framed close-up of a scan. This topic derives from the bio-medical field, and its inclusion can be said to constitute a claim by the corporate website owner to be authoritative in an area of specific scientific knowledge. This can invoke a bio-medical model with its:

...complex power/knowledge relations in the bio-medical model whereby women's bodies are made docile through disciplinary technologies, including physician control of knowledge and panopticonic domination of time, space, and movements of the body (Worman-Ross and Mix, 2013: 453).

Matthews and Wexler (2000) have tracked the history of foetal scanning, and refer to the phenomenon as an icon because it 'expresses common and important themes in a culture' (2000: 196). In their view, scanning technology:

...would increasingly support further intrusions upon the former secrecy of the womb. And statisticians, public health officials, and public policy makers discovered that once an image of the fetus was widely available, the fetus itself entered public life, along with imperatives for its physical protection (Matthews and Wexler, 2000: 198).

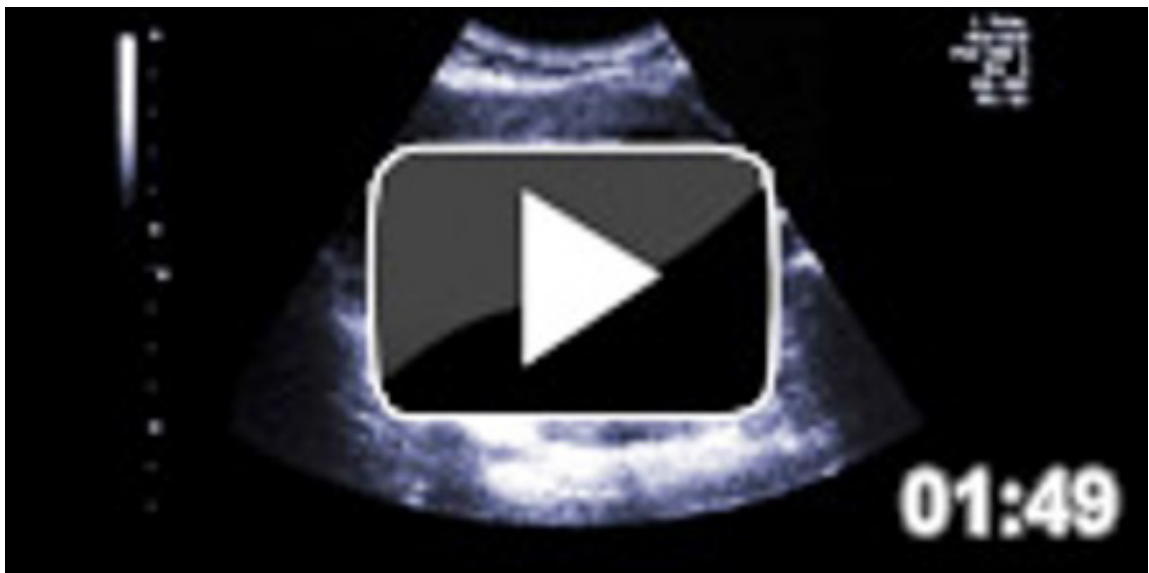


Figure 6.10 Still of a scan video, <https://www.cgbabyclub.co.uk>
(captured 25th August 2017)

The introduction of the topic of scanning into the home pages, including a video recording of a foetal scan (figure 6.10) is therefore a noteworthy discursive move. This is not only because of the encroachment into women's lives it may signify, but because it can imply some form of alliance between the infant milk manufacturers and health professionals.

6.4 Highlighting breastfeeding

These are the ‘club’ homepages created by, and on behalf of, manufacturers who produce infant formula milk. It therefore might be anticipated by a potential reader that this product would be prominently promoted, as had been found by Gunter et al. (2012) in their media communication surveys of manufacturers’ websites in 2009 and 2012. In my reading of the ‘club’ home pages, however, it is breastfeeding which is given attention. For example, at the bottom of the C&G baby club homepage there is a list of topics which can be found on subsequent subscription-based web pages. The order of the list offers an insight into the standing of various parental activities, according to the corporate authors:

Extract 6.3

Login / Join now/

Baby Feeding

Breast feeding

Bottle feeding

Breast and bottle feeding

Weaning

Baby recipes (<https://www.cgbabyclub.co.uk>)

Breastfeeding is allocated a higher rank in the list than bottle feeding. This is, moreover, the only mention of the ‘bottle’ which could be found on any of the ‘club’ homepages examined in this chapter.

Infant formula and bottle feeding have been found to be represented in public health communication as risking the baby’s and mother’s health, as well as being morally dubious, and thus are constructed as subject to socio-cultural disapproval (Lee, 2008; Wolf, 2011; Brookes et al., 2016). In other words, bottle feeding is stigmatised. If passing as expert in matters related to pregnancy, maternity, and early childhood is, as I argue, in the interests

of the manufacturers as expressed in these ‘club’ home pages, it would be their concern to appear to promote the activity which is presented in public health fora as ‘desirable’ and especially ‘natural’, even if this is not in a mother’s best interests (Brookes et al., 2016). The communicative risk run by the formula milk corporates is of alienating their readership by putting breast feeding in the foreground. As Goffman (1963/1990) suggests, however,

[t]he issue is not that of managing tension generated during social contacts, but rather that of *managing information* about his failing (*sic*). To display or not to display; to tell or not to tell; to let on or not to let on; to lie or not to lie; and in each case, to whom, how, when, and where (Goffman, 1963/1990: 42. My emphasis).

Discussing stigma further, Goffman (1963/1990: 41) notes that the question of ‘passing’, or being viewed as ‘normal’, ‘has raised the issue of the ‘visibility’ of a particular stigma... Visibility, of course, is a crucial factor.’ As mentioned above, formula milk packages are presented in two images, on the HiPP and SMA club homepages, but there are no images of bottles, or of babies being bottle fed. There are, however, images of women breast feeding infants. The images naturalise formula by association with breast feeding, which is over-represented. An example for the Cow and Gate web page can be seen in figure 6.11:



Figure 6.11 <https://www.cgbabyclub.co.uk/> (captured 27th August 2017)

Because the webpages can be scrolled down, it is not possible to define the placement of the image and its caption, 'Helping you to make a great start to breastfeeding / Find out more' except in its New position. This is relative to an image of a smiling baby, as the Given, in a domestic setting which echoes an image to be found on Cow and Gate infant milk formula packaging, discussed in an earlier chapter. In the webpage, the laughing baby, in an offer shot, appears to be leaning towards the image of breastfeeding, forming a subtle vector to the latter image. The woman, repeating the interactional meaning of the laughing baby, also smiles down happily at her feeding infant. The dominant colour in the photograph of breastfeeding is the bright, saturated red of the Cow and Gate brand, which recurs throughout the 'club' homepages. Here it is shown on the woman's clothing and, through photographic lighting effects, in a coordinating tone of her skin. Van Leeuwen (2005) notes that, '[i]n contemporary Western consumer society colour also signifies identities...The colour signs used are not arbitrary, but motivated' (2005: 61). It can be inferred that breastfeeding and the brand are intended to be strongly and positively affiliated via a process of 'managing information' (Goffman, 1963/1990), in particular, through semiotic placement and colour choices (Kornberger, 2010).

The appeal of a promotional effort which foregrounds breastfeeding is that it can draw in the 'club' homepages' readership by addressing another area of expertise. For example, on the Aptaclub home page, below an image of a baby being fed, is the following highly evaluative text:

Extract 6.4

7 wonders of breast milk

Breast milk [link] is incredible, multifaceted, and fascinating. And as we're able to discover more and more about its composition, more unexpected and amazing properties are being revealed. Learn more. (<https://www.aptaclub.co.uk>)

As the subheading suggests, breast milk is given prodigious qualities by the corporate authors. The adjectives, ‘incredible, multifaceted...fascinating’, beneath a hyperbolic subheading, are used to describe the food as if it is being marketed (Clapp and Scrinis, 2017). This is commodification, but with the emphasis on the prodigious qualities of breast milk. The move through textual cohesion, ‘And’, to the introduction of another participant, ‘we’, presents a claim, in the second sentence, about the research prowess of the firm itself. This clause stresses its ability ‘to discover’ revelations about its...‘properties’, employing scientific lexis. The accompanying image, again in the New placement, is so closely focussed that the viewer can almost take the place of the breast feeding mother because of the angle of the shot. See figure 6.12:



Figure 6.12 <https://www.aptaclub.co.uk/>
(captured 27th August 2017)

The interaction of the text and image work to position Aptamil as an authority in the matter of breast milk. The difficulty, embarrassment, guilt, pain, sleeplessness, and frustration which mothers can experience (Wall, 2001) are all deleted in this idealised construct.

At the bottom of the last Aptaclub home page, the following text appears:

Extract 6.5

Breast milk provides complete nutrition from day one, with LCPs for brain, eye and nervous system development and antibodies to strengthen immunity (Nutricia, 2016).

There is evidence here of a formal register, of bio-medical lexical origin, which is also intertextually connected to the infant milk packaging nutritionism discourse discussed in an earlier chapter. The reader, perhaps, is being invited to make the association between the manufactured product and more socially prestigious breast milk (Knaak, 2006).

As Gill (2000) observes,

...much discourse is involved in establishing one version of the world in the face of competing versions...the rhetorical nature of texts directs our attention to the ways in which all discourse is organized to make itself persuasive(2000: 178).

Placing breastfeeding in the foreground, in contrast to bottle feeding, positions the corporate website authors and designers alongside the health discourse which is less stigmatised. With this strategy they can foreclose any argument from campaigners that formula feeding representations on the homepages transgress EU law (Berry et al., 2012; Gunter et al., 2012).

6.5 Positioning the ‘expert’

From a Habermasian perspective, the ‘club’ homepages can perhaps be said to attempt to accomplish two discursive strategies: to co-opt the capacity of those in the lifeworld to come together to communicate knowledge and values through the notion of the “club” or “community”; and to extend the corporate capability of transmitting technical knowledge, through the web, as part of the ‘steering media’ (Habermas, 1984/1987: 154). The latter claim to expertise has been described by Illich (1977) as one ‘way in which dependence on commodities has legitimized wants, coined them urgent and exasperated needs’ (1977: 14). In a communicative context such as the ‘club’ homepages, the strategy can be said to realize ‘an asymmetrical relationship between and advice-giver and the advice-seeker’ (Harvey and Koteyko, 2013: 191).

The duality of discourses of expertise and texts which imply exclusive grouping can perhaps best be summarised on the C&G baby club first page, where ‘Our Careline’ and ‘Our Community’ are typographically aligned in the sidebar. This alignment is achieved through the presentation of the same font size and red branding colour, the use of white space to frame the phrases together, and the ambiguity of the two uses of the first person plural possessive ‘Our’. The ‘Careline’ can only be offered by the manufacturers, but the ‘Community’ is also variously communicated elsewhere on the web pages as ‘your club’ or a ‘mums’ club’. Moreover, ‘Careline’ as a lexical choice is interesting. It pairs social work and call centre derivations, presumably to construct an image of corporate kindness. This is illustrated with an offer shot of a woman gazing into the middle distance, smiling, and apparently talking through a headset (see figure 6.13). That she is represented as older presumably is intended to denote her greater experience in parenthood than the young ‘parental’ participants. The background, which can be seen in soft focus in the image, displays plants and a softened light source on the right of the image. These denote a comfortable domestic setting which is at odds with the popular image of a corporate call centre. The image is overlaid with the text ‘careline’, and a caption reads: ‘We’re here to help/ Talk to us 24/7’.



Figure 6.13 <https://www.cgbabyclub.co.uk/> (captured 27th August 2017)

On the Aptaclub home pages, the following infant care topics are proffered as within the purview of the corporate ‘experts’: ‘Establishing a bedtime routine’; ‘Your baby’s weight’; ‘Helping your toddler walk’ and ‘Toddler sleeping problems’. Each subheading is accompanied by texts which are marked in their use of the second person possessive pronoun, ‘your baby’; ‘your toddler’, to draw in the reader with ‘false equalisation’ (Fairclough, 1992a). The imperatives, ‘Find out’; ‘Read more’; ‘Find out why’ and ‘Find out how’, are insistent, and encapsulate Illich’s (1977) analytic category of:

...the way in which dependence on commodities has legitimized wants, coined them urgent and exasperated needs while simultaneously destroying people’s ability to fend for themselves.....these activities are principally in the service of an increased servitude of people to commodities (1977: 14).

Another short sentence from the Aptaclub homepage recalls, intertextually, infant milk packaging. This employs a physical metaphor of building to frame a promotional focus on a child’s diet and their development (Scrinis, 2013):

Extract 6.6

Discover how our early life nutrition expertise can help you lay the foundations for your baby’s future...gift-of-future-health (<https://www.aptaclub.co.uk>)

The discourse of nutritionism is evidenced, with reference to ‘our early life nutrition expertise’, a complex noun phrase which makes an exaggerated claim in close proximity to the phrase, ‘gift of future health’. Whose gift it is remains ambiguous, although it is implied to be a discovery that can only be made through becoming part of the virtual community of the Aptaclub. Two powerful cultural metaphors are used: health as something which is built, which the brand helps to construct, and health as a gift. The tenor of relationship between the represented social participants positions the ‘nutrition’ experts as dominant Actors, through the use of the imperative ‘Discover’ and the modal phrase, ‘can help you lay the foundations’. The parent or carer is positioned as a rather

dependent, inexpert, ‘receiver’ (Thompson, 2004: 101). This framing helps to position the reader/viewer as the neophyte, grammatically placed as the beneficiary of ‘our...expertise’. The individual ‘parent’ has responsibility, rhetorically embedded in the imperative, ‘Discover’, for their child’s health prospects, reflexively conducting life planning through trust in experts, regardless of any structural socio-cultural limitations (Giddens, 1991). In the different ‘club’ home pages, the ‘experts’ are visualised through a series of portraits of women in closely cropped demand shots. See, for example, figure 6.14:

Supporting parents for 20 years

Our expert team of mums are here to reassure and empower you through the early years of parenting with specialist tips, advice and guidance. And to lend you a friendly ear when you need it most.



Figure 6.14 <https://www.smababy.co.uk>
(captured 28th August 2017)

The subheading references a name, to further personalise the demand shot (Kress and van Leeuwen, 2006), and a warrant for the claimed expertise: ‘Claire/ Nursing background’. There is a combination of informal lexis, ‘mums’ who ‘lend you a friendly ear’, and a more formal range deriving from a discourse of counselling, with ‘supporting’, ‘reassure and empower you’ and ‘advice and guidance’. The use of the deictic ‘here’ again serves to present an illusion of a tangible place and of constant availability, in another form of ‘friendly’ yet guiding ‘community’ to replace the lifeworld. The demand portrait of ‘Claire’ (see figure 6.14) is strategically angled so that she is seen within close social distance from the viewer (Kress and van Leeuwen, 2006), smiling at the viewer so that ‘friendliness’ is constructed lexically and visually.

The C&G baby club also constructs their ‘experts’ as real people, in a collage of portraits which includes health-related job titles to formulate a claim of professionalism. These ‘social actors are both classified and functionalised’ (van Leeuwen, 1996: 67). (See figure 6.15.) Each portrait of an ‘expert’ is presented as an individual offer image, for our perusal, as if on a notice board. They do not engage directly with the viewer, but their smiles are for unknown viewers, out of the shot. The images are overlaid with iconography, denoting the supposed specialities of the ‘experts’: alphabet brick toys and a stethoscope for a midwife; a toy ball for the baby care specialist; and an apple for the nutritionist.



Figure 6.15 <https://www.cgbabyclub.co.uk/>

(captured 27th August 2017)

The icons are sketched in a childlike outlines, and the job titles are formed in a curved font to mimic handwriting. These design decisions, together with snapshots of the smiling women, displayed as if on a bulletin board, are placed to suggest accessibility and friendliness. They distract from the real remoteness of ‘our team’, and yet are represented to connote a family’s health visitors.

6.6 Profiting from ‘communities’: companies gathering data

Alongside displaying discursive resources discussed above, the ‘club’ homepages offer free gifts and other inducements in exchange for detailed information from members of the ‘club’. This extract from the first page of the Cow and Gate baby club homepage illustrates the trade-off:

Extract 6.7

Join the C&G baby club today
Receive emails and postal packs for your stage
Chat and share on our friendly forums
And get a FREE cuddly cow! (www.cgbabyclub.co.uk : second screen page)

The short, urgent sentences are framed as instructions, ‘Join...today’, with repeated imperatives which fill in the Theme slots for impact. The use of imperatives had also been noted by Talbot (1996), who builds on McRobbie’s (1991) analysis of strategies which synthesize friendliness used in magazines aimed at teenaged girls. In the print magazine *Jackie*, ‘closeness’ was suggested by means of personal pronouns (such as ‘our’ in extract 6.7 above), by the use of presupposition, and by the tactical employment of punctuation such as the exclamation mark (Talbot, 1996: 158). The direct interpersonal appeal of the imperatives is employed with possessive pronouns which imply familiarity: ‘your’ and ‘our’ (Machin and Mayr, 2012). The lexis of communication in extract 6.7 is presented as a metaphor of two-way interaction: ‘emails’, ‘postal packs’ and ‘forums’. Talbot argues that this type of construction places the reader in an ‘imaginary dialogue’ with the author. This textual approach also involves the application of the informal register of conversation, for example ‘chat and share’ in extract 6.7 above, with a claim of friendliness. The free offer in extract 6.7 is described as ‘cuddly’, an adjective with associations of soft, infantile affection. In this way, in addition, the anonymous author can perform a role of confidante with which the reader /viewer is meant to identify, albeit as only one of ‘thousands of identical yous’ (Talbot, 1996: 148).

It is clear that in order to ‘receive emails and postal packs’, with unspecified content, the joiner must divulge details about their personal identity, ‘stage’ of pregnancy or their child’s age. Extract 6.7 is positioned immediately below appealing images of contented toddlers. These images have small overlays which display the number of ‘likes’ they have received. Such devices can draw in the reader to an apparently ‘interactive’ audience, although the interaction ‘on *our* friendly forums’, is managed by the corporate host (Herring, 2013; Thurlow, 2013). This is a form of instrumental rationality, meaning that it allows the manufacturers to pursue their own interests in the guise of equal and open communication (Habermas, 1984/ 1987). Thompson (1995) theorises that because of the ability of technology to allow the transmission of messages to large audiences who have historically no contact with the originators of the communication, this flow is not reciprocated but is in one direction. He even questions the use of the term ‘communication’, preferring to describe such transactions as processes of ‘diffusion’ (*ibid.* : 25). This symbolic process Thompson calls ‘mediated quasi-interaction’ (*ibid.* : 85-87), which implies that the power over the mediation resides with the originator of the message. Thompson’s claim, however, is that readers/viewers are not acquiescent in their reception of media diffusion, and that we have means at our disposal to reply or resist (cf. Williams and Popay, 2001). It is also made clear by Talbot (1996) that despite the efforts made by editors and authors to create a subject position for their readership of faux sisterhood based on consumption, the readers have agency and actively construct sense and meanings for themselves. Talbot emphasises, developing her argument, that it is possible for a reader simultaneously to occupy more than one, albeit contradictory, subject position.

Extract 6.7 is in the New placement (Kress and van Leeuwen, 2006) in relation to a reduced image of the ‘cuddly cow’ soft toy, emblematic of the Cow and Gate logo. Thus, the Given, the brand, is in actuality what is on offer (Barber, 2007).

6.7 Summary

Through the form of communication exemplified in the 'club' homepages, formula companies can gather data as these enable an organisation to monitor the progress of a customer's pregnancy and the status of the infant, including their age and developmental stage. The 'club' homepages can act as signposts to complex and sophisticated personalised promotion. A discourse of parental need, and of corporate expertise to meet that need, is expressed visually, and in words. This is through imagery which projects the 'club' as a requirement for parents – almost wholly targeted at young mothers – who are positioned as potential benefactors of the knowledge that the formula marketers can provide. An egregious example is the foregrounding, not of the bottle of formula, as might be expected of these websites, but of breastfeeding. This has been co-opted from health promotional campaigning. The re-presentation is of the corporate mastery of an area of a woman's life as a parent. There are infelicities in the homepage communication, moreover. Pregnant women are, at times, presented as torsos, even though there is evidence that the 'club' is constructed as a real 'community', for example through the use of the interpersonal function. The metaphor of the 'journey' of early parenthood is also used to appeal to viewers, and has also been borrowed from a UNICEF health promotion campaign (Cusick and Georgieff, Undated). The image projected of the 'club' is found to be ethnically lacking in diversity, and there is no representation of women in the public sphere apart from the childcare 'experts'. These problematic representations will be explored in the Discussion, next.

7. Discussion

7.1 Introduction

In the preceding chapters there has been an exploration of promotional texts on infant formula milk packaging and formula milk makers' 'club' homepages through the use of multimodal critical discourse analysis (MCDA). The thesis thus brings together systematic social semiotic scrutiny of the packaging and these online multimodal texts, which is, to my knowledge, the first time such analysis has been carried out. This approach has enabled a detailed examination of how the main large food corporates have targeted consumers with complex messages on their formula milk packaging and in their homepages. These have been connected with a broader socio-cultural context. The MCDA approach affords a unique understanding of formula milk corporate producers' written and visual forms of promotional communication, in a relatively new yet significant area of growing research into discourses related to food, including texts which invoke both health and nutrition (Cook, 2010: 10).

This chapter will draw together the key findings from the analytical chapters, attending to significant discursive strategies which have been identified in the two sets of data and the consequences of these for the consumer. At the same time, the thesis research questions will be discussed. These questions, briefly, are concerned with the multimodal presentation of health and food discourses in the data; with the multimodal representation of people; how the relationship with the viewer is built; subject positioning; and whether topics are excluded or occluded in the data which will be discussed. The argument will be set side-by-side with relevant studies, in order to locate this work in the field of contemporary research. The results of the analysis of the data will be discussed using key principles identified in Foucault's (1980) *Power/ Knowledge*, Fairclough's (2001) *Language and Power*, and Machin's (2016) piece entitled 'The need for a social and affordance-driven multimodal critical discourse studies'. These choices of frame for the Discussion chapter

have been made because they provide the broader, sociocultural context in which to place the results of the analysis. This will mean that the multimodal critical micro-analysis of text and image which has been carried out in the previous chapters can be articulated within crucial concepts of the workings of power and knowledge at a broader, societal level. Foucault's influential work in the field of (big D) Discourse has been elaborated by various discourse analysts (Fairclough, 1992a; Mills, 2003; McIlvenny et al., 2016), amongst others. Here, power will be discussed and understood as being exercised constantly in, and through, everyday contact and relations between people and organisations. Those organisations give rise to knowledge, which for Foucault cannot be separated from the operation of power (1980). Knowledge is circulated and can become established as true and natural, not least through the omission or elision of other discourses. It is argued here that power/knowledge is an apposite perspective from which to view this analysis of the mundane and everyday multimodal texts concerned with the promotion of an infant's manufactured foodstuffs from birth. Foucault asserts that:

...analysis...should be concerned with power at its extremities, in its ultimate destinations, with those points where it becomes capillary, that is, in its more regional and local forms and institutions (1980: 96).

In *Language and Power*, Fairclough (2001), changes the directions in which discourse and society are discussed and subjected to examination. Fairclough describes *Language and Power* as, in part, a handbook for the practical analysis of texts. The thrust of Fairclough's principles is determined by the central tenet that '[l]anguage is a part of society; linguistic phenomena *are* social phenomena of a special sort, and social phenomena *are* (in part) linguistic phenomena' (2001: 19. Italics in the original). The precepts found in the work will be drawn upon to connect the analysis carried out on texts, in previous chapters, with discourses of broader socio-cultural arguments. Machin (2016), like Fairclough, has a clear perspective on the nature of ideological operations in discourse. His concern in his 2016 essay is with MCDA as a programme of research, and its development.

Firstly, the strands in the discussion of the packaging data will be evaluated, in relation to the major discursive topics found therein, of nutritionism, and the idealisation of childhood and nature. Next, there will be a focus on the features of health promotional discourses in the ‘club’ homepages, and their co-opting by corporates to draw in readers and viewers to engage with the producers through ‘club’ membership. There will also be a discussion of the discourse elements which may have been elided or placed in the background through the different promotional strategies that have been identified in the data. The multimodal discursive arguments in the two sets of data will be compared and contrasted.

This weighing up of the findings will enable the key socio-political consequences of the research to emerge, including implications for policy makers and regulators. The implications for parents and carers, the group to whom the manufacturers appeal, will be considered.

In the later sections of this chapter I will evaluate the methodology and the theoretical approaches used for the study, and finally, based on the results of the analysis and its synthesis, recommendations for the UK regulators of advertising will be discussed.

7.2 Infant formula milk packaging and discourse

This work forms a contribution to the emerging field of food discourse analysis by investigating the ways in which textual expression at the localised level of packaging connects with the larger food system in the West, under late capitalism. Corporations have increasingly promoted specialised and processed goods, including food for infants. Scholars in critical nutrition and sociology have observed in general terms, and commented on, corporate food discourses and how our attitudes to food can be entangled with and constructed by them (Maurer and Sobal, 1995; Fine et al., 2002; Coveney, 2006). For example, Jaffe and Gertler (2006), argue that:

[t]he prevalence of packaged, processed, and industrially transformed foodstuffs is often explained in terms of consumer preference for convenience. A closer look at the social construction of “consumers” reveals that the agro-food industry has waged a double disinformation campaign to manipulate and to re-educate consumers while appearing to respond to consumer demand (2006: 143).

Jaffe and Gertler adopt a strong constructivist position of ascribing the ongoing market development of factory produced, highly processed foods to the manipulation by the producers of the shopping public, including the influencing of needs and wants. The thesis takes up the challenge of looking closely at a case study of a particular group of campaigns, the promotion of formula milk in the UK, in order to examine the positioning of the consumer.

7.2.1 Packaging analysis and food consumption

Attention has been given to debates about food labelling (Nestle and Ludwig, 2010), including Foucauldian studies which focus on the development of governmentality, as exemplified by such phenomena as food date stamping (Draper and Green, 2002; Yngfalk, 2016). It is timely and much-needed, then, to add a detailed, multimodal perspective to this field of study. In foundational studies which investigate the discourses of large scale production and consumption, analysis has also been applied to the multimodal promotion of processed, probiotic dairy foods which are associated with health claims (Koteyko and Nerlich, 2007; Koteyko, 2009). The research produced here sits alongside these studies and contributes to an expansion in this field in a hitherto under-explored but critically important area. Guthman (2014), a scholar in the field of critical nutrition, observes that communication about and of ‘[n]utrition... is implicated more generally in the construction of modern subjectivities and provides a strong moral underpinning for how one ought to think and live’ (2014: 4). As an input into work on food consumption discourses, then, the addition of close textual analysis of multimodal expression on packaging is important.

7.2.2 Packaging analysis and food advertising

Historically, as the design consultant Stewart (1995; 2007) suggests, packaging has been a stable form, not only for the protection and containment of products, but as an effective medium for carrying promotional messages. Unlike much advertising copy which, to be effective at marketing, relies on the recall of its readers or viewers, packaging has the immediacy of being present at the point of sale. It is perhaps because of its very ubiquity that the affordance of packaging as a persuasive textual and visual multimodal form has largely been invisible in critical discourse scholarship. Firstly, this work places packaging analysis within the field of advertising discourse scholarship, and seeks to extend that strand of critical scholarly work. Commercially produced promotional material, as Williamson (1978) argues, ‘obviously... has a function, which is to sell things to us. But it has another function...It creates structures of meaning’ (1978: 11–12). By looking carefully and systematically at the ways in which promotional material is communicated in the infant formula data, the study aims to place packaging as a significant and overlooked semiotic resource within advertising literature. Cook amplifies the point by observing that advertising, as well as selling merchandise and services, can ‘amuse, inform, misinform, worry or warn’ (2001: 10). The analysis of packs bears out the argument that packaging texts can structure and communicate meanings, over and above the immediate and obvious function of containing and protecting expensive contents. For example, micronutrients are foregrounded in this claim on a box of formula for toddlers (extract 4.2): ‘In cows’ milk, however, the amount of iron, omega 3, vitamin d and essential vitamins is very low’. In the case of packaging for milk that is targeted at the parents and carers of infants over six months in particular, promotional discursive labour is carried out in the guise of packaging. The adjectival slogan on a Hipp bottle of pre-mixed formula demonstrates this point. The phrases, ‘Gentle satisfying organic growing up milk for active toddlers Nutritionally superior to cows’ milk’, make an advertising claim against a competitor (ordinary milk) without citing an independent authority, while positioning and stereotyping the child of this age. Infant milk packaging communication, secondly,

employs a particularly powerful persuasive frame which requires analytical attention as a form of adverting because the corporates have been subject to international attempts to restrain promotion. This control has been attempted through the promulgation of marketing codes and ordinances (WHO/UNICEF, 2003).

I contend that the promotional work accomplished through the packaging texts endeavours to re-position the formula milk producing corporates as scientifically expert and as benignly orientated towards children's health, and that the analysis underpins this hypothesis. This touches on the relationship between the corporate authors and the reader/ viewer. The text also attempts to cultivate values to be associated with formula, such as it being 'natural'; or scientifically prestigious and nutraceutical; and, in the case of Cow and Gate products, 'fun' (cf. Koteyko, 2009). In this way, the packaging can sidestep the regulation of promotion. As in the analysis here, Cook and O'Halloran (2000) note, in their study of the legibility of formula labelling, that the idealisation of the formula products is prohibited. The analysis here builds on their observation of the use of images of toys on the packs. Looking at the data through a social semiotic lens, in pursuing the research question about the representation of human participants, it is possible to see that brands and their values are associated by the producers with idealised representations of mothers, for example in the SMA logo, and sweetened and softened imagery of children and of infant-like toys. As has been acknowledged by the linguists Cook (1992) and Myers (1999), the discourse of promotional advertising can provide entertainment and distraction through the visual and textual *jeux d'esprit* of the work of advertising and branding agencies. Cook's (1992) and Myers' (1999) linguistic studies have allowed the packaging data here to be viewed through the prism of the design agencies' multimodal creativity and possible motivations. There is no necessity for the packs to be labelled with any more text than can provide the buyer with information, plainly given: its contents and infant age appropriacy; and clear instructions about feeding. There is a minimal amount of obligatory detail which is required by law (Cook and O'Halloran, 2008). In other words, the packs provide affordances, which are exploited

by the corporates, for the elaborate social semiotic communication of promotional messaging over and above the legally required, simple information. The values which are foregrounded and circulated through discourse can become naturalised (Fairclough, 2001). The links with larger socio-cultural ideologies will be discussed next.

7.2.3 Packaging analysis and nutritionism discourses

My thesis, using a social semiotic research approach, draws on the theory of nutritionism, in order to bring empirical evidence to the argument about its ideological undercurrents for the first time. Kimura (2013), a sociologist, argues that nutritionism has driven a ‘micronutrient turn’ (2013: 17). This means that food discourses, in dietetics, food policy, and food production, have tended to focus in recent decades on the constituent elements of foodstuffs (*ibid.*). This phrase, ‘micronutrient turn’, summarises the case that food regimes have a history of discourses that have changed over time and place. It also emphasises the power of a technical approach to perceived or constructed difficulties in nutrition, including that for infants. In pursuing the research question concerning food discourses, a finding of contextual background research for this thesis (as already discussed in section 2.4.2) was that the foregrounding of certain nutrients appears to be discursively contingent. Sugar, as a source of calories (Stevens et al., 2009; Green Corkins and Shurley, 2016) is no longer a focus of marketing. Sucrose has been put in the background or has been described equivocally on the packaging by infant milk producers. The different emphases in nutrition discourses over time may confuse and disturb consumers, while making them feel individually responsible for complex decisions in the face of apparently contradictory messaging. Cook and O’Halloran (2008) comment that fats are differentiated in the formula ingredients tables as unsaturated and saturated, and this is a feature which, as they insightfully hypothesise, ‘may facilitate reading by a parent in terms of an adult dietary discourse’ (2000: 10). They go on to explain why this construction by manufacturers may be unhelpful, in an era when food-health discourse emphasises a link between saturated fat and coronary illness: babies require some saturated fat (*ibid.*).

The analysis in this thesis goes much further, to ascribe such findings to the presence of a reductionist discourse on the packaging. One observable example shown by the analysis is of the foregrounding of micronutrients through the use of textual and visual emphasis, in the packaging, placed on vitamin D. When an ingredient such as vitamin D is foregrounded, it not only endows the nutrient with some charisma, but it makes the manufacturer more visible in a complex and potentially fraught arena of child feeding, for example through their connection with a child health campaign, as in the Cow and Gate case. This ‘micronutrient turn’ diminishes the agency of the people to whom the products are provided (Kimura, 2013; Scrinis, 2016). Moreover, the complicated economic and socio-cultural structural factors which affect families are also overlooked (Brookes et al., 2016). In other words, the issue of access to nutritious and affordable food is de-politicised. An egregious example of structural deficit is reported by Thewliss et al. (2018):

[t]he UK Healthy Start scheme is the main welfare food scheme in the UK which provides food vouchers and free vitamins to young (under 18 years) and low income pregnant women, and to low income families with children under the age of 4 years. The eligibility for and uptake of Healthy Start, and Government spending on the scheme, rapidly declined in the five years from 2013 to 2018, denying many vulnerable families additional support to improve their diet, and removing the safety net for ensuring vulnerable infants receive appropriate alternatives to breastmilk when this is not provided (2018: 9).

The loss of the Healthy Start scheme in many areas through lack of state finance and support means that access to information about food for infants has been curtailed, as well as the loss of direct provision of food tokens for the most vulnerable families. Meanwhile, the impact on parents or carers is that they are handed responsibility for ensuring that the promoted micronutrients **are** supplied, for example by buying Cow and Gate’s infant milk formula, ‘fortified’ with vitamin D, in acts of family self-care.

A discourse which communicates micronutrient deficiencies, or the dearth of nutrients such as vitamins and minerals, is particularly effective as a marketing tool because of its

emotional resonance, and entwines a discourse of food promotion with that of health. The packaging analysis contributes to the argument by showing how language and images can intercalate such an ideologically motivated textual element with the basic, legally required information on the packaging. Deracinated and potentially confusing terms such as ‘Galacto- and Fructo-oligosaccharides’; ‘Docosaheptaenoic acid’ and ‘Nucleotides’ are all listed on SMA and Aptamil packaging, and given salience through their placement and typography. Kimura (2013) considers that the micronutrient deficiency discourse was predominant during the late 1980s and 1990s in international food policy work, and was used partly as a description of, and explanation for, food insecurity in the Global South. This discourse has apparently travelled, through ‘discourse itineraries’ (Jones, 2013: 36), to be inserted into food consumption texts in the West, as evidenced by the packaging analysis. This reveals the organisation of information such as the quantification of micronutrients to be a social practice which is, like other discourses in the health field, ‘subject to change as ...the politics of scientific research and public health policy play out’ (*ibid.*, 37).

The decontextualization of scientific and technical information on the packs, with its accompanying textual and visual simplification, are connected to the broader social production of novel categorisations which describe the world in catalogues of minutiae so that these can be examined and controlled. Power is associated with the producer of these truth claims because the corporate organisations define them, as also discussed by Kent (2014).

The broader context of the importance of a social model of engagement with food has been widely discussed in food studies (Coveney, 2006; Ward et al., 2010; Yates-Doerr, 2013). Scholars in this field have critiqued the link between food and health promotion, in nutrition science and in the commercial application of dietary regimes, because these can channel attention to food solely as a source of nutrients. Foods are then viewed

chiefly as amalgams of health-giving properties. It is argued that the focus on food elements, within ingredients, to the exclusion of commensality, limits the pleasure and the diverse cultural meanings to be found in appetite because a discourse of risk is introduced which can activate anxiety (Spoel et al., 2012). In the Similac packaging, the connection is made between nutritional elements and babies' health and development, and in this way the argument is shown to be located in *realia*. The example from Similac 2 follow on milk packaging supports this analysis. In that packaging layout, stress is given through placement, and typeface difference and emphasis, to a series of nominalisations derived from a bio-medical field: 'immunity', 'growth', 'cognition', and 'development'. Each is followed by a named micronutrient, with its function. It is possible to understand how claims such as these could give parents and carers cause for anxiety about satisfying their small infants' needs, as listed and highlighted by the corporate producer.

A reductive force can overshadow the closeness and pleasure of feeding an infant, and create, promote and maintain anxieties or guilt – which are met and relieved by the corporations circulating this form of knowledge along with the formula. The subject positioning of recipients of these forms of knowledge as the ones who require 'expert' advice about child development can result, alongside an asymmetrical distribution of resources for argument or questioning (cf. Cook and O'Halloran, 2008). As Fairclough (2001) argues, 'the naturalization of subject positions self-evidently constrains subjects, and in the longer term both contributes to the socialization of persons and to the delimitation of the "stock" of social identities' (2001: 87).

Whereas there has been much attention to messaging in the promotion of children's snacks and cereals, including packaging communication, investigating links to obesity (Elliott, 2008; 2012; 2013), little consideration has been given to reductionist multimodal communication on packaging. Loyer (2016), a food historian, argues that superfood packaging can be used by manufacturers to validate nutritionism discourses of food and health for their own profitable ends. More particularly, it is argued here that a focus by

manufacturers on particular health claims, drawing attention multimodally to certain features, such as the SMA Nutri-steps cogwheel icons, may be seen as the circulation of normative attitudes to health via the packaging. The analysis shows that ‘Omega 3 & 6 + GOS/FOS’ (section 4.5.1) are terms which are derived from a bio-scientific lexis, and refer to micronutrients which are associated with the cogwheel graphical elements in the SMA packs. This form of nutritionism can be viewed as a technique of power (Foucault, 1980), because it harnesses a strategy of persuasion which legitimises the work of the corporations. They present their work as that of experts, establishing a relation between ‘author’ and reader, and in so doing may construct ‘readers as ignorant of the facts’ (Jones, 2013: 48), and at the very least, dependent on the ‘scientists’: ‘Happy baby – happy mum. Developed by dedicated scientists, our palm oil free formula is nutritionally complete and provides all the key ingredients to support your baby’s nutritional needs.’ This approach therefore problematises foods. Kornberger (2010) says of brands in the neoliberal context:

[p]ower needs to talk, more than anything else. It is productive by nature. And it refrains from suppressing, burdening and wearing down; rather, it frees individuals and invites them to actualize themselves and choose their lifestyle...Power is not evil *per se*, but it is dangerous (2010: 203).

The danger in the power of branding lies in its pervasiveness and its ability to control communication Kornberger implies, following Foucault (1980) on discourse. Thus, a brand campaign enables the diffusion of messages, for instance connecting an infant’s feeding requirements with the maternal state of mind. As the examples in the analysis in the previous chapters demonstrate, health discourses on the infant milk packaging entrain the calculation of the infant diet in terms of deviance from what is presented as a scientifically established, remote, set standard. Consequently, the answers proposed to the parent by the formula manufacturers take some specific forms, such as the purchase of certain brands of formula milk, instead of broader solutions that would be linked to an integrated, communal vision of infant health, commensality and the infant’s place at the

table in the family. There is a developing sociological discussion regarding reductionism and its work as a discursive resource in the development of over-fastidiousness about the relation between food and health, including self-surveillance, and a blurring of boundaries between medicine and foods in a form of nutrient fetishism (Nicolosi, 2007; Rangel et al., 2012; Costa et al., 2017). In this way, it is argued, discourses which are disseminated verbally and visually can have an impact on the body and a subject's view of their body (Foucault, 1980). The contribution of this analysis of packaging to the discussion is to give instances where the discourse is performed multimodally in real world cases.

7.2.4 What is missing from the discourses evident in packaging texts?

In common with Cook's (2009) findings about organic food marketing in the UK, the visual referencing of nature, for example on Hipp packaging, is used as a device to subtly align a set of positive values with the brand, and to foreground a form of rustic innocence. Other relevant matter is ignored or elided in the texts viewed on the packaging. This includes the highly processed characteristic of formula infant milk. Dairy production, moreover, is contested by scholars because of the farming methods it involves, with associated concerns about animal welfare (Ventura et al., 2013); and its impacts on climate (Monbiot, 2015). For example, Statham et al. (2017) argue that for the farming of cattle, '[t]here are profound consequences for water availability, soil degradation, biodiversity and local ecology, as well as in terms of conflict for energy supplies' (2017: 10). The strategy by the food corporates to focus on an idealised version of nature distracts from submerged information and the legitimate concerns about the food production systems which affect us all.

The omission which affects parents directly, as buyers of the different formula milk products, is an absence of significant guidance on the packaging which touches on the needs of infants over six months. This group does not require a special, more expensive

formula because, after the start of weaning, the introduction of a mixed diet that can be enjoyed with the rest of the family will suffice (Keenan and Stapleton, 2014). The exclusion of such pertinent information is made all the more material when considering the space taken up by marketing text and imagery. A neoliberal counter-argument to the above, indeed to all or any resistance, is that commercial companies have a fiduciary duty to their shareholders (Rao and Bharadwaj, 2008) to sell as effectively, creatively and attractively as possible; moreover, that consumers are free to choose and that, in any case, all have agency (Ambrose and Harris, 2011). Nevertheless, the contribution which the analysis in this thesis makes to the critical discussion is that the ordering of certain facts in the packaging, and their alignment with wider scientific knowledge, through semiotic intertextuality, endow that commercial discourse with authority. Presenting information in the packaging in this way helps to naturalise both the ‘facts’ and the strategy (Jones, 2013).

Following Freedman and Jurafsky’s (2011) study of verbiage on potato chip packets, it is possible to determine that the best-selling and most expensive formula, Aptamil, has most words on its packaging, including the use of technical and scientific signifiers. This is a simple calculation at one level. Dipasquale et al. (2019), nutritionists, argue that ‘[f]ew differences exist between infant formulas, both for the nutrition action and the macronutrient/micronutrient composition’ (2019: 16). Thewliss and First Steps Nutrition Trust (2018), however, have argued that families may feel that they ought to buy the formula which appears to have most prestige. This sense of individual moral responsibility (Murphy, 2000; Knaak, 2005; Lee, 2011) may be compounded by recommendations to parents by health professionals (Thewliss and First Steps Nutrition Trust, 2018; van Tulleken, 2018) The cost of formula milk for infants is far from negligible. There is no clear evidence yet about the average costs to a family in the UK of continuing to give follow on and growing up formula preparations to a baby over six months. To feed a baby aged between two to three months in 2017, however, on Aptamil Profutura 1 First Infant Milk ‘Ready to feed’ (200ml bottles) would have cost £32.20 for a week; or the

use of Aptamil Profutura 1 First Infant Milk Powder (800g packages), to be made up with the addition of water, would have cost £13.52 for one week (Thewliss and First Steps Nutrition Trust, 2018).

7.3 Formulating a ‘club’ community through digital means: homepages

The discussion continues now by considering the results of the analysis of data found in the formula manufacturers’ homepages which are dedicated to their online ‘clubs’ for parents. On the Cow and Gate packaging, these web names are framed and located near the bottom of the packs, in a ‘Real’ placement in relation to the rest of the offered information. Purchasers of the formula tubs and pre-mixed bottles pay for promotional verbiage on those packs, including the ‘club’ homepage addresses.

7.3.1 Inviting membership

The analysis in this thesis contributes to MCDA and strikes new ground by critically examining the texts on the homepages which form the multimodal invitations to join the ‘clubs’ as synthetic communities. The research in my thesis on the food manufacturing corporates’ own ‘club’ pages adds another perspective of multimodal analysis to the current critical digital discourse analytic scholarly work. In these ‘club’ pages, my analysis, following on from the question concerning the representation of participants, shows that the experiences of parents of babies and young children are appropriated, re-presented in texts and images, and sold back to readers/viewers in a commodified form. A hygienised, normative version of parenthood can be seen, for example, in the photograph of young, attractive, white women in an offer image, with their beautiful, smiling babies above them in the main Hipp ‘club’ image (section 6.2). Unsurprisingly, given the dominance of the large communication and media industries, the scholarly literature on Web 2.0 discourses is largely concerned with the expression of identity and community which is found on

the proprietary platforms of Facebook and Twitter (Page, 2012; Zappavigna, 2012; West and Trester, 2013; Tagg, 2015; Zappavigna and Martin, 2018). The analysis in my thesis explores the ways in which the large food corporates' version of the identity of 'parent' is communicated.

More accurately, the role of 'mother' as parent is conveyed multimodally, given the paucity of images of men. These messages are exclusionary, yet have the potential to be highly persuasive, given the power of the brands and the communications resources at their command, yet commodity companies' attempts to create 'communities' of consumers have been under-researched heretofore in the critical literature. Poulsen (2018) used 'critical visual discourse analysis' (2018: 95) to examine Instagram's corporate blog. The viewer is positioned as passive by the producer, Poulsen finds, but as there are few images in the selected Instagram data which include people, there is no consideration by the author of social representation in the imagery. The multimodal analysis in chapter 6 arrests the 'club' web pages before consumer/user-generated content is visible. This allows the analysis to concentrate on the ways in which marketers use the means at their disposal to attract viewers into their online communities, for example with the picture of a group of three apparently contented women, whose pregnant torsos are the focus (Cow and Gate club [section 6.2]). There are no images or texts relating to pregnant women at work or in any settings other than ones which are in soft focus, or domesticated. The texts which represent pregnant women in this on-line 'community' promotional mode have been unexplored in the literature. It is argued that the analysis in my thesis can show how marketers take advantage of a perceived desire for a participatory culture in on-line communities (Wesch, 2008), through the use of interpersonal functions and a tone of familiarity. For instance, the same Cow and Gate web page includes a text which reads, 'our Community has other mums at your stage who want to chat about it too' [section 6.2], a wholly problematic invitation given the exclusionary nature of the representation of 'our Community'.

MCDA attention to the digital space, where the authorial voice is that of producers and distributors of commodities in the off-line world, is timely and necessary. This is because of the organisational discursive power these corporates have to construct models of social practice which are aimed at their consumers. Firstly, and only in the sense that there are no texts made by consumers, the corporate ‘club’ homepage genre I have studied is a relatively ‘pure’ authorial semiotic form (cf. Jones et al., 2015). Secondly, my analysis of an extract in Chapter 6 (section 6.3), for instance, demonstrates that the ‘club’ web page is heteroglossic, in that phrases from contrasting lexical sources are appropriated and interwoven (Androutsopoulos, 2011; Jones et al., 2015). Such variety of textual usage engages with various ideological discursive formations while drawing in the reader/viewer with synthesised friendliness, while supporting the web pages’ claim to offer expertise. There is a reference to the ‘1,000 day journey’ motif of pregnancy (SMA club), for example, which is derived from public infant health discourse (Kattula et al., 2014), whilst an informal, conversational register is also employed, with the strategic use of noun phrases, ‘bump size’ and ‘chat’.

There is also evidence of an apparently contradictory mixing of multimodal elements on the homepages. This analysis is unusual in revealing micro-textual examples of symbolic images of nature put to the work of commercial advantage. This is discussed more generally by Williamson (1978), in work which has been neglected in recent social semiotic studies. An example of the use of nature in a ‘club’ homepage includes an overlay of text that promotes special offers and is juxtaposed with an image of a small family going for a walk in idyllic countryside (section 6.2). The two referent systems in the layout composition, of commerce and of nature, can in this way be exchanged, as Williamson (1978) suggests: ‘nature is take up by culture as ‘the natural’ in a symbolic form that enables a transference of meaning from nature to culture to invest cultural objects and culture itself, with a ‘natural’ order’ (*ibid*: 135). The promotional idiom itself has been naturalised here, so that the contradictions of industry linked with nature are

invisible. Does the unlikely combination of a '£40' saving and a field of grass, seen in alignment with the child's head, offer the viewer/ reader an ideal family, if only they would sign up to the 'club'? Jones et al. (2015) emphasise that all forms of discourse, on-line and off-line, are entangled with power. Laroche et al. (2012), marketing scholars, argue that the expense to a company of developing a complex multimodal assemblage of interlinked web pages is off-set by such in-house platforms' 'inherent advantages of the vast reach, low cost, high communication efficiency' (2012: 1755).

7.3.2 Representing social participants in the 'club' homepages

It is understandable that, given the growth in corporate digital communication, including the potential of Web 2.0 (Muniz and O'Guinn, 2001), a fund of business research literature has been developed. This includes research which attends to the use of digital technology by commercial organisations to harness the promotional opportunities, for future profit, which such a medium brings (Laroche et al., 2012; Malone, 2013; Zheng et al., 2015). The notion of community is important in this literature too, and insights from this scholarly work are built on in this discussion, in order to develop a critical understanding of the 'club' data. In management literature, the community is perceived in terms of the brand. This is viewed as a concept which is central to the purpose of online corporate website building (Laroche et al., *ibid.*). A brand community has impacts on customer equity. This entails the profitability of a customer to a commercial entity over their lifetime (Kim and Ko, 2012). The discourse of the web page gateway is important, therefore, because it encodes 'practices through which customers co-create value in brand communities: social networking, impression management, community engagement, and brand use' (Laroche et al., 2012: 1758). Laroche et al. define the brand community here:

...members of a community felt a strong connection with one another and they termed it as "they sort of know each other" even if they have never met. This is the central facet of a brand community... through processes of legitimacy and oppositional brand loyalty members of a brand community perpetuate their

consciousness of kind. The former refers to the process of differentiating between the true members of a community and those who are not, and the latter refers to the process through which members of a brand community identify what the brand is not and who the brand community members are not (2012: 1757-1758).

The formula homepages exemplify the multimodal work which is required of the producers in order to create, as can be seen above, an exclusionary discourse of the brand community, as outlined by Laroche et al., or 'club'. My analysis reveals, for example, that this involves the positioning of the readers in contradictory ways. For example, the reader/viewer is constructed through implication as socially isolated ('when you know you are not alone', Hipp homepage), yet is often pictured in small groups in ideal domestic settings, lending the 'club' some legitimacy through a synthetic suggestion of 'connection' (*ibid.*). The readers are addressed as normatively white, attractive, healthy and happy (for example, the nuclear family, pictured gazing at a beautiful baby on an SMA homepage). Childcare and feeding texts are almost always addressed to the mother. These constructions powerfully communicate 'who the brand members are not', i.e. the membership is not projected as diverse in any way. The messaging is mediated through the corporate producers, and an ideologically loaded discourse is visible.

Fuentes & Brembeck (2017), scholars in consumer science, employed frame analysis to evaluate discourses in the marketing on corporate web pages of first solid foods for babies. My critical perspective contrasts with that of Fuentes and Brembeck, as their conclusion is that the discursive depiction of women, infants, and products by the commercial food companies ultimately sends a positive message to families. They contend that the marketing discourses combine a 'mothering' and 'caring consumer identity', because they successfully accomplish the portrayal of 'various ways to care' such as intensive mothering. That formation of parental identity is associated through text and image frames with values of taste, nutrition, ecology, fun and convenience. Wesch (2008), an anthropologist of digital culture, describes the cultural inversion of networked individualism. The data viewed here bring new evidence of this phenomenon in action on the food corporate

‘club’ homepages. Normative individualism is expressed through the communicative mode which is designed to reach the isolated consumer in privacy via a screen. Simultaneously, the ‘club’ is held up as an aspiration, exploiting the craving that people have, as Zheng et al. (2015) argue, to be part of a group with a strong identity.

7.3.3 How is online health promotion presented?

Here, I argue that an attempt to communicate moral probity is expressed in the texts, revealed by my analysis, on the ‘club’ homepages which foreground ‘care’ and ‘health’. These include breastfeeding advice; fitness in pregnancy; and guidance about caring for infants. First, imagery and texts prominently reference WHO and public health guidance on breastfeeding (Brookes et al., 2016), and stress the expertise of the manufacturer (‘7 wonders of breast milk...we’re able to discover more and more about its composition’, Aptaclub). This is a bold discursive move in the context of manufacturers whose products prevail in the formula milk trade. It not only aligns the makers with a dominant health discourse which has taken the moral high ground (Brookes et al. *ibid.*), but opens the potential for future marketing, such as that of nutritional products for nursing mothers (Picciano, 2003). The fitness texts include images of pregnant women exercising, (‘Active for 2’, Aptaclub) and short texts encouraging activity in pregnancy. Again, a health and fitness discourse derived from public health messaging in the West is drawn upon, in a multimodal assemblage which associates the companies with medical authority. The representation of pregnant women in images which edit out their heads, and thus anonymise them, is a less than fortunate semiotic choice. As discussed by Matthews’ and Wexler’s (2000) study, images such as these have been used in medical textbooks since the late nineteenth century, in what the authors argue is a method of de-sexualising the women. It is not clear that the images in the ‘clubs’ consciously reference the textbooks, but a patriarchal ideology is nevertheless promulgated.

Lastly, infant care information is presented on the ‘club’ homepages. Included in this is a section on pre-natal care, focussed on the foetus. Again, problematically, it is only the torso of the woman which is seen. The foetal scan representations invoke a bio-scientific discourse, combining medical technology with the moral pressure on women to cooperate with investigations and measurement. A rebuttal is that women on the homepages are at least in the focus and are represented, and that scans are almost universal in the healthcare of pregnant women and their offspring in the West. In this way, reality is reflected in the ‘club’ homepages. Its inclusion in a banal site such as a commercial homepage, however, also serves as a reminder of the ubiquity and acceptance of the medical gaze, however intrusive it may be (Foucault, 1980). Above all, the critical approach used in my study notes that the commercial sites commodify pictures and texts which refer to pregnant people and foetuses, and hence the discourse of commercial mastery is naturalised. Knowledge about looking after yourself and your baby is established as the domain of the ‘club’ distributors (‘our expert team of mums are here to reassure and empower you... with specialist tips’, Sma.baby) and offered as a source of expertise for those who join up. Aspects of the historical background to online ‘communities’ for parents will be discussed next.

7.3.4 ‘Club’ homepages in context

Tagg (2015) observes that online communities are not formed in isolation from the world as it exists offline. They are cast by social currents and practices. Discussing the artefacts of the formula milk producers’ ‘club’ homepages emphasises the importance of context in MCDA. The two phenomena which I would like to consider as particularly relevant to the understanding of the ‘club’ data are the historical boycott of Nestlé milk (Post, 1985); and the recent and on-going closure of children’s centres, known as Sure Start or Flying Start centres in the UK (Torjesen, 2016). Firstly, I argue that the multimodal texts found in commercial ‘club’ communities can be seen to have meaning when viewed through

a particular reading which goes against the grain of dominant Left thinking about the anti-Nestlé campaign as undermining corporate power. The historian Sasson (2016) argues that an underestimated aspect of the boycott was its ushering in and building of a discourse of consumer power. Against a background of the consumer movement led in the USA by Ralph Nader, the boycott successfully sought to harness concerned Western consumers to put pressure on the formula milk manufacturers to cease their heavily funded marketing efforts in the Global South (*ibid.*). Regulation of the formula market also followed, which was resisted by the large manufacturers of food. An unintended, yet important, consequence of this campaign is the promulgation of a post-colonial discourse which patronises the families in the Global South as not yet ready for Western consumption arrangements (Friedman, 2001; Hobbes, 2015). The structural forces which maintained the inequalities that the formula milk manufacturers exploited, meanwhile, were not addressed, or were left in the background by a movement which focussed on consumers' buying power (Hobbes, 2015; Sasson, 2016).

The sovereignty of the individual buyer and shareholder is also brought to the fore in this discourse of the market. This context helps in understanding the digital data as an inevitable diachronic development of a neoliberal consumerist discourse in which the system colonises the lifeworld. This can be viewed partly as a response by the formula manufacturers to an antipathetic campaigning discourse, albeit itself grounded in consumer politics. In contrast with the packaging, formula feeding is not placed in the foreground on the 'club' pages. This has been replaced on the homepages by a claimed expertise in breastfeeding, and in childcare more generally. The promotional texts in the 'club' data also ignore the current structural austerity and deficiencies which may form the social backdrop to the lives of a contingent of their readers/viewers. Dury (2016) notes that 'in the current neo-liberal ideology, private partners are deemed more efficient service deliverers than government' (2016: 76). Sure Start centres are local services for families with babies and young children, and they are provided free by local

government with grant aid from central government (Department for Education, 2013). They support families and offer information, including about food and feeding. Formula vouchers can be obtained there. They also provide play areas and activities, and therefore, crucially, act as centres for families to meet, socialise, and share knowledge about child rearing (Sammons et al., 2015). I argue that the widespread closure of Sure Start centres (Torjesen, 2016) demonstrates the erosion and loss of State-facilitated neighbourhood resources. It is the loss of community support in the offline world (Wesch, 2008) which the corporate 'club' online development inadvertently reveals.

7.4 Comparing the packaging and the 'club' data

An innovation in the approach in this research is to bring together packaging and homepage data from commercial entities, for the first time as far as can be seen, to create a dialogue between the texts which have been identified above. There are differences in the affordances of each: packaging comprises three dimensional objects which occupy physical space and thus can have a more permanent presence on the retail shelf and in the domestic setting. The materiality and tactile qualities of the plastic and smooth cardboard of the infant formula packs act as reminders of the functions of containment and safety, and of their significance as useful objects for parents (cf. Crawford, 2002). The 'club' pages are fleeting in the impression they are expected to make, but have greater potential for larger, sophisticated imagery and flexible layout (Schneider and Foot, 2004).

There are structuring elements on the homepages which provide constraints on the users' ways of locating information – when these are positive they help prevent a reader from getting lost in the websites and can be seen as conventions of webpage use which allow the reader to navigate readily between sections (Still and Dark, 2013). Scrollbars, sidebars, and underlined links to different pages are examples of these elements on the homepages. Structural features could also frustrate a reader/ viewer, however. The Aptaclub homepage has many links to detailed sections and these could be seen as overloading the webpage

space – and the viewer. As Still and Dark (2013: 287) comment, however, '[a]ffordances only emerge from the interaction between the user and the device', and a viewer with experience of the homepage genre may have no difficulty in negotiating the non-linear reading path which the 'club' homepages offer.

At the surface level mode of delivery, the two sets of data contrast. The card and plastic packaging has physical limits, because of weight and capacity (Ambrose and Harris, 2011), which dictate how much information can be displayed on the surfaces. Multiple 'voices' are, nevertheless, in evidence, much as Graddol (2007) had noted in his analysis of wine labels. Obligatory information (Cook and O'Halloran, 2008) and marketing texts are present together on the planes of the packaging. The affordances of packaging are used, I argue, to attract the consumer's gaze and to maintain attention in the shop through the salience of the signifiers of the brand. These include the logo, colour, font style and size, for example in the use of vivid red and a loose, almost handwritten quality of the typeface in Cow and Gate packs of formula (sections 3.3 and 5.5.2). The creation of contrast with surrounding, competing products on the shelves is also arranged, in the limited available space of the packs, through layout, with recognisable tropes of childhood and graphical devices to connote activities of feeding and nurturing (section 3.3).

On the contrary, once a viewer has reached a 'club' homepage, there is little visual competition for attention on the screen, other than peripheral stimuli in their environment. There are no distracting 'pop-up' advertising boxes for other products on the homepages, for example. The webpage corporate authors are able to provide a rich mixture of imagery and text, nevertheless, because of formatting flexibility, maintaining their readership's focus through visual effects such as the striking imagery on the Cow and Gate 'club' homepage. This presents a familiar introductory magazine style of layout with a non-sequential reading path including sub-headings which allow the reader to skim and scan the pages (Askehave and Ellerup Nielsen, 2005). Cook and O'Halloran (2008)

commented on the use of different font sizes on the packaging in their data collection, including font which was barely legible. A simple affordance which distinguishes digital delivery of information from the printed packaging is the ability of readers/viewers to adjust the images on their screens to improve the legibility of texts by zooming. The readers also have the ability to click on still images which will present sound and visual effects in the form of videos in different sections of the websites away from the homepages. The theory of affordance emphasises the agency of the user (Hutchby, 2001; 2003), and it is the choice of the 'club' homepage user to be guided by the links and reading/viewing constraints provided by the corporate author, or simply to ignore the prompts. Still and Dark have developed a concept of 'phantom affordances' which 'reflect disconnects between the interface design and the user's previous knowledge; they may produce frustration and unsuccessful interactions' (2013: 297). I argue that an example of a phantom affordance is the choice offered on the homepages through prominent, insistently phrased and frequent links which operate as invitations to join or register for the 'clubs', through the reader/viewers supplying their details. The web designers have not attempted to communicate all aspects of this interactive ability that may have ethical data implications.

My analysis shows that manufacturers can take advantage of the restrictions on dimensions to promote brand differences (section 5.2). Shape and icons suggest how to use the pre-mixed formula bottles, and even the detail of closure fastening is indicated by makers to suggest technical innovation and prestige (section 4.2). The packages can be handled and moved around, however, so that the written and visual information can potentially be in a parent's line of sight in the domestic setting as well as in the public space of a retail shelf. The 'club' homepages, on the other hand, require some effort on the part of the consumer/ reader to view. Materiality and tactile experience are also involved in the handling of a monitor or phone in order to view the screen. This physicality is peripheral in the reader's consciousness, as it were, of the web page display

(Still and Dark, 2013). The information that can be communicated through the webpage is potentially infinite, however, with few physical constraints such as new packaging print runs for the producer to contend with. This means that the pages can be altered and updated frequently by the corporate web designers. Of course, this ability is not shared with the homepage users; the pages are clearly not clubs in the sense of being jointly co-ordinated with or between members. The club' homepages have a distinct advantage over the packaging in being free as a source of information, nevertheless. They are also easily portable on a hand-held device, with the affordance of email, such as the link built into the Aptaclub pages which can connect the reader to a call-centre. The contrast between the modes of reception of the packaging and the 'club' homepages could be generally described as public and private (cf. Thompson, 1995).

There are also comparisons to be made in the grammatical expression of purpose used in the two sets of data. The section begins with that discussion, before moving on to the links between the data and larger scale social practices.

7.4.1 Comparing grammatical expressions

The comparison here between grammatical usage in the sites of data demonstrates any differences in promotional texts used in the packaging and the homepages, as these linguistic contrasts can subtly signal underlying ideologies (Gee, 2014). It is apparent that some grammatical structures recur in both the packaging and 'club' data. Phrase fragments are present, a feature which is common to advertising and poetry, as Cook (2001) points out. 'Contains DHA' is one example of many incomplete clauses from the packaging, while on the website it is possible to read 'Exclusive offers'. These instances indicate that the onus is on the reader to complete the phrases by reference to cultural knowledge and by looking at, and activating, an understanding of the immediate context. This structuring draws us in to complete the possible meanings because assumptions are made by the

copywriters about the familiarity of some tropes (Cook, 2001; Holt, 2002). We do some of the promoter's labour. Few interrogative structures could be found in the packaging data. This is striking as the question form is a device used in advertising to engage the reader/viewer (Cook, *ibid.*). On Hipp 3 packaging, in the form that foregrounds a 'search for a missing piece of information' (Halliday, 1994: 45), the following WH- question is posed to the reader: 'Why choose HIPP Organic growing up milk?'. The information is, of course, immediately supplied in the company's own terms on the packaging, in a statement with a tone of a high level of commitment, demonstrating that the question is a rhetorical device: 'Children from the 12th month onwards still have special nutritional needs and milk is particularly important for helping meet their calcium requirements'. Similar question form structures can be seen on the website, including, for example: 'What happens during a baby scan?'. As befits a form of invitation to join a 'club', a response-demanding voice is foregrounded: 'Did you know your baby responds to your voice in the womb?' (section 6.3). That the answer will be forthcoming if one joins the 'club' is intimated by the rhetorical structure.

On the packaging, declaratives are in evidence. A slight distinction in authority is suggested by this difference between the datasets, although declarative sentences are present on the 'club' pages too. An example of two clauses from a pack ('as they do more, they need more / your little one will be developing at an amazing pace', section 4.4) demonstrates how emphasis is placed, by the copywriter. Through the use of deictic pronouns and material processes, the clause focus in each is on the infant and the requirements that can be met by the product contained in the packaging. The main contrast between the homepages and the packaging is in the lexis, however. On the packs, individual nutritional constituents of the products and their promoted effects are given prominence in short, concise phrases: 'Vitamins A, C and D for the immune system/ with iron contributes to normal cognitive development/ Praebiotik (GOS) (from the Hipp 2 pack); 'Fortified milk drink for young children aged 2-3 years Delivering hard-to-get

nutrients' (Cow and Gate 4 pack). This particular lexical use bears out Mumby's (2016) argument that:

[t]hrough their brands, corporations have increasingly positioned themselves to take on the role traditionally occupied in modernity by the processes and practices of citizenship, including, for example, articulating brand image with particular forms of issue (*ibid.*: 887).

The brands in this way both echo and re-construct concerns in the West about nutrition and diet, anxieties in society about health and food which are evident to researchers (Maurer and Sobal, 1995; Goldacre, 2007; Hayes-Conroy et al., 2013; Scrinis, 2013). My analysis in earlier chapters here indicates how the 'little texts' (Halliday, 1994: 392) of packaging are interlinked with operations at a broader societal level.

More focus is placed on the parents as readers in the 'club' web pages, most especially interpellating the individual mother. In the interrogative form in section 6.3 ('Did you know your baby responds to your voice in the womb?'), and in declaratives such as: 'our Community has other mums at your stage who want to chat...' and 'you will find everything you need to know', section 6.2, the promotional construction of the 'club' is made salient, especially through the use of a relational process and a modal with high probability. Knowledge, constructed grammatically as the domain of the web page producer, is offered in the 'community'. The use of pronouns is similar in both datasets, with a tendency for the parent to be positioned as an unspoken beneficiary: 'we're here to help' can be found as a recurring phrase in the packaging and homepages. Possessive structures are present in both sets, again, with predictable shifts in motif emphasis. As Cook (2001) observes, the identity of the addresser is left vague and unspecified, allowing the reader to interpret this voice. The packaging has, as an instance, 'our Follow-on milk can help support your baby's changing needs' (section 4.3), with its reference to the reader's child, in a gesture of familiarity which is evident in promotional discourse (Fairclough, 2001). The possessive deictic determiner 'our' is associated with the product and brand, as distinct from [their] Follow-on milk, i.e. competitors' products. The 'club'

data includes ‘our Careline’ and ‘our community’. In these examples (section 6.5) the illocutionary force of the determinative possessive is designed to appear inclusive, and associated with the solicitousness of the (unspecified corporate) addresser. Cook (2001) notes that promotional texts include ‘a high-involvement strategy which attempts to win us over by very direct address; they step uninvited into our world, expressing interest in our most intimate concerns’. There are parallels in the lexical representation of social participants in the data. The informal term ‘mum’ is used repeatedly. More formal designations are used for the people who are associated with the producer: there are anonymous ‘dedicated scientists’ on the packaging, and ‘healthcare professionals’, with illustrations, on the ‘club’ homepages. A social hierarchy is created through this use of formal and informal diction. The reader/viewer is positioned as the receiver of more knowledgeable help.

7.4.2 Formula promotion as social practice

It is argued here, therefore, that a particularly important ‘structure of meaning’ that the infant formula packaging and ‘club’ multimodal texts must build is the re-branding of damaged reputations, both for corporate entities such as Nestlé and for the formula product itself. These have been campaigned against since the 1970s (Palmer, 1993; 2009). They have suffered reputational damage more recently from the circulation of information about infant food contamination in China (Wyatt, 2013); and from the Trump administration’s involvement in Latin America (Jacobs, 2018). My research is thus situated closely to the scholarly exploration of an example of magazine print media carried out by Machin and Thornborrow (2003). There, they claim that multimodal critical analysis is appropriate for the examination of branding as it is a social, ‘specific discursive’ practice, which relates certain values to social practices. Machin and Thornborrow comment that ‘[n]ot only hamburgers, but also discourses are globally marketed by powerful multinational corporations. Like hamburgers, they are cheap and attractive, but what is

their impact on the health of social and personal relations in the world at large?’ (2003: 453).

An ideal of ‘nature’ is intertextually introduced, on the packs and in the ‘club’ homepages. In these examples in sections 4.3 and 6.4, nature and science are invoked together. Again, these multimodal references to nature and the ‘natural’ are fragmentary; they invoke values such as the ‘countryside’ and ‘organic’ (cf. Cook, 2009), to connote nature as an ill-defined desideratum for promotional purposes (cf. Williamson, 1978). Nature and an illusion of nature are thus multimodally entangled. The contradictions between the representations of nature and technology are not foregrounded. Williamson’s observation that ‘advertising has no subject...we are drawn to fill the gap left where the speaker should be’ (1978: 14) can be seen to be operationalised effectively and positively by the designers of the multimodal packaging texts. This is a particular way of replacing of one public brand image with another. A counter argument is that branding by firms develops efficiencies; creates product recognition; can offer credibility to customers, and can guarantee high quality (Aaker, 2004; Keller, 2009). The formula market is dominated by a handful of firms, however. My research is important because the Western market hegemony of the huge formula corporations makes their discursive power influential. In her discussion of promotional communication, Johnstone (2008) suggests that:

...texts and interpretations of texts are shaped by the world and they shape the world...The Western tradition of thought about language has tended to privilege referential discourse and to imagine discourse reflects the pre-existing world. But as twentieth century philosophers, theoreticians, and linguists showed us again and again, the converse is also true, or perhaps truer: human worlds are shaped by discourse (2008: 10-11).

Johnstone’s view of discourse as productive and constructive of socio-cultural norms remains feasible when applied to arguments which run counter to the critical position, for example those proposed by marketing scholars (Costa, 1995; Day and Aaker, 1997;

Underwood and Ozanne, 1998; Moingeon and Soenen, 2002). They theorise that various modes of commercial promotion perform necessary roles in consumer society. These include the active encouragement of people's engagement in consumption patterns, which stabilises society through the mechanism of our involvement in the market as consumers and workers. This mechanism relies on the performance of families as economic units which reliably reproduce consumption behaviours (Brown, 2015). The feminist theorist Lury (2004; 2009) goes further, to propose that brands mediate culture. For example, she claims that:

...there is a clear concern with habits and precepts, and attempts to understand the temporality of a body by plugging it into a field of action. In all of these fields, the brand may be staged as a performance or an event of some kind. Minute and apparently inconsequential decisions become the active site of intervention (Lury, 2009: 75).

The formula milk corporates' broader promotional infant care campaigns are aimed mostly at women, as shown in the visual analysis of the 'club' webpages, and this can be seen as exemplary of Lury's dictum, above, that brands can intervene in decision-making. The two media of packs and 'clubs', with their semiotic affordances, are linked. The analysis of the packs can therefore demonstrate the language and visual representation which Kent (2014), a food policy specialist, alludes to in his critique of the food industry:

[f]ortification schemes add to women's burdens and detract from their power. Suddenly people need chemicals with unrecognizable names, delivered through programs and foods designed by specialists and experts....they are now told they must get things in boxes and bottles. The advertisements tell them how important it is to provide those boxes and bottles; it is the responsible thing to do. This adds to the pressure (Kent, 2014: 529).

This 'pressure', both from the corporate producers and from health promotional messages which are internalised by consumers (Petersen, 2003), can be seen to be

applied acutely to parents and carers who are confronted with the responsibility of feeding infants who are over six months, for example.

The data studied here are not context free. They have emerged as products of the practices of large multinational food companies whose goods are traded across the globe. The artifacts which disseminate multimodal texts in the UK can be found to be circulating in English in other countries, albeit with different regulatory regimes and socio-cultural backgrounds. The methods employed to examine the data found in the UK could be extended and adapted to analyse formula milk packaging and corporate online ‘clubs’ abroad. This argument is explored more, below, in the concluding chapter.

7.5 Methodological evaluation

7.5.1 Food packaging and ‘club’ homepages as datasets – limits and potential

The packaging and ‘club’ homepage data were unchanged for the duration of the collection period, as described in chapter 6, but when the pack ranges and ‘club’ pages were viewed again in late 2018 and early 2019, it was clear that certain design elements, including colour and the use of fonts, had been altered by the producers, i.e. the designers and manufacturer. These developments would be expected in the ever-changing medium of digital communication. I argue that the remodelling of aspects of brands such as these is inevitable and can, moreover, be anticipated in a consumer-oriented business, because the appearance of novelty is also marketable. Jurafsky (2014) notes, following Bourdieu’s theory of class distinction, that snack food packaging manufacturers’ use of ‘health language is not, as far as we can tell, due to actual differences in the chips [crisps]’ (2014: 110). It can be envisaged that future versions of formula milk packaging, and of other marketed foodstuffs, will foreground health claims framed in different language and altered visual displays, perhaps orienting more towards individualised healthcare (Mephram, 2012). Other signifiers which marketers may find equally compelling in the future will, in all probability, be used. The shift from a reductionist discourse on the packaging to

a generalised pro-breast feeding, childcare and ‘community’- centred discourse on the homepages indicates, as Williamson (1978) notes, that moving on is built into promotional work because ‘new products must constantly appear up to date’ (*ibid.*: 64). Health related language and images, however, derive from, and help to construct, a particularly powerful discourse in the West, as Jones (2013) points out. Marketing agencies and consultants monitor social movements, on the other hand, in order to understand the origin of successive cultural changes and to appear relevant to consumers (Brown et al., 2003). The tracking of ‘[m]inute and apparently inconsequential decisions’ (Lury, 2009: 75) informs branding inventions, to maintain profitability (Brown et al., *ibid.*). As Thurlow (2014) also argues,

[a]lthough they have sometimes been caught unawares by the uptake and development of new technologies, ...people of commerce are always quick to catch up and their drive to capitalise is voracious (...it’s all about ‘monetisation’). Excited claims made in the 1990s for the democratising, emancipatory and participatory potential of new media have had to be sharply revised as the involvement of commerce has intensified (2014: 174. Parentheses in the original).

This means that innovation and keeping abreast of technologies of communication are built into commercial promotional activity; here Thurlow strikes a note of caution. As profit-driven organisations, such as those which dominate infant food manufacture, have harnessed interactive web affordances, optimism about the possible egalitarian effect of these developments have been revised (cf. Thompson, 1995).

The late innovations in font style and layout which have altered the data in my study slightly, changes which were made by designers outside the date parameters of the data collection period, do not detract from the transferability of the findings in this study. This is because the methodology may still be applied to each iteration of packaging and web pages as produced within the promotional, profit-oriented neoliberal system as it prevails.

7.5.2 Multimodal critical discourse analytical methods – the limitations and strengths of using an interpretive approach.

A clear constraint on any interpretive method is that it can be charged with being subjective. To counter this, MCDA has been adopted because it has a robust and systematic framework. This has been worked through with illustrative examples from the data, to demonstrate the argument that texts rendering reductionist, quantifying discourses are present in the packaging data, and that the lifeworld experiences of young parenthood are commodified by corporates in the ‘club’ homepages. Jewitt (2015) cites some of the challenges of a multimodal approach. She argues that attending to diverse communicative modes simultaneously can detract from insights into a single mode. That limit is addressed here by systematically analysing the data and making overt connections between the feasible meanings of the modes, textual and visual. By undertaking the analysis in this way, it is hoped that the pitfall of considering one dominant mode, for instance verbal communication, at the cost of demonstrating how other semiotic resources are used for making meaning, is avoided. The innovative contribution which my research for this thesis makes to the field of the discussion of food discourses is in bringing a multimodal, critical lens to examine infant formula packaging and the food corporates’ ‘club’ homepages. Critical discourse theory demands that links are made, contextualising the micro examples from the data with macro questions of social practice and ideology. Hence, the discourse of nutritionism running through texts on the packaging of this foodstuff for infants is viewed for the first time in relation to the multimodal texts on the homepages of the manufacturers’ websites which promote ‘clubs’ aimed at parents and carers. This is important as a strategy because, until now, nutritionism has been discussed in the literature theoretically in more general terms with broad brush examples (Kimura, 2013; Scrinis, 2013; Bonotti, 2015). The implicit discourses idealising parenthood and establishing the manufacturers as child care experts have not, hitherto, been discussed in the context of ‘club’ homepages. At base, the point of any MCDA driven analysis is,

as Machin (2016) notes, ‘to reveal buried ideologies in texts, to show how the powerful seek to re-contextualise social practices in their own interests and maintain control over ideology....it is clear this is done multimodally’ (2016: 322-323).

A strength of the multimodal work in this thesis is that the meaning-making potential of language in the packaging and ‘club’ pages is acknowledged, while being firmly set in relation to the other visual resources for communication with which it is interwoven. This necessarily leads to the selection of examples with which to further the argument; clearly, not all data can be reproduced verbatim because of lack of space. The process of selection has been guided by principles which build on scholarly work. It should be emphasised that the disparate semiotic resources from which packaging and web page designers draw have different affordances, and the use of a framework such as MCDA facilitates the construal of design decisions. To cite one small illustrative example, Machin (2016) questions the relevance, in analysis, of noting that a vector is present, in his discussion of visual grammar. In the analysis here it has proven useful in pointing out the cohesive link made by producers between brand logos and images and text which connote nutritional health and prestige. It is noted and discussed in social semiotic scholarly literature that the development of a visual ‘grammar’ is an on-going project (van Leeuwen, 2005; Machin, 2016), to which my research contributes. The discussion now turns to the significance of the findings for readers and viewers.

7.6 Implications for parents, carers and regulators

This section will consider what implications there may be of the discourses found in the foregoing analysis for parents and carers. Specifically, ways of challenging these discourses will be discussed. That having being said, I believe it is not my place as a researcher to direct others. In the spirit of reflexivity, the following suggestions form courses of action which I would undertake as someone with childcare responsibilities in order to question

the promotional gambits which have been identified in the analysis and explored earlier in the discussion. The actions are within the law. The results of the analysis lend themselves to the development of campaigning effort because the promotion of infant formula affects a cohort of the most vulnerable in our society (Cook and O'Halloran, 2000).

There are existing groups in the UK which monitor the promotion of infant formula milk (Baby Milk Action, 2020; La Leche League GB, 2020). However, the discourses which they circulate, while opposing infant formula marketing, could be interpreted as oppressive to women who choose not to breastfeed. Rather, a range of individual and community action responses could be developed. An inspiring example of the transfer of critical thought from the academy to the community is offered by the discipline of art education, which has a history of enabling social action and engagement, even including the curricular inclusion of courses in activism (Frostig, 2011). Felshin argues that 'activism is process-based rather than object- or product-orientated...activism joins preliminary research with activist goals to achieve audience participation' (1995: 10-11). This approach to resisting problematic discourse emphasises activity which focuses on the power of the agency of the actor, in this case a parent or carer. The open-ended nature of projects to change discourses in a neo-liberal socio-economic context is acknowledged. The art education activism heuristic is fruitful for this section in offering cues which relate a critical approach, or theory, to practical responses.

To stop purchasing infant milk which is retailed for infants over twelve months is a form of direct action, with a long history, against the marketing activities of infant milk formula companies (Geller, 2018). This only has an impact if carried out on a large scale, clearly, and if the organisation responsible for diffusing the discourse, against which the boycott is aimed, is made aware of the opposition and the reasons for it. An immediate response would be to utilise the means of communication (Thompson, 1995) which the companies put at parents' and carers' disposal, using the details on the formula corporates' homepages, and signalled on their packaging. This entails contacting them through their call centres

or using the club contact pages to draw attention, for example, to the lack of diversity in the representation of families on the homepages; the confusion of infant and toy imagery and graphical representations of ideal motherhood on the packs; and to object to the expense of infant formula. The drawback of this action is that it is individual and may have little influence, unless a campaigning group could be developed to bombard the call centres. Corporate food manufacturing managers can also be traced and contacted through social media sites for professionals, such as Linked in (LinkedIn Corporation, 2018). There are existing organisations helping community groups to formulate campaigns which offer on-going grassroots support, such as The Food Foundation (Food Foundation, 2020). A critical nutritionist stance is evident in their discursive approach. The Foundation describe themselves as ‘a registered charity working in partnership with researchers, campaigners, community bodies, industry, government and citizens to galvanise the UK’s diverse agents of change’ (*ibid.*). This organisation campaigns on public policy to change the food system, including work to establish a commission on children’s food which would include children, and thus the slow work of countering reductive discourses of nutritionism with a positive agenda could be approached through collaboration with them.

Another technique of addressing the aspects of promotional discourse which are most problematic is through an indirect means known as investment action (Shareaction, 2020). This utilizes the power which those in employment pension schemes have to influence the investment decisions that pension trustees make on behalf of scheme members. In other words, this form of activism exploits the affordances of engagement with the financial system under capitalism. The course of action entails establishing whether one’s pension scheme invests in any of the infant milk food manufacturers, working with the workplace trade union to raise awareness of a contentious area, such as the references to probiotics and health claims on the packaging, and campaigning through engagement with the pension board to apply pressure as shareholders to ameliorate the activities

of the corporates. In the recent past, as an illustration of what is achievable through investor action, small groups of highly committed individuals have also been successful in pressuring a bank to change their investment and lending decisions, albeit because of concern about different issues. The action entails buying a small share and owning it long enough to have a voice at the bank's Annual General Meeting (O'Sullivan, 2010). This approach creates publicity and so can generate an alternative discourse. The clear disadvantage of investor action is that it assumes access to financial resources.

The questionable discourses which appear to flout the current regulation, including the use of toys and graphical representations of motherhood, could be reported to a regulator. There has been successful action taken by local regulators. For example, in 2003, the Birmingham Trading Standards unit won its case against the advertising of SMA infant formula (Laurent, 2003). At the national level of regulation, the All Party Parliamentary Group on Infant Feeding & Inequalities met in January 2020 at the House of Commons (APPG on Infant Feeding and Inequalities, 2020). The group publishes a newsletter and can be contacted to put forward views and comments, and so lobbying and detailed argument about tightening the current regulation of infant milk corporate promotion can again be made to the parliamentary group. It is also important that MPs are made aware of the impact on families of the closure of children's centres. At a broader level, support can be offered to groups such as Action for Children (Action for Children, 2020). This charity works to 'improve children's life chances', including campaigning to keep open the remaining Sure Start centres for families in the UK (*ibid.*).

Considering the power to communicate which the food industry can mobilise, resistance to their influence through changing the nutritionistic discourse of infant milk promotion in the UK would be an ongoing, long-term project. The food industry operates within a regulatory environment, however, and it is this context for the infant formula industry which will be discussed next.

7.6.1 Regulation

In this thesis it has been found that images which connote ideals of motherhood and of small infants on formula packaging appear to go against the existing regulation, which limits idealising imagery on formula (section 5.3). The producers of these images could clearly come to be regulated, if there were wider awareness of visual design and its communicative work. Cook and O'Halloran's study of the legibility of formula packaging texts makes recommendations for further regulation. This includes the consideration of the use of typefaces and layout to ensure that packaging designers give salience to obligatory, relevant information, but their conclusions do not consider the promotional use of imagery. Gunter et al. (2012), from a media and communications field, surveyed formula manufacturers' web sites in the UK twice, in 2009 and 2012, to determine how they complied with existing regulation. Their finding, in concert with an observation by Cook and O'Halloran, was that consumers at times misremembered follow-on product promotion on the websites, and assumed it referred to formula for babies aged less than six months. Their major finding was that the websites in the second survey in their study had conformed to regulation about formula promotion more strictly (Gunter et al., 2012). In my multimodal analysis, however, it was found that the Important Notice about the benefits of breastfeeding, one of Gunter et al.'s measures of compliance, is indeed present, but that the message has been co-opted, and placed in the foreground to position the manufacturers as childcare experts. This more nuanced communication would need to be considered, if further regulation were the route that campaigners, for example, wished to pursue.

The WHO guidance dated 13th May 2016 clearly states that '[m]essages should not:

- include any image, text or other representation that might suggest use for infants under the age of 6 months (including references to milestones and stages)' (World Health Assembly Secretariat, 2016: 2. Parentheses in the original).

As can be seen in figure 5.6 and its analysis, the layout and design of the bottles blur the boundary between formula for newborns and older babies and so go against the guidelines. Moreover, the same guidelines recommend that

[c]ompanies that market breast-milk substitutes should refrain from engaging in the direct or indirect promotion of their other food products for infants and young children by establishing relationships with parents and other caregivers (for example through baby clubs, social media groups, childcare classes and contests) (*ibid.*).

My analysis of the ‘club’ homepages leads to the argument that such promotion is part of the web-based marketing effort by manufacturers, and again, is in contravention of the WHO guidance. These elements have not been translated into legislation in the UK, however, as attempts to strengthen the Formula Act of 2007 have failed in the UK parliament (and see Hampson, 2013). On the 16th of November 2016, Alison Thewliss MP introduced a Bill in the House of Commons which sought to regulate the promotion of formula milk (Parliament, 2016) following the publication of the WHO guidelines (Hansard, 2016). The presentation of the Feeding Products for Babies and Children (Advertising and Promotion) Bill by Thewliss, for its first reading, happened to coincide with the period during which the data for this thesis were collected. In fact, the Bill fell because Parliament was dissolved on 3rd May 2017, before its second reading could be debated. There is therefore a lacuna between legislation in the UK and the guidance produced by the World Health Organisation, despite parliamentary lobbying by pressure groups (Landon et al., 2017). The WHO Code and subsequent guidelines are more robust than the legislation (*ibid.*).

The multimodal approach here reveals that health claims on the formula packaging involve complexes of communicative resource and can be quite subtly connoted. In one example, a vector spans the Similac brand and technical-sounding phraseology (section 4.7.1: ‘Contains LCPs DHA/ AA (omega 3 & 6)’) associated through placement with a graphic shield in gold. Furthermore, up-tick graphical devices in layouts with abbreviated

lists of claims ‘IMMUNITY ...COGNITION’: section 4.3) are not substantiated on the packaging and cannot be challenged. Power in discourse is productive, however, and creates resistance (Fairclough, 2001). Scrinis (2013) believes that much tighter regulation is needed to prevent food manufacturers throughout the food system from making health claims, because they can be misleading.

Regulation can only go so far, as the large food corporates can harness vast resources to lobby government (Jacobs, 2018) and to create promotional opportunities out of apparently antithetical discourses, as discussed here. On the basis of my analysis, the aspects of the promotion of infant milk formula described in this section would appear *prima facie* to be in breach of the regulation, however this is not the appropriate place for a formal legal discussion and opinion, which would have to be tested in court.

7.7 Summary

In this discussion chapter, packaging and ‘club’ homepages, which are produced by the major formula milk manufacturers, have been reviewed in terms of the analysis from previous chapters. The data have been put into context, and this study has been placed in the growing research field of multimodal, critical discourse analysis of food promotion in English. There has been very little critical attention to reductionist communication on packaging, and this study addresses this gap. The multimodal texts on the packaging and on the ‘club’ homepages, it is argued here, appropriate health promotional messaging to recreate the formula milk brand, by discursively positioning the manufacturers as experts, including in childcare and parenting. This discourse can undermine the agency of the potential buyers, while complex socio-economic structural difficulties which affect families are disregarded.

As this study is part of an expanding field of enquiry, it opens up a programme of ideas for further research which will be sketched in next. The thesis now ends with a concluding chapter, in which a summary of findings can also be found.

8. Conclusion

A key objective of the research in this study was to investigate how health promotion and food promotion discourses are presented through texts on packaging for manufactured infant formula, follow-on, and growing up milks in the UK, and on the manufacturers' 'club' homepages. These sets of data are clearly linked through the presence of the homepage web addresses on the packets and tins. A secondary purpose of the research was to explore how human participants are represented in the packaging and the webpages, linguistically and visually. A closely related aim was to examine what relationship with the reader/ viewer is built, through the use by the producer of images and text, and whether subject positions are created between the participants. If so, how are these positions realised, multimodally? Finally, it was also an intention to see whether participants and topics are excluded from the promotional texts, or made obscure, as less attractive aspects of the production and manufacturing of the formula milk may be omitted from, or minimised in, promotional campaigns in order to maximise sales.

8.1 Summary of key findings

It would be artificial to separate the results of the analysis into discrete answers to the research questions, as they are bound up with one another. The representation of participants on the packaging and on the homepages, for example, aids in the development of the discourse of promotion. Broad categories can be drawn, however.

8.1.1 How are health promotion and food promotion discourses presented, multimodally?

A result of the study is that a reductive, quantifying discourse of nutrition is communicated in the packaging. Infant milk packaging was found to be a site for

the dissemination of notions of infant food as a bio-scientific product, while text and images invoking nature were also to be found, for example on Hipp packs. The possible meanings of nature as a referent were unclear, but it is feasible that the use of denotation of 'the natural' aids in the obfuscation, by producers, of the highly processed character of the formula milks. This may be especially relevant for a brand which claims to be 'organic', as Hipp does. The foregrounding on the packaging of elements of the milks such as 'GOS/FOS', and attaching health claims to certain nutrients, such as their use for 'normal bone development' (section 4.5), appeal to an individualistic discourse and suppress the sociability of food, I argue.

The nutritionism discourse is less visible in the 'club' homepages, against my expectation that branding would dictate that the follow-on and growing up milks would be marketed with health claims on the websites. This shift in emphasis on the homepages, it is argued, allows the texts and imagery denoting wider aspects of parenthood to be placed in the foreground in the 'clubs'. I argue that this is an example of the lifeworld of the family being colonised by a commodifying system. Breastfeeding is given prominence on the homepages through images and texts (section 6.4), and my argument is that this topic coheres with the Important Notice, an obligatory text in all formula promotion in the UK, which states that breastfeeding is the best method for feeding infants. The manufacturers have, in effect, co-opted the practice of breastfeeding and its imagery, through using the rationale that they are experts in all matters concerned with infants' milks and feeding (section 6.5). The commercial world, in this way, makes inroads into a private experience. The regulation was originally intended to curtail their promotional activities (Crawley and Westland, 2018), but by appearing to fulfil the rules about recommending breastfeeding, the producers can communicate a morally superior position. This is a significant discursive manoeuvre because it may undermine one of the main planks of argument by campaigners, i.e. that breastfeeding as a practice is subverted by formula promotion (Palmer, 2009).

8.1.2 How are human participants represented in the packaging and homepages?

The use of cartoon imagery on the packaging, ostensibly denoting toy animals but plausibly also subtly connoting human infants, makes the applicable section of the current regulation of the packaging (Hampson, 2013: paragraphs 30 and 31) appear somewhat redundant and weak, I would contend. The regulation prevents the idealisation of infants on formula packs in terms, and yet the SMA logo was found, notwithstanding, to also invoke an ideal, quasi-religious trope of mother and child.

It was noted that there are frequent reminders to join the manufactured ‘baby community’ in the homepage layouts, mostly in the form of imperatives. The ‘community’ and its desirability are thus in focus on the homepages, with images of groups of women, for example, made highly visible, with branding colours and fonts associated with them. Cultural norms of behaviour were found to be connoted in the images, for example by the use of soft focus, domesticated or ‘natural’ background scenes, and by the absence of images of any women in public or work settings. The exception to this was the representation of the childcare helpline ‘nurses’, all women, who are realised as authorities in giving parenting advice. It is also disturbing that the pregnant body is subject to scrutiny and the gaze in these commercial websites. Torsos were discovered to be centrally placed in many images of pregnant women, with their faces, and thus their identities as whole people, erased. This is a distorting construct.

8.1.3 Are subject positions created? What relationship with the reader/viewer is built?

A discourse of childcare expertise was found to be promulgated in the ‘club’ homepages, with the readers/viewers placed in this unequal relationship as the beneficiaries of information. This echoes the self-positioning of the producers as experts in the scientific

or technological production of ‘tailored’ formula in the packaging texts (section 4.3). The warrant which is used by the manufacturers is that their position renders them in some way ‘professional’ and knowledgeable. This strategy, I argued, may be deployed to draw in the consumer, and persuade them of the premium qualities of the brand (cf. Fairclough, 2001). Links to childcare information elsewhere in the websites are available on the homepages, associated with images of parents and infants. Ante-natal scan images are also present on the homepages, and I argue that this fetishizes a technology whose output is confidential, for consumption in private. The representations of parenthood are limiting and socially exclusive. Pregnant women are white, attractive, happy and well-dressed. These constructs could cause anxiety in viewers about their own competence as parents, if their lived experience does not match the ideal which is projected online. The images of parent and child groups are of the traditional, nuclear family unit: a woman, a man, and a baby or young child (section 6.2). Such multimodal texts may be productive of more sceptical responses from readers/viewers, in the sense that Foucault suggests (1980). A discourse which excludes groups of people, who are, after all, potential buyers, may lead to resistance among readers/viewers.

8.1.4 Are some participants and topics excluded or occluded?

The packages of formula milk for infants result from a highly complex, factory process. This fabrication is hidden by the many references on the packaging to specific nutrients, without stating which have been added rather than being intrinsic to the basic ingredient of whey (see 4.8). Moreover, aspects of the packaging itself, for example its component materials, are not specified in the texts to be found there. It is noted that in emotional appeals to potential purchasers of the packs, the mother is addressed. The father or male carer is excluded. A narrow, ethnically exclusive and traditional, heteronormative model of infant care and feeding is reinforced. Similarly, on the homepages, images of pregnant women dominate the space.

The references to nature, in text and image, on the packaging and homepages, occlude the fundamentals of the farming processes which produce some of the basic ingredients in the liquid and powder formula (section 5.4). There is thus a surfeit of information which promotes the prestige of the product, and an absence of the controversial facts which a consumer may find disturbing. In this way, a particular representation of technologized, 'natural' food is made commonplace. Eagleton (2007) argues that a view of nature as detached from the impacts of social organisation is itself ideological and thus influential:

[i]t is interesting that the concept of naturalization itself rests upon a particular *ideology* of Nature, which takes it in the manner of William Wordsworth to be massively immutable and enduring; and it is ironic that this view of Nature should prevail in an historic epoch where the stuff is continually being hacked into human shape, technologically dominated and transformed (2007: 59).

At the same time, the real weekly economic impacts on a family or carers of using formula, especially the expensive brands, are not made clear on the packs or on the homepages. Marketing energy has, instead, been expended in making distinctions between brands, through semiotic choices (section 5.2), and in promoting formula to parents of children beyond infancy into toddlerhood in order to capture more of the family financial resource. The socio-economic constraints and the cultural context of infant feeding are thus not addressed, but, rather, images idealising infants and parenthood can be seen on the packs and, most notably, on the homepages.

8.2 Contribution to MCDA

The study contributes to theory development by demonstrating that nutritionism, as a broad set of sociological premises concerning food consumption and food industry operation, functions and is operationalised at the micro level in aspects of this data. This analysis has used MCDA to consider the patterns in language and imagery which express nutritionism, for the first time. That is, nutritionistic constructs can be viewed and read

in one dimension of the promotional strategy for formula milk, follow on milk and growing up milk. Although these are important products of large food corporates in the UK, as sales of formula and follow-on milks alone went up by £37million between 2015 and 2016, the findings cannot be generalised to other areas of food promotion or consumption.

This opens a path for further research employing MCDA to explore, for instance, the discourses of nutritionism which may be co-opted by producers to promote functional or novel foods. In addition, the exploration of the infant milk manufacturers' 'club' homepages, while limited to the study of the gateways for these websites, adds to research in MCDA by extending the object of study beyond the largest social media sites. In examining the homepages, it is possible to see evidence of normative constructs of pregnant women, of the family unit, and of the infant. These constructs circulate idealised images which are highly problematic, for example in their lack of ethnic and sexual orientation diversity.

8.3 Further research

This study has concentrated on the promotional texts which have been devised by the designers and copywriters who create multimodal promotional strategies. I am aware that limits of space and time mean that further research could usefully be designed in order to listen to the voices of other relevant parties. Cook and O'Halloran (2000; 2008) focus to some extent on interview and questionnaire data from parents, and on a discussion of a short interview with a packaging designer. Their primary concern is with the accessibility and legibility of obligatory information of formula and children's cereal packaging. The frame of reference of the producer/ designers could also potentially produce interesting data to attend to in future. These data would not be conclusive but would add new texts and new data for analysis, and create useful adjuncts to the present discussion.

Because the sociolinguistics of food is at a relatively early stage of its development as a sub-discipline, there are many lines of enquiry which further research could take. A complement to this work on packaging would be to carry out interviews of families and carers, to hear their responses to the multimodal texts on children's food packaging, including formula. It would be of use to analyse parental views about model plain packs of formula and children's food packaging, free of branding messages. Further research in regulatory development and its approach to food corporate communication is also urgently needed. Cook and O'Halloran (2000) argue that the legislation is 'text-based', meaning that it does not take adequate account of the power of rhetorical nuance. Added to this work should be research to support the development of infant food regulation which could robustly take account of multimodal promotional discourse.

There is critical scholarly work still to be carried out on the social semiotics of corporate consumer on-line 'communities', and this can extend to social 'clubs' which are cultivated by producers other than food manufacturers. The on-line discourses created by very large social media corporates deservedly receive attention from discourse analysts, and it is now timely to recognise that other organisations bound up in the consumption economy require analytical attention because of their potential to influence social practices. It is also pressing to add a critical discourse voice to a discussion concerning the large food corporates' fiduciary duty, or their responsibility to shareholders. The research could examine such relevant corporate communication as is in the public domain, and aim to analyse interviews with key figures. Fiduciary duty, more generally, has been a central and contested concern in the discipline of organisational theory dealing with governance, environmental and social responsibility. The interpretation of fiduciary duty by a commercial enterprise can determine the extent to which profit is put before people (Williams and Conley, 2007), and is a discourse worthy of critical scrutiny.

Further work could be carried out which uses the research here as a springboard

for analysing the discourses which are used internationally to promote formula milk and infants' foods. Such analysis would render the project capable of cross cultural comparison, and offer a more complete picture of contemporary promotional discourses as they operate in large food corporations. The analytical work would also be significant in light of the context of continuing international controversy about formula milk marketing (Muller, 2013), including litigation in Pakistan (Shabbir, 2019). Formula milk promotion was also in the international news headlines when the representatives of the North American government administration controversially went against the passing of the WHO resolution on infant feeding in 2018. The resolution proposed the ending of infant formula promotion (Jacobs, 2018), and the Trump administration supported the milk formula lobby. A Changing Markets Foundation report (2019) also outlines the challenges for families in Hong Kong which parallel findings from the study here:

[f]eeding a 2-3-month-old baby for one month with the most expensive Nestlé formula in Hong Kong would cost a family approximately 3.6 times more than feeding a child with their most expensive formula in the UK. This premiumisation happens despite the advice of nutritional and health experts (such as the NHS and UNICEF) that more expensive products have no proven nutritional benefits (2019: 10).

An area of work in social semiotics which could usefully add to the literature is that on the representation of pregnant women, in other media than that studied here. Discourses related to pregnancy have received some attention in cultural studies and sociology, but there is, as yet, little critical multimodal work on this important topic. Research in social semiotics could include the critique of the clinical representation of pregnant women; the consideration of the discourses related to the various medical technologies which pregnant women are invited to be subject to, including scanning; and analysis of the many websites which proffer advice, multimodally, to expectant parents. There is also critical work still to be carried out into multimodal past and present representations of early parenthood, in relation to what Brown (2015) argues are ambivalent neoliberal ideologies of the family.

8.4 Overall summary

The investigation of the promotion of formula milk, follow-on, and growing-up milks in the UK led to the realisation that constructs of infancy, and of parenting ‘communities’, were also, crucially, being communicated through the manufacturers’ digital ‘club’ campaigns. The theoretical perspective that was used, in pursuit of the research objectives, was multimodal and critical. This approach has been built on by employing hypotheses from the sociological study of nutritionism, as this was viewed as appropriate for the detailed analysis of food promotional discourses in late capitalism. Nutritionism, I argue, is evident in multimodal communication in the packaging, in which the focus is on individual elements, marking a shift towards the conception of food as a bio-scientific grouping of entities which are only useful if the individual’s health is enhanced. Discourses both sustain and build power and ideology, which are then promulgated through the ownership of their digital and packaging communicative media by corporates such as the large food manufacturers in this study. Texts which circumscribe notions of food; idealise infancy; delimit the idea of ‘community’; and represent pregnant women as both in need of commercial ‘experts’ and as objects of scrutiny, are in this way, it is argued, legitimised and naturalised. The study extends existing knowledge about formula promotional discourses used by the large corporate entities in the UK, by applying multimodal analysis underpinned by sociological theorising of branding, health and nutritionism.

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Appendix

Appendix A: Formula milk manufacturers' 'club' homepages

Appendix B: Lexes and abbreviations on the formula packaging

Appendix A: Formula milk manufacturers' 'club' homepages



Pregnancy exercise is good for you and your baby too, so there's never been a better time to get Active for 2(<https://www.aptaclub.co.uk/article/active-for-2>)

Discover how our early life nutrition expertise can help you lay the foundations for your baby's future(<https://www.aptaclub.co.uk/gift-of-future-health>)

More from Aptacub

A.1 Screenshot of Aptacub homepage 1:

www.aptaclub.co.uk , downloaded July 2017



Active for 2

When you exercise in pregnancy(<https://www.aptaclub.co.uk/article/active-for-2>), your baby exercises too. Studies show that pregnancy exercise has many benefits for both of you, so pick a sport and find a trimester based workout for you today.

[Learn more\(/article/active-for-2\)](#)



A.2 Screenshot of Aptaclub homepage 2:

www.aptaclub.co.uk , downloaded July 2017

Hello in There

Did you know your baby responds to your voice in the womb? Discover the benefits of talking to your bump(<https://www.aptaclub.co.uk/article/talking-to-your-bump>), and with the help of our experts, start a conversation that lasts a lifetime.

[Learn more\(/article/talking-to-your-bump\)](#)



7 wonders of breast milk

Breast milk(<https://www.aptaclub.co.uk/article/the-7-wonders-of-breastmilk>) is incredible, multifaceted, and fascinating. And as we're able to discover more and more about its composition, more unexpected and amazing properties are being revealed.

[Learn more\(/article/the-7-wonders-of-breastmilk\)](#)

A.3 Screenshot of Aptaclub homepage 3:

www.aptaclub.co.uk , downloaded July 2017

Preparing for Birth App

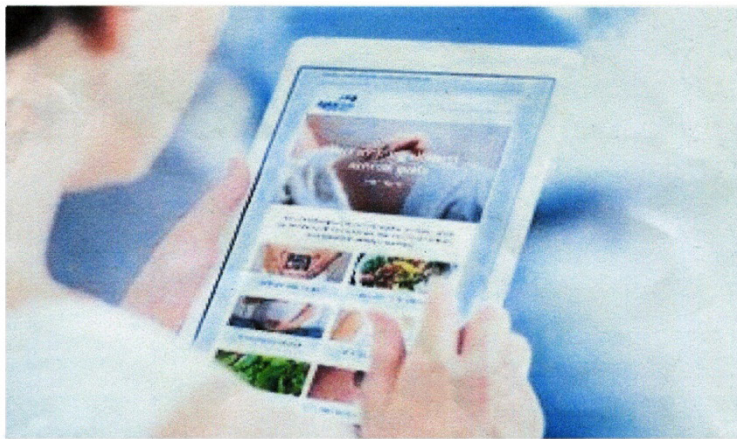
Feel confident from early pregnancy to preparing for your baby's arrival with advice from our midwives, ready-made checklists, event reminders and a contraction timer for when the time comes!

[Learn more\(/article/preparing-for-birth-app\)](#)

[https://itunes.apple.com/gb/app/preparing-for-birth/id580108631?](https://itunes.apple.com/gb/app/preparing-for-birth/id580108631?mt=8)
<https://play.google.com/store/apps/details?id=uk.co.aptaclub.preparingforbirth>

A.4 Screenshot of Aptclub homepage 4:

www.aptaclub.co.uk , downloaded July 2017



Tailored advice via email

Aptaclub emails are helping mums-to-be through pregnancy

***"It was very helpful right from the time I
joined and is still useful now"***

Jawharat, Birmingham

LEARN MORE(/REGISTER)

Source: Careline exit survey 2016, 2379 people

A.5 Screenshot of Aptaclub homepage 5:
www.aptaclub.co.uk , downloaded July 2017

Questions about feeding and nutrition?

Our midwives, nutritionists and feeding advisors are always on hand to talk about feeding your baby. So if you have a question, just get in touch.

97% of Careline users say they'd contact us again

Source: Careline exit survey 2016, 2379 people

LIVE
CHAT([HTTPS://WWW.APTACLUB.CO UK/ARTICLE/LIVE-
CHAT-UNAVAILABLE](https://www.aptaclub.co.uk/article/live-chat-unavailable)) WhatsApp

Call us 24/7 on **0800 996 1000**.

alternatively you can [Email us\(/ask-us\)](#)

A.6 Screenshot of Aptaclub homepage 5:

www.aptaclub.co.uk , downloaded July 2017

- [Aptamil Pepti 2\(/article/aptamil-pepti-2\)](/article/aptamil-pepti-2)
- [How to prepare Aptamil Pepti 1\(/article/aptamil-pepti-1-safe-preparation\)](/article/aptamil-pepti-1-safe-preparation)
- [How to prepare Aptamil Pepti 2\(/article/aptamil-pepti-2-safe-preparation\)](/article/aptamil-pepti-2-safe-preparation)
- [How to prepare Aptamil Anti-Reflux\(/article/aptamil-anti-reflux-safe-preparation\)](/article/aptamil-anti-reflux-safe-preparation)
- [How to prepare Aptamil Comfort\(/article/aptamil-comfort-safe-preparation\)](/article/aptamil-comfort-safe-preparation)
- [How to prepare Aptamil Lactose Free\(/article/aptamil-lactose-free-safe-preparation\)](/article/aptamil-lactose-free-safe-preparation)



Expert advice when you need it

Our team of midwives, nutritionists and feeding advisors are here to answer your questions. Just get in touch.

LIVE
CHAT([HTTPS://APTA CLUB-
DEV REALADVENTURE.NET/ARTICLE
CHAT-UNAVAILABLE](https://aptaclub-dev-realadventure.net/article-chat-unavailable))

WhatsApp([https://api.whatsapp.com/sen
phone=447557204242](https://api.whatsapp.com/send?phone=447557204242))

Call us 24/7 on **0800 996 1000**.

Alternatively you can [Email us\(/ask-us\)](#)

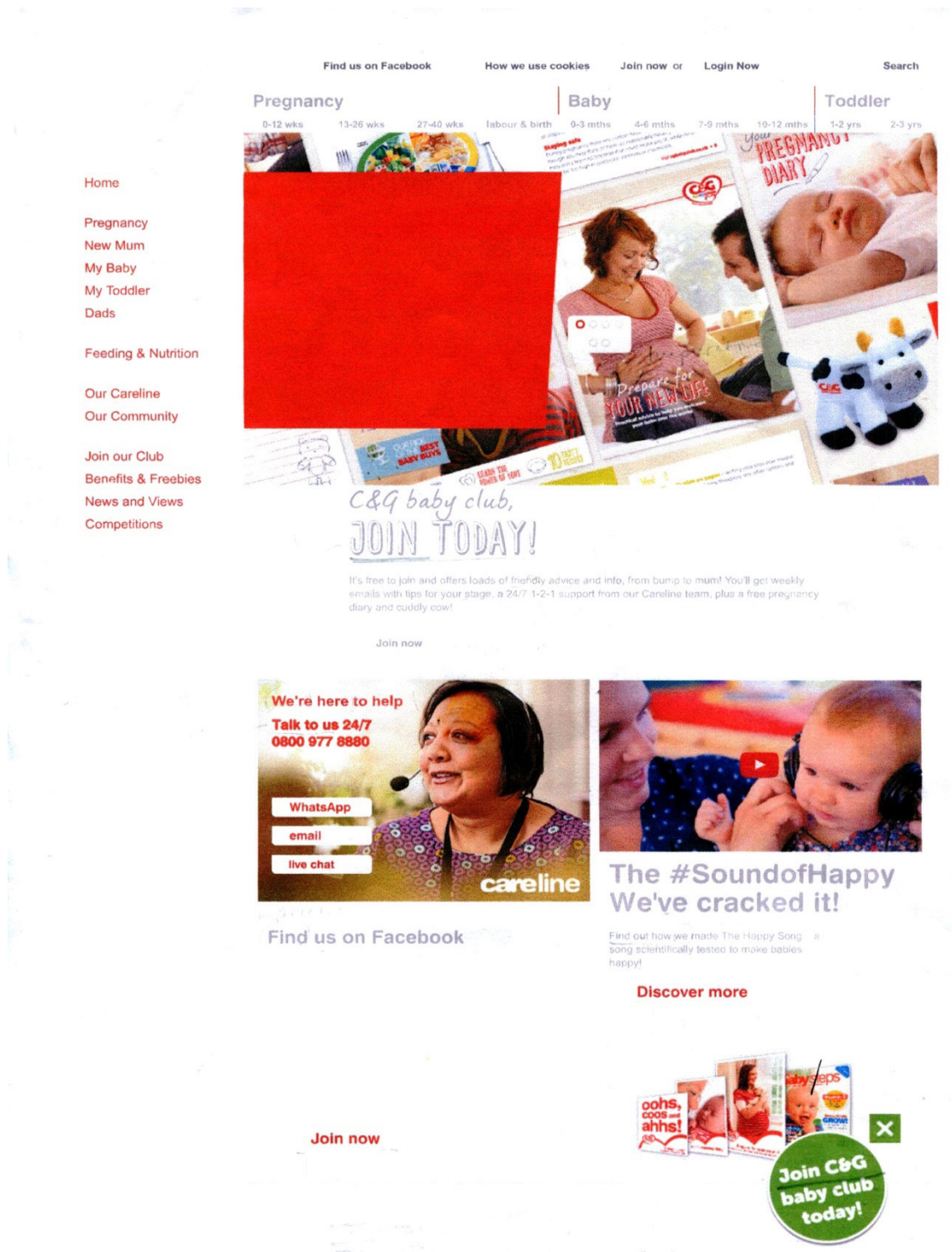
You are here: [Home\(/\)](#) > [Sitemap](#)

[Unsubscribe and close account\(/oneclickcloseaccount\)](#) | [Contact us\(/ask-us\)](#) | [Healthcare professionals\(https://eln.nutricia.co.uk/\)](#) | [Sitemap\(/site-map\)](#)

[Terms & conditions\(/terms-and-conditions\)](/terms-and-conditions) | [Privacy policy\(/article/privacy-policy\)](/article/privacy-policy) | [Accessibility\(/article/accessibility\)](/article/accessibility)

A.7 Screenshot of Aptaclub homepage 5:

www.aptaclub.co.uk , downloaded July 2017



A.8 Screenshot of C&G homepage 1:

www.cgbbabyclub.co.uk , downloaded July 2017



A.9 Screenshot of C&G homepage 1:

www.cgbabyclub.co.uk , downloaded July 2017



A.10 Screenshot of C&G homepage 1:

www.cgbabyclub.co.uk , downloaded July 2017



Useful tips and facts about your bump, week by week

[Pregnancy calendar](#)



Helping you make a great start to breastfeeding

[Find out more](#)

Pregnancy, baby and toddler advice

Pregnancy



1st Trimester:
your baby's
development

146

You might not be able to see it, but there's an awful lot of development going on in there! In the first trimester your baby goes from being a collection of cells, or an 'embryo' to having the beginnings of a heart, brain, bones,...

[Read more](#)



2nd Trimester:
Your baby's
development

[read more](#)



3rd Trimester:
Your baby's
development

[read more](#)

More related articles:

[Conception and early pregnancy signs](#)

[Your pregnancy calendar week by week](#)

[Eating well in pregnancy](#)

Baby



Establishing a bedtime routine

Find out how to help your baby prepare to sleep through the night from 6 months.

[Read more](#)



Your baby's weight

It's not what they weigh but how much they gain that's important. Find out why.

[Read more](#)

Toddler



Helping your toddler walk

Learn how to get your little one get a wiggle on and toddler-proof your home.

[Read more](#)



Toddler sleeping problems

Can't nod off or keeps waking in the night? Find out how to overcome sleeping problems.

[Read more](#)



Join the C&G baby club today

Receive emails and postal packs for your stage

Chat and share on our friendly forums

And get a FREE cuddly cow!



[Join now](#)

Join C&G baby club today!

A.11 Screenshot of C&G homepage 1:

www.cgbabyclub.co.uk , downloaded July 2017

Find us on Facebook How we use cookies Join now or Login Now Search

Pregnancy **Baby** **Toddler**

0-12 wks 13-26 wks 27-40 wks labour & birth 0-3 mths 4-6 mths 7-9 mths 10-12 mths 1-2 yrs 2-3 yrs

Home > Sitemap

Sitemap

Home

Pregnancy

New Mum

My Baby

My Toddler

Dads

Feeding & Nutrition

Our Careline

Our Community

Join our Club

Benefits & Freebies

News and Views

Competitions

Pregnancy

- Pregnancy due date calculator
- Pregnancy
- Conception and the early pregnancy signs
- Health and nutrition during pregnancy
- Practical pregnancy info and advice
- Pregnant again
- Your pregnancy emotions and relationships
- Pregnancy health advice
- Labour and birth
- My pregnancy calendar week by week

My baby

- My baby's development stage by stage
- Baby feeding and nutrition
- My baby's health
- My baby's routine
- Your Baby

Dads

- Dads' health and nutrition
- Practical info and advice for dads before the birth
- Practical info and advice for new dads after the birth
- Dad's Emotional Well Being
- Dads

Forums

Pregnancy forums

- Morning sickness
- Caesarean sections
- Changing moods
- Diet and fitness
- General concerns
- Pain relief
- Pregnancy fashion & beauty
- Other
- Pregnancy pains and problems
- Young or single mums-to-be
- Introduce yourself
- Baby equipment

New mum

- New Mum
- My growing family
- Emotional wellbeing and relationships
- Information and advice for the first few weeks as a new mum
- Health and nutrition for new mums

My toddler

- Playtime Planner
- Toddler feeding and nutrition
- My toddler's development
- My toddler's health

Feeding & nutrition


- Good nutrition during pregnancy
- Toddler nutrition
- Feeding and nutrition
- Weaning advice
- Bottlefeeding advice
- Breastfeeding advice
- Feeding problems and allergies

Forums

Mums forums

- Bottlefeeding
- Breastfeeding
- Other
- Sleeping
- Special baby diets
- Teething
- Useful information
- Weaning
- Single parents
- Travelling with your baby
- Toddler activities and games
- Allergies & intolerances

Talk to our experts

 **call 24/7**
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live chat

0800 977 8880

A.12 Screenshot of C&G homepage 1:

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Baby Feeding Breastfeeding Bottle feeding Breast and bottle feeding Weaning Baby recipes	Pregnancy Advice Pregnancy signs Pregnancy cravings Heartburn in pregnancy Braxton hicks contractions Labour and birth Second pregnancy	Pregnancy Tools Pregnancy calculator Pregnancy calendar	Baby Development Premature babies Baby sleep Baby weight Baby feeding worries Colic
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HiPP Organic (/) / HiPP Baby Club



Having a baby is a really exciting and special experience, and here at the HiPP Baby Club you will find everything you need to know about pregnancy and your new baby including lots of helpful feeding advice. By joining our club you can benefit from all of the below and much more!

Welcome to the HiPP Baby Club

Personalized baby calendar

Exclusive offers and competitions

Regular baby development emails

FREE photo prints from Snapfish

A to Z pregnancy and baby health

Chat to other mums and health experts
on the HiPP Facebook page

Expert advice at every stage

Find out more about **HiPP Baby Club benefits** (/hipp-baby-club/exclusive-offers/)

Join now (/hipp-baby-club/join-hipp/)

Already a member? Sign in (/hipp-baby-club/sign-in/)

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Offers only available to our Baby Club members!

Read more (/hipp-baby-club/exclusive-offers/)



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A one stop shop for your favourite HiPP products

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Exclusive photo service advantages for Baby Club members.

Read more (/hipp-baby-club/snapfish-exclusives/)

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This year HiPP is teaming up with KinderHotels.

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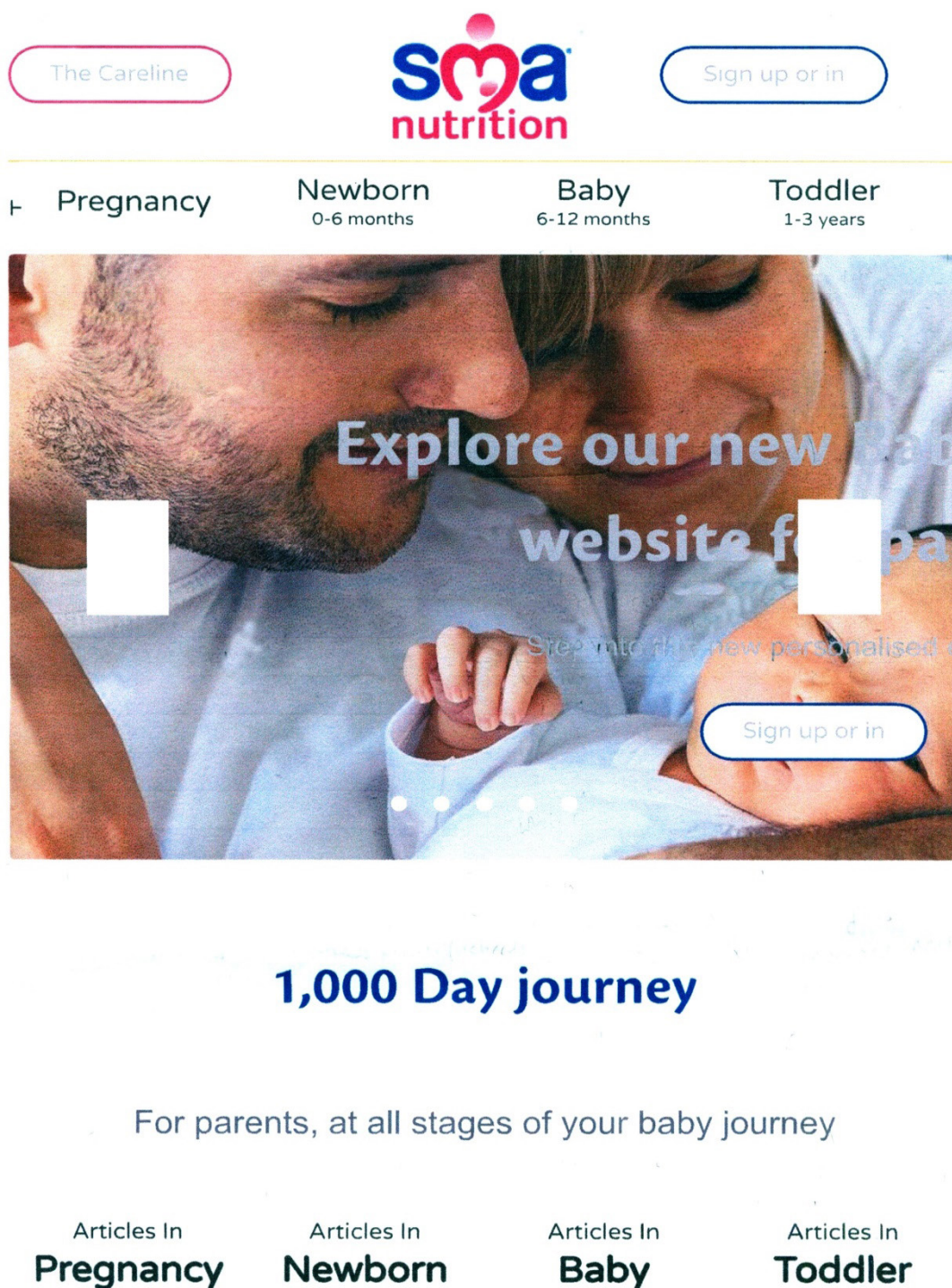
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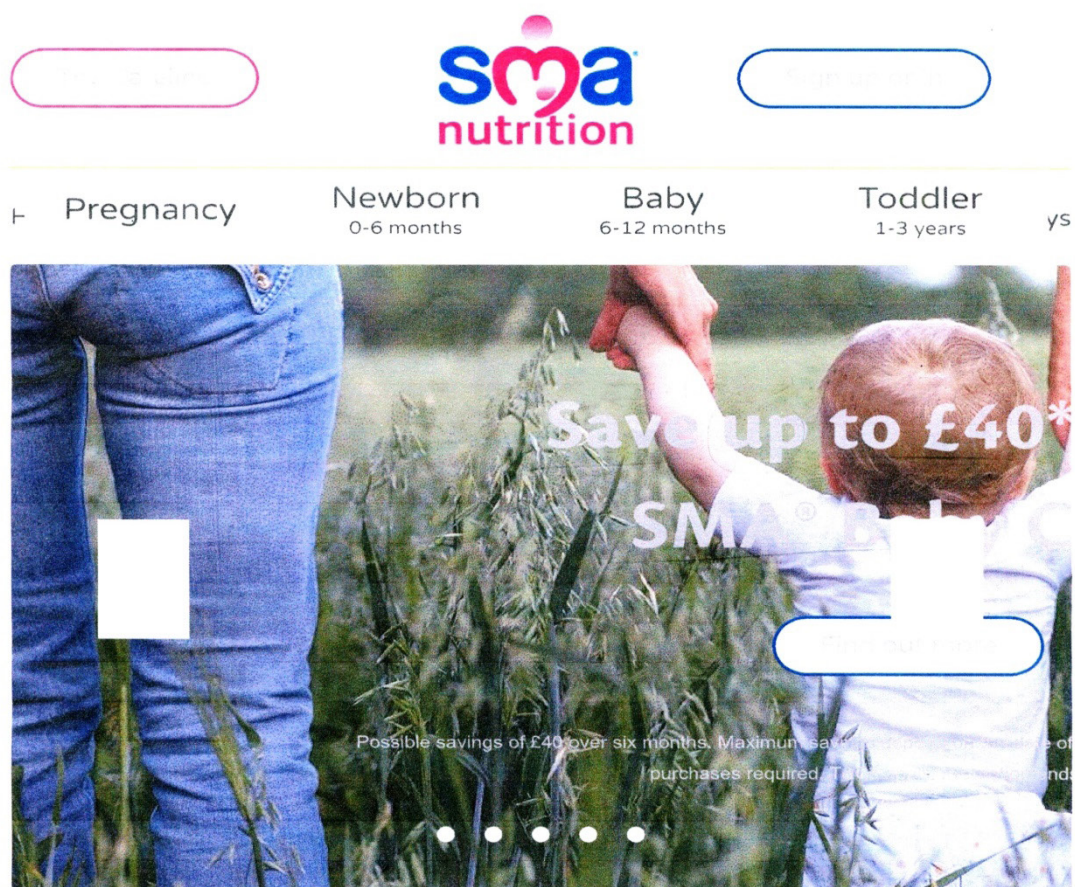
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1,000 Day journey

For parents, at all stages of your baby journey

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Pregnancy

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Newborn

Articles In
Baby

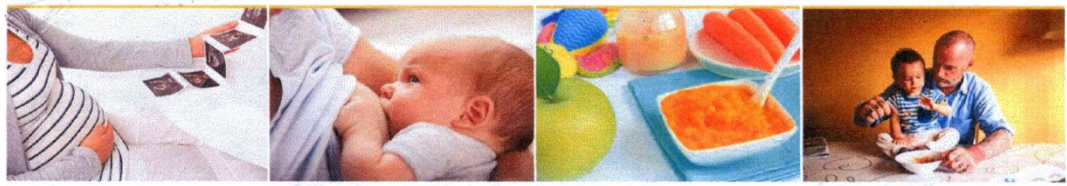
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Toddler

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What happens during a baby scan?

3

minutes read

How to breastfeed a newborn

3

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Feeding guide for babies

6

minutes read

A healthy diet for toddlers

8

minutes read



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A.24 Screenshot of SMA homepage 1:
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**92% of parents
who trialled SMA® PRO Follow-on Milk
would recommend
it to their friends and family****



****Trial conducted by SMA* Nutrition among 460 parents, United Kingdom, October 2016.**

A.24 Screenshot of SMA homepage 1:

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Claire

Nursing background

A.25 Screenshot of SMA homepage 1:

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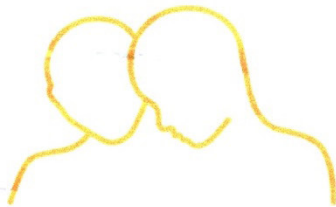
“Being a new parent can be overwhelming and lonely at times, even as a nurse with lots of experience. I had all the knowledge but still had to try different things to see what would work. This background is extremely helpful now, when I'm chatting to all the mums and dads with similar issues. I am happy to help and listen. I believe parents should follow their instincts.”

Find out more

Chat now is offline

Join the SMA[®] Baby Club. With you on this extraordinary journey.

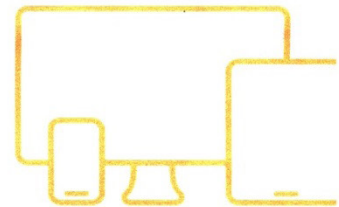
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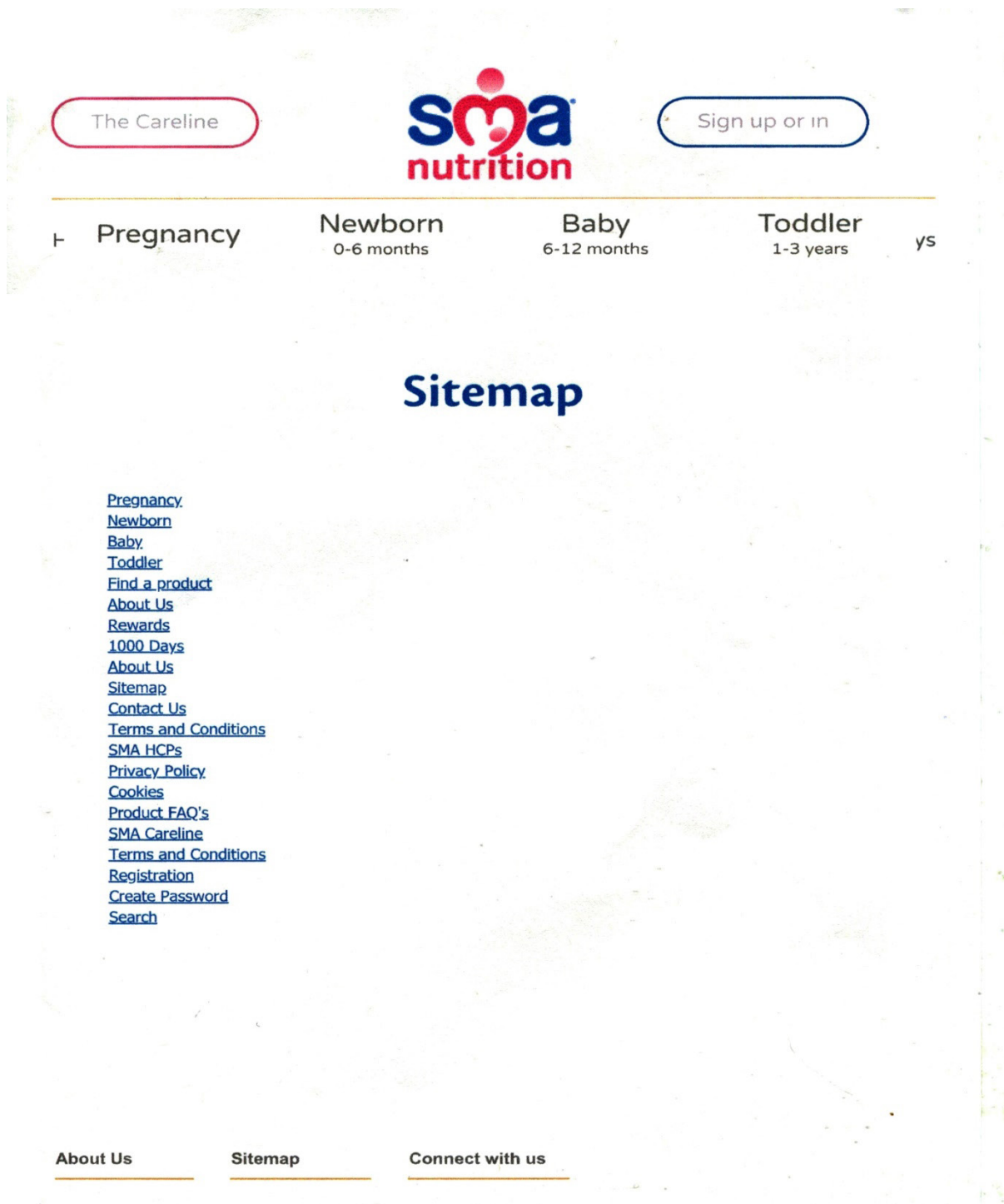
Surprises along the way



Staying in touch

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Appendix B: Lexes and abbreviations on the formula packaging

Table B.1 Lexes and abbreviations on the formula packaging: ‘GOS/FOS’ or ‘Galacto- and Fructo-oligosaccharides’; ‘DHA’ or ‘Docosahexaenoic acid’; ‘LCPs’ or ‘Long Chain Polyunsaturated fatty acids’; ‘Nucleotides’; and ‘Omega’ or ‘Omega 3 and 6’.

Brand	GOS/FOS	DHA	Nucleotides	Omega	LCPs
Aptamil 1	Y	Y	Y		
Aptamil 2	Y	Y			Y
Aptamil 3	Y	Y			Y
Aptamil 4	Y	Y		Y	
Aptamil Hungry Milk	Y	Y		Y	
Cow & Gate 1	Y		Y		Y
Cow & Gate 2	Y				
Cow & Gate 3					
Cow & Gate 4				Y	
HIPP Organic 1				Y	Y
HIPP Organic 2	Y				
HIPP Organic 3	Y				
HIPP Organic 4	Y				
Similac 1	Y	Y	Y		
Similac 2				Y	
Similac 3				Y	
SMA Pro 1	Y			Y	Y
SMA Pro 2	Y			Y	
SMA Pro 3				Y	Y
SMA Pro 4				Y	Y
SMA Pro Extra Hungry				Y	Y