SOCIAL KNOWLEDGE OF FOOD:

HOW AND WHY PEOPLE TALK ABOUT FOODS

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Abstract

Social knowledge about food was investigated from a social contingency perspective (Guerin, 1994, 1998, 2004), a functional linguistic approach that considers language use having functions both to establish 'facts' in order to control listeners, and to maintain social relationships with words.

In Study 1, whether people shared knowledge about food or not was examined. One hundred and fourteen New Zealand and 23 Japanese participants were asked to answer free format questionnaires asking the reasons they and others eat or do not eat particular food items. Those answers were categorised into 8 categories and 30 sub-categories of the knowledge about foods by qualitative content analysis. The results of a cluster analysis of those categories showed that participants used the categories homogeneously although there were some differences between New Zealand and Japanese participants, and that the participants selectively used different types of knowledge according to food items especially when explaining why people do or do not eat some foods.

In Study 2, rhetorical features about foods were investigated: (1) numerical quantification rhetoric; (2) narrative use rhetoric; and (3) enumeration rhetoric. Factual statements from a corpus of 118 New Zealand TV commercials and 249 Japanese TV commercials were coded by the categories generated in Study 1. The results showed that the categories of factual statements were selectively used on TV commercials depending on the food types, and related closely to the results of Study 1. The rhetorical strategies appeared in commercials according to the categories of factual statements. When more than one factual statement was presented in a commercial, the relations of the factual statements were usually of a conjunctive form such as "fact A *however* fact B" or

"fact A *moreover* fact B", or else the factual statements were presented independently rather than the one statement logically warranting the other. These results suggest that those rhetoric uses and the arrangements of the factual statements were selectively used according to the effectiveness against counter arguments using shared knowledge.

Study 3 and Study 4 analysed the functions of shared knowledge about food for maintaining social relationships through investigating the cases in which knowledge about foods presented as the form of 'collaborative talk', which occurs when one speaker completes the preceding saying by another speaker.

In Study 3, the collaborative talk as sentence completions of knowledge about food was qualitatively analysed from conversations of 30 to 45 minutes produced by four groups consisting of four or five Japanese participants who were friends. From a social contingency view, the analysis focused on the following conversational properties: (1) who the listener was; (2) the degree of sharing of the information between the speakers; (3) the degree of sharing of the information between the 2nd speaker and the listener; and (4) the disagreement between the 2nd speaker and the listener.

The results of Study 3 suggested some possible functions of sentence completions of knowledge about food: (1) the function when the first speaker is the listener may be enhancement of the relationship between the first and the second speakers through showing the second speaker's attention and understanding to the first speaker's utterance, because those sentence completions were often followed by the affirmation or negation by the first speaker; (2) when a third person is the listener, and the first and the second speaker refuted the third person using sentence completion, the function seems to be just establishing

‘facts’; and (3) in the cases of ‘assisted explaining’ (Lerner & Takagi, 1999) , the function may be not only establishing ‘facts’ but also enhancement the relationship between the listener and the speakers, because the constructed ‘facts’ may work as a kind of conversational ‘gift’.

In Study 4, five Japanese groups consisting of four participants who were friends were asked to talk about four topics about foods that all participants either agreed or disagreed (‘All agree’ condition) and four food topics for which there was disagreement about it between participants (‘Some agree’ condition). When the listeners could not be identified, and the second speakers did not used the utterance-final element such as ‘*yo ne*’ that is regarded as having a function of showing agreement between the speakers, the participants used sentence completions more frequently in ‘All agree’ conditions. The results suggested that the function of this type of sentence completion is not merely establishing ‘facts’ but also enhancing the relationship between the speakers through showing agreement about the relevant things to the topic**.**

In conclusion, the results of the present studies suggest some possible social contingencies involved both when people get knowledge about food and when they use it.

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General Introduction:

Social Knowledge and Food Rituals

Food is an important and vital part of life, and it is no surprise that procuring, eating and talking about food are entrenched aspects of our lives. We work to buy food, and spend a sizable proportion of our time preparing and eating food. Nutrition and good diet are also an important priority for the Ministry of Health in New Zealand, and the most recent survey of dietary habits of New Zealanders was not positive (Ministry of Health, 1999). To get people to eat better foods, however, is not just a matter of providing those foods and telling people that they are good for them. As we will see, the role of food in social behaviour is much more complex than this and we need social science tools to fully analyse all the complexities.

Even though food has important biological properties for our growth and health, the ubiquity and importance of food and eating also means that they enter into other realms of our lives. Social anthropologists describe the many social rituals built around food and eating (e.g., Counihan & Van Esterik, 1997; Guerin, 1992a). Moreover, and this is the topic of the research here, food and eating enter into our ordinary conversations in many and varied ways. We do not just talk about what we are eating at the moment, we also talk about strange and exotic foods, we make jokes about foods and eating habits, and we discuss recipes and new tastes. We are also bombarded with many television and other forms of advertisements telling us about foods to make us buy them. That is, ritual or social uses of food talk exist alongside talk about eating food and what is

nutritious.

In this research I will be looking at the ways people talk about foods, but to analyse food rituals and the talk about food, it is necessary to analyse briefly both the biological (material) factors and the social or cognitive factors involved in eating foods to put what is to come into a broader context. Such research has been done in anthropology, sociology, and psychology.

Studies of Biological and the Material Aspects of Food Preferences

Some aspects of food preferences seem to be direct reflections of the physical environment. Rozin (1987) pointed out that biological factors are important for understanding food preferences, as well as social factors. He categorised food acceptance and rejection into three basic reasons:

(1) sensory-affective factors (e.g., some foods taste sweet)

(2) anticipated consequences (e.g., some foods cause nausea or cramps)

(3) ideational factors (thinking and talking about foods)

Rozin considered that a combination of these three factors leads to our food preferences.

Logue (1991) further suggested that the sensory-affective factors and the anticipated consequences were innate factors but that the ideational factors were acquired through learning. She argued that some preferences for tastes, such as sweetness, saltiness, and milk, have been acquired through the stages of evolution and that they are innate. Sweet foods are high in calories, so that animals with preferences for them might have a greater advantage towards survival than others. Logue suggested that other aspects of food preference come from learned factors, such as sensory specific satiety, taste aversion, observational learning, and choice behaviour (Logue, 1991).

Optimal foraging theory was developed to account for choice behaviours by animals, including food choices. It assumed that animals forage in the most efficient manner. For example, Charnov (1976a, b) proposed two mathematical models of optimal foraging. The *optimal diet* model predicts the prey types which an animal selects when various types of food are available (Charnov, 1976a). On the other hand, the *optimal patch* model predicts how an animal uses each patch when there are various patches in which foods can be found (Charnov, 1976b).

Of relevance here, optimal foraging theory has been applied to areas of cultural anthropology that investigate different food preferences between cultures (Smith, 1987). One of the most popular theories was developed by the cultural anthropologist Marvin Harris (1979), in advocating his position of "Cultural Materialism". According to Harris, food cultures are functions of infrastructural (material) variables, such as food sources, the skills to obtain foods, and geological and meteorological factors. For example, the beef taboo in India was said to have originated because using cows as traction animals can feed more of the population (is the optimal) than if the cows were killed and eaten as a direct food source (Harris, 1977).

Some of the above has discussed aspects of food preference that seem to be due to natural environmental factors or to evolution over time, but these are not enough to explain all we know about food preferences. For example, while Harris's theory may be one of the best for understanding the origins of food cultures in particular areas and during a particular period, it is difficult for Harris's theory to explain why such food cultures are maintained when the infrastructures around people have been changed for a long period of time.

The results of empirical studies of food preferences also suggest that social factors are important factors. For instance, as part of studying his "ideational" influence, Rozin and his colleagues have investigated how children acquire the concept of 'disgusting' things during childhood (Rozin & Fallon, 1987; Rozin, Fallon, &Augustoni-Ziskind, 1985). Their results suggested that children acquire the concept of 'disgusting' things through social interactions with adults. This means that there are still many social and linguistic factors that are involved in food-related behaviours, even if evolutionary or gross environmental factors are present.

Social Science Studies of Beliefs and Attitudes towards Foods

Social or cognitive factors of food preference have been investigated by social scientists as issues of the beliefs about foods and the attitudes toward them, and those frameworks have been also accepted in neighbouring science areas. For example, Smithson Ashcraft (1985) surveyed beliefs and practices concerning food by the members of a Māori tribe from the view of the nursing science. She showed that many beliefs and practices about gathering, preparing, and serving based of Maori culture are still continued, although the younger members could not explain reasons for those beliefs.

With regard to attitudes, Rozin, Fallon, and Mandell (1984) investigated resemblances in food preferences between children and their parents as attitudes to food and food contaminants. Attitudes by university students and their parents from two religious groups (Jewish and Christian) were studied. Rozin et al. (1984) found positive correlations between children and parents, which were higher than the correlations between religions. Moreover, the degree of correlation between children and fathers and between children and mothers were

almost the same, even though the children were typically more influenced socially by mothers than fathers because mothers had more contact with them. From these results, Rozin et al. (1984) concluded that family resemblances in food preferences were the results of genetic factors rather than social factors by learning.

Attitudes to food preferences have also been used as indices of eating disorders. Garner and Garfinkel (1979) developed the *Eating Attitude Test* (EAT) in order to measure the symptoms of anorexia nervosa. The EAT consists of 40 items, each self-rated on a 6-point scale, with the overall result indicated as an EAT score. When the score is equal to or greater than 30, it is taken as indicative of potential anorexia nervosa. Because of the convenience of mass assessment of attitudes to eating, the EAT score has been adopted widely (e.g., Lowe, Miles, Richards, 1985) as a verbally reported measure of eating practices.

These investigations are based on a traditional social psychological approach which regards 'beliefs' and 'attitudes' as individual cognitive processes. Many changes have taken place in the social sciences, however, and social psychology in particular, since these studies were conducted. Many of the assumption are no longer followed, and Wiggins, Potter, and Wildsmith (2001) summarised the common assumptions of such studies as follows:

(1) eating behaviour is directly influenced by an individual activity involving perceptual and cognitive appraisals;

(2) internal states can be accessed by quantifiable measurements to predict eating behaviour;

(3) internal states are truly represented by the participant responses.

In short, the assumption is that eating behaviour is a simple reflection of

stable internal state such as 'beliefs' and 'attitudes'. With regard to 'attitudes', Wiggins (2001) went on to point out that the notion of a stable attitude concept is problematic, because the results of discursive psychology studies show that the same speaker can talk from different conflicting standpoints within the same stream of conversation (e.g., Potter & Wetherell, 1987). Therefore, in order to understand eating practices, Wiggins (2001) proposed an alternative approach to study eating practices in the context of social interaction using a discursive, social constructionist viewpoint (e.g., Edwards & Potter, 1993) that focuses on the constructive nature of discourse. This will be outlined more fully below, although a slightly broader form of analysis will be used in this research.

As an example of an alternative to traditional social psychological approaches, a number of discursive studies have focused on mealtime conversations (Aukrust, & Snow, 1998; Ochs, Pontecorvo, & Fasulo, 1996; Pontecorvo & Fasulo, 1999; Wiggins, 2001, 2002: Wiggins, Potter, and Wildsmith, 2001). Wiggins, Potter, and Wildsmith (2001), for example, analysed a corpus of mealtime conversations from three families with adolescent daughters. They showed that each of (1) the objects of eating (food), (2) the participant's physical states (e.g., hunger), and (3) the norms of eating practices (e.g., 'restraints'), were socially constructed and flexibly developed through negotiable interactions within the conversations. This means that conversations about food are more complex phenomena than simple expression of individual cognitive states. Wiggins (2001) also analysed a similar corpus of family mealtime conversations, and showed that evaluations of foods (attitudes) are oriented to particular activities such as compliments and phrases, requesting food, obligation to eat, and expressing knowledge. They are not just reports of "inner"

preferences, as more traditional social psychology views attitudes, but functional within conversations.

Ochs, Pontecorvo, and Fasulo (1996) and Pontecorvo and Fasulo (1999) likewise studied mealtime conversations by families. In the conversations of twenty middle class American and Italian families, the conversations were once again highly socially developed, and in these cases, the conversations were categorized around four themes: (1) food as nutrition; (2) food as a material good; (3) food as a reward; and (4) food as pleasure (Ochs, Pontecorvo, & Fasulo, 1996). Pontecorvo and Fasulo (1999) analysed how cultural knowledge was used when an Italian family was planning to produce a typical Italian meal for a future formal occasion in Austria, and also showed how social actors of conversations determined or constructed much of the talk. For example, while the father proposed the plans as a worker whose relationship to Austria was important, the mother refuted him from practical viewpoints as a housewife, and the daughter tried to participate in the conversations as a useful family member.

Necessity of Studies about Social Knowledge of Food Rituals

In brief, to analyse ritual or social uses of food from a social viewpoint, it is important to research social factors as well as biological and material factors. With regard to social factors, in addition to the traditional social psychological approach of beliefs and attitudes, recent discursive approaches have been developed. Although Ochs et al. (1996) focused on nutritional knowledge in their conversations, it is not yet clear how knowledge and conversations about food function in everyday food conversation. For example, how does the statement "Spinach is good for your health because it is high in iron" influence food habits, or is it a throw-away line to keep a conversation going? A

framework is needed to encompass many possible functions of conversation and not assume that speaking of nutritional value is only about conveying information about nutrition.

Approaches to Social Knowledge

We have seen that studies of the knowledge of food beyond just mealtime conversations are needed, because such knowledge also circulates in other social interactions in everyday life (Beinstein, 1975). Relevant approaches to these 'social' aspects of knowledge have been investigated as *social representations* (Moscovici, 1981), *widespread beliefs* by (Fraser, 1992), and *interpretative repertoires* (Potter & Wetherell, 1987). I will briefly review these first to see what they can bring to our investigation of talking about food. To look more broadly at the range of functions that food and eating have in conversation, we will use a broader social science approach to language use in everyday life that incorporates many of the characteristics from these newer approaches (Guerin, 2004).

The Theory of Social Representations

Among theories of social knowledge, the theory of social representations developed by Moscovici (1981) has been widely discussed and researched in the last two decades. Moscovici (1981) assumed that social representations are cognitive phenomena that are constructed socially and shared by the members of the group. Social representations are considered to be phenomena that are linked to a specific way of understanding and of communicating knowledge through creating reality and common sense.

According to Moscovici (1981), social representations consist of two sides: the iconic side (image) and the symbolic side (the meaning or idea). For

example, social knowledge of the term 'neurotic' is associated with psychoanalysis, Freud, and the Oedipus Complex on the symbolic side, and at the same time, it is connected to an image or figure of an egocentric, pathological individual (Moscovici, 1984, p. 17).

The notion of social representations is based on the earlier idea of *collective representations* presented by the sociologist Durkheim, but whereas collective representations are usually discussed as static forms shared by a whole society, Moscovici shows that various sub-groups in the same society can be considered as having different social representations. Moscovici (1984) also argued that social representations are not an explanatory device like collective representations, but phenomena that are objects of description and explanation.

Moscovici advocated dividing our society into two different parts: a 'reified universe' and a 'consensual universe'. In the former, individual identities are disregarded and society consists of solid, fundamental, immutable entities, whereas, on the other hand, every reality is also constructed through consensual human activities. According to Moscovici (1984), social representations are the form of knowledge corresponding to the 'consensual universes', while scientific knowledge corresponds to the 'reified universe'.

The functions and generating processes of social representation. With respect to the functions of social representation, Moscovici noted as follows: *"the purpose of all representations is to make something that is unfamiliar, or unfamiliarity itself, familiar"* (Moscovici, 1984, p. 24). That is, the function of social representations is to modify novel and strange concepts which threaten people's recognition of the 'consensual universes' and change them into usual ideas that does not disturb people.

Moscovici has talked about two processes that can generate social representations: *anchoring* and *objectification* (Moscovici, 1984). *Anchoring* is the process of incorporating unfamiliar and troubling things into the usual network of categories we use. Assigning an unfamiliar object or person to a preferred category (*classification*) and assigning a name to it (*naming*) are the two ways of anchoring a representation. *Objectification* is the process of saturating the unfamiliar concept with reality. In the first phase of this, an ill-defined idea or being is connected with the iconic aspect of it. For example, the concepts of the unconscious and the conscious by psychoanalysis have been connected to the usual images as one on the bottom and the other on the top. The images of the concepts become elements of reality which can be referred equally to physical things in the second phase. For instance, nowadays people deal with the term 'complex' in psychoanalysis as if it were a physical feature of a person.

Recent developments of social representations. Studies of social representations have been developed in many areas. According Wagner (1996), recent trends in the research can be divided into content-oriented research and theory-driven research. In content-oriented research, common-sense thinking about various popular science topics such as intelligence (Mugny & Carugati, 1989) and the economy (Vergès, 1987), and cultural objects such as health (Herzlich 1973), mental illness (De Rosa, 1987; Jodelet, 1991; Morant, 1995), and AIDS (Joffe, 1995; Marková & Wilkie, 1987) have been the subjects of investigations. On the other hand, structure (Abric, 1976; Flament, 1994), dynamics (Domo, 1984; Guimelli & Jacobi, 1990), and process (Wagner, Elejabarrieta, & Lahnsteiner, 1995) have been the focus of theory-driven research.

A remarkable feature of recent social representation studies is the

development of quantitative methods, since many researchers with strong qualitative leanings were the early researchers in social representation theory. According to Doise, Clémence, and Lorenzi-Cioldi (1993), quantitative methods such as factor analysis, cluster analysis, correspondence analysis, and multidimensional scaling are useful for (1) describing the hierarchical structure of social representations, (2) analysing individual differences of social representation, and (3) studying connections between social representation and group membership.

A study by Hammond (1993) is a good example of the third type of study. He analysed data about female circumcision collected by Hassan (1986) from interviews from rural Sudanese, urban Sudanese, and British participants. The data were coded into seven categories by a content analysis, and the results were then described by correspondence analysis. The description by correspondence analysis suggested that the three different social groups had different representations of the phenomenon. For example, the representations by British participants were highly associated with a *lack* of knowledge.

Recent studies focused on social identities. Because of the assumption that each sub-group in the society may have different social representations, some studies have been developed to investigate the links between social representations and social identities. These investigations suggest that members of a specific group may use specific social representations to defend or elaborate their group identity. For example, Echebarria, Fdez Guede, San Juan, and Valencia (1992) found that participants with drug problems emphasised social or economic factors more as the causes of drug addiction in their social representations than did participants who were unfamiliar with drug problems and

who attributed more to the person.

Another example of these sorts of investigations was the research into social representations of smoking run by Echebarria, Guede, and Castro (1994). Two different types of representations were found to be used by non-smokers and smokers. The first group regarded smoking as a result of psychological factors, and they also showed negative feelings towards smokers. The other group emphasised the social causes of smoking with more positive feelings towards smokers. Echebarria et al. (1994) found that smokers who were being challenged by non-smokers used the former representations even more frequently.

Criticisms of Social Representation Theory

The concept of social representations has been criticised by a variety of psychologists and social scientists, such as Harré (1984) and Jahoda (1988), and also by discursive psychologists (Potter &Litton, 1985; Litton & Potter, 1985; McKinlay & Potter, 1987; McKinlay, Potter, & Wetherell, 1993). Criticism has been raised over the conceptualising itself, as well as the methods used to investigate social representations. Further criticisms come from empirical studies on social representations.

Conceptual problems in the social representation theory. With regard to conceptual problems in social representation theory, two issues have mainly been argued. These arise from (1) ambiguity in the distinction between 'consensual universe' and 'reified universe', and (2) problems with the cognitive interpretation of social representations.

Some ambiguity and vagueness seems to be due to Moscovici's very notion of 'consensual universe' and 'reified universe'. Jahoda (1988) pointed out that differences between social representations and ideology are not clear.

According to Jahoda, Moscovici (1984) used the three terms 'social representation', 'common sense' and 'ideology' as having almost the same meaning as 'consensual universe', while asserting that main *function* of ideology is for the transition between 'consensual universe' and 'reified universe'.

McKinlay and Potter (1987) claimed another problem was the result of Moscovici's distinction between 'consensual universe' and 'reified universe', both of which have an ambiguous position in scientific knowledge. In Moscovici's theory, scientific knowledge in 'reified universes' and social representations in 'consensual universes' should be regard as strictly different. However, recent studies of the sociology of scientific knowledge show that scientific knowledge is also socially constructed by scientists through their social interactions. This means that there is no warrant to state that scientific knowledge is different from social representations.

Another conceptual problem is that some theories of individual cognitive processes are presupposed in the social representation theory. For example, Jahoda (1988) pointed out that Moscovici's notion of 'anchoring' (Moscovici, 1984) uses a categorisation theory that is not supported by recent cognitive psychologists. Also with respect to individual cognitive processes, the assumption that social representations have both an iconic side and a symbolic side seems to be regarded as the most problematic concept in the theory. This assumption means that social representations are not restricted to linguistic phenomena. Potter and Litton (1985) pointed out that these unrestricted usages of social representations may be the primary source of the ambiguity and vagueness of social representation theory, because social representations are mentioned as concepts, images, statements, explanations, perceptions, theories,

branches of knowledge, and mixtures of them. It is not clear what they are exactly.

McKinlay et al. (1993) pointed out some further conceptual difficulties regarding cognitive images as representations in social representation theory. According to these authors, because images themselves do not make sense, an interpretative process to classify the images of social representations is also required. However, there is no account of such a process in the social representations theory. Another problem is that there is no good explanation as to how images of representations are socially shared. Images inside the head of an individual cannot be sent to another individual directly, so that the assumption that iconic images are transferred through communication process has difficulties and a more detailed account needs to be given.

Methodological problems in the social representation theory. With regards to methodological problems in social representations theory, the following four points have been criticised: (1) problem of defining groups; (2) problems of consensus within a group; (3) problems of context; and (4) a shortage of empirical evidence.

Potter and Litton (1985) pointed out that the relationship between social groups and social representations in social representation theory risks becoming a circular argument. In some studies, apparently well-defined groups such as public and comprehensive schoolboys (Hewstone, Jaspars, & Lalljee, 1992), and students and student committees (Di Giacomo, 1980), were used as the group units of analyses. However, social representation theory assumes that a group may be defined as a unit sharing the same representations. This means that group categories are both an analytic resource and the object to be analysed,

which can lead to circularity and sometimes contradiction.

Harré (1984) also pointed out the problem of defining groups in social representation theory. According to Harré, the difference between taxonomic, aggregate formed groups and structured groups is neglected in Moscovici's theory. The former is formed by similarities between members, whereas the latter is formed by real relations among members. Even though Durkheim's original idea of collective representation assumed structured groups (Durkheim, 1897), Moscovici dealt with only aggregated groups. Harré asserted that social representations are only gatherings of individual belief systems in taxonomic aggregate formed groups, while social representations are truly collective only when formed through social interactions in structured groups.

Level of consensus and degree of agreement within a group is another problem in social representation studies. Potter and Litton (1985) criticised that consensus within groups is presupposed and that internal variations and diversity are ignored in empirical studies. Social representation theory assumptions tend to emphasise similarity within groups rather than difference because they use average scores. The need to specify the particular level of consensus and degree of agreement was pointed out.

Another problem pointed out by Potter and Litton (1985) is that of ignoring the possibility of contextual variation. Many social representation studies focus on how participants reproduce social representations that are assumed to be unitary and largely static entities. However, the findings from discursive analyses show that the same participants can produce a variety of different representations corresponding to different situations or contexts (Potter & Litton, 1985; Potter & Mulkay, 1985). Moreover, if varied representations are

shown at the same time, it is counter to Moscovici's assumption of the function of social representations, because different social representations cannot resolve conflict or disagreement in the group if that were the case.

Another type of criticism is that some hypotheses in Moscovici's theory have not been sufficiently tested in the empirical field. Jahoda (1988) pointed out that there was no satisfactory evidence supporting Moscovici's assumption of the function of social representations as changing something unfamiliar into something familiar. Jahoda (1988) criticised Moscovici's account of Denise Jodelet's unpublished study of social representations about mental handicapped people by the inhabitants of various villages (Moscovici, 1984). In the study, the village inhabitants continued to keep the image of mentally handicapped people as "alien". This result is discrepant with the assumed function of social representations, although Moscovici later argued that it was not contradictory to the theory. Jahoda (1988) concluded that more empirical evidence was needed in order to verify Moscovici's assumption of the function of social representations.

Empirical counterevidence to the social representation theory. Litton and Potter (1985) analysed discourses by the mass media and by six participants regarding the St Paul's street disturbances (riots) of 1980 in Bristol. They focused on two explanatory schemata (social knowledges): 'race' and 'government cuts and amenities', and examined how key people used these two schemata to explain the same event. The results showed three *different* levels of agreement: (1) particular explanatory schemata have potential to explain something concerning the event (e.g., "The government cuts in public spending caused the St Paul's 'riot'."); (2) particular explanatory schemata are appropriate

to explain the specific case in the event (e.g., "The 'riot' was due to the lack of amenities."); and (3) particular explanatory schemata are proper to explain the particular case in the event, but it can be used in some different ways (e.g., "The 'riot' was a consequence of the government spending on the wrong sort of amenities"). Litton and Potter (1985) argued that these disunities of consensus cannot function to reduce conflict as Moscovici (1981) has always assumed.

In order to explain different levels of consensus within groups, and the contextual variation by individuals, the theory of the 'central nucleus' was proposed by French social representation researchers (Abric, 1976; Flament, 1994). Their idea was that every social representation consists of two layers, the 'central system' and the 'peripheral system' (Molinari & Emiliani, 1996). The 'central system' is the nucleus composed of stable elements that are resistant to communication pressure, and that are homogeneously shared by members of a group. On the other hand, the 'peripheral system' around the nucleus is more flexible and depends upon individual personalities and contexts.

These new development in the study of social representations, however, do not resolve the basic ambiguity of the cognitive assumption that social representations have both the iconic side and the symbolic side, or other problems of social representation theory. It is not at all clear why there are two systems or how to measure and define such central and peripheral systems. They are also probably tautological because a central system can be defined or measured only when it is regarded having a stable structure, it means that we cannot predict is the central system or peripheral systems until stable elements are found.

Discursive Approaches to Social Knowledge

One suggested way of overcoming the problems and limitations of the

social representations approach to social knowledge has come from discursive psychologists. They restrict social knowledge to linguistic phenomena and replace cognitive assumptions by introducing the concept of 'interpretative repertoires'. There are many varied schemes of discursive psychology but I will gloss the minutiae and focus on the main points needed to understand the research here.

Features of discursive approaches. Among qualitative research methods, discursive approaches are fundamentally based on a social constructionist perspective (Gergen, 1985), which assumes that 'facts' are constructed through social processes and used for social activities rather than as things that exist outside of us. Therefore, discursive psychologists mainly focus on how people establish facts in everyday life, and the place the discourse in everyday practices and life.

Edwards and Potter (1993) named their discursive approach to human language use the *Discursive Action Model* (DAM). DAM consists of three elements: (1) actions; (2) fact and interests; and (3) accountability. The model focuses not on cognitions but on *Actions* within activity sequences, such as invitation refusals, blamings, and defences. *Fact and Interests* refers to how speakers can use factual reports and descriptions in order to manage their stakes or interests, so factual statements therefore are constructed using a variety of rhetorical devices and strategies to undermine alternative factual descriptions. Moreover, the factual statements attend to *Accountability* in reported events. This model is quite far from both cognitive psychology and traditional social psychology which regard 'beliefs' and 'attitudes' as internal cognitive processes of the individual that can control behaviour. Instead, it focuses on the contextual

relationships between the individual and their social environments. In a sense, this model is closer to Behaviour Analysis and Gibson's Affordance Theory (1979) which both deal with the interactions between individuals and their environments.

The concept of 'interpretative repertoire'. 'Interpretative repertoires' are language units for constructing actions events, and other phenomena in talk. Every 'interpretative repertoire' consists of a restricted usage of terms and specific stylistic grammar combined with particular tropes or figures of speech (McKinlay et al., 1993). For example, 'the empiricist repertoire' in scientific writing (Gilbert & Mulkay, 1984) has the following features: (1) grammatical impersonality (a grammatical form that minimises the author's action or involvement); (2) data primacy (data are treated as primary both in a theoretical and a chronological sense); and (3) universal procedural rules (method sections of scientific papers are described by world standard routines and analytic procedures). In order to achieve a specific activity such as blaming or warranting, a speaker selectively utilises different 'interpretative repertoires' according as the social/conversational context (McKinlay et al., 1993).

McKinlay et al. (1993) pointed out that the concept of 'interpretative repertoires' is useful to understand the construction of social knowledge which social psychologists traditionally label 'attitudes', 'stereotypes', 'beliefs' and 'attributions' as well as the social representation theory. Moreover, they asserted that the approach to social knowledge using the concept of 'interpretative repertoires' has an advantage over the theory of social representation, because it is restricted to linguistic phenomena, so that there are no problems with defining groups, consensus within groups, and ambiguity from individual cognitive

processes (Potter & Wetherell, 1987, pp. 156-157).

A New Approach to Social Knowledge

Social knowledge from a contextual perspective. Social knowledge has been studied mainly from the view of social representations for the last few decades and more recently through discursive psychology. However, we have seen that the concept of social representation has both conceptual and methodological problems. The new approach by discursive psychologists which regards social knowledge as linguistic phenomena seems to be more advantageous because of less ambiguity. However, there is a problem when the discursive approaches are applied in order to understand features of social knowledge of food. This is that discursive approaches tend to ignore the relationships between language use and material (physical) worlds, because of their philosophical background in social constructionism.

The discursive approaches, especially, those by Edwards, Potter, Wetherell and their colleagues take a strong relativism position, and they oppose critical realism which assumes existence of material worlds beyond language and our constructed versions of it (Edwards, Ashmore, & Potter, 1995). With regard to food, material aspects such as nutrition should not be ignored, because social knowledge of food is highly relevant to the consequences of food consumptions in material worlds. The functions of food talk beyond establishing facts also need to be considered and this has not been developed in discursive psychologies. It seems that there is a necessity for an alternative contextual approach when considering the relationships between language use and material worlds.

Social Contingency Theory is a broader approach to social knowledge that has been proposed by Guerin (1994, 1998, 2001a, 2003a, b, c, 2004). It is

another functional linguistic approach to social knowledge and was originally based on Behaviour Analysis, which considers language phenomena as verbal behaviours (Skinner, 1957). It draws heavily on discursive approaches but adds more in the way of a realistic functional basis to language use.

The Concept of Social Contingency

From the view of Behaviour Analysis, it has been assumed that social behaviours by humans are operant behaviours controlled by three-term contingencies of reinforcement, consisting of discriminative stimulus, operant behaviour, and reinforcement. This means that those behaviours are shaped and maintained by their past and present consequences, and they are selected by the contexts that lead to particular consequences. Pierce (1991) pointed out three possible methods for studying those social contingencies empirically: (1) observational techniques; (2) quasi-experimental studies; (3) experimental analysis of behaviour in small groups. However, very few empirical studies of social behaviour have been conducted by behaviour analysts, and certainly not complex ones. It seems that it is very difficult to study social behaviours in the way that operant behaviour studies more simple behaviour.

Difficulties in studying social contingencies. Guerin (2001a) explicitly pointed out four reasons as to why the analysis of social contingencies is difficult. First, many social contingencies work in large social systems and are difficult to observe directly or isolate. Moreover, the difficulty of observing social contingencies is compounded by a property of social contingencies that many social contingencies work better when they are difficult to see. Second, within social contingencies, any single behaviour is connected to many different consequences, none of which always occur. In behaviour analysis terms, social

contingencies take the form of complex concurrent schedules and concurrent chain schedules connected with many different consequences. Third, because of the above reasons, observers tend to focus on immediate or salient consequences which can be easily observed. The observer may attribute cause to salient or immediate consequences. Finally, in addition, descriptions of social contingency systems take on forms such as 'norms' that seem to be stable, but that may actually hide the real contingencies. For example, the description "People work for money" may hide the real contingencies that control why a man or a woman is working.

The necessity to a new approach. From the above, in order to analyse such complex contingencies, Guerin (2001a) concluded that it is a necessity to analyse whole contingency systems in society or a community rather than each contingency that works on individuals. Single contingent relations might be the building blocks of behaviour, but real and everyday social behaviour deals with vast numbers of such terms in very complex, and historical, relations. This means that the traditional behaviour analytic methods are not appropriate for analysing social behaviour. Analysing complex social contingencies using those methods is similar to "trying to understand a rock concert by mapping the molecular structure of the people and objects there" (Guerin, 2003c, pp. 699-700).

Guerin (2001a) therefore proposed that the findings and methodologies in social science areas, such as sociology and cultural anthropology, could be utilised for analysing complex social contingencies even though they are imprecise compared to traditional behaviour analysis studies. According to Guerin (2001a), the framework in social science suggest that resources, population (group size), and social exchange of resources are the most

fundamental elements which form the context for most of our social contingencies, although we cannot specify the precise individual exchanges that occur.

Resources and population. For human social behaviours, resources mean not only material resources but also social resources. There are 'tokens' or 'ritual resources' which can be substituted for more material resources in most societies. The most typical 'token' is money, and 'tokens' are usually regarded as symbolic or cultural resources. 'Kudos', 'brownie points', 'reputation', 'power', 'status' and 'prestige' have similar functions to 'tokens' as social resources.

Resources and population are interdependent. Populations usually grow as resources increase, and the resources per person become less as a population increases. When resources decrease, competition or conflict for resources arises more frequently. Organising groups is one solution to resource conflicts. The advantage of this strategy is not only that increasing the number of people enables one to gain more resources, but also that one can form coalitions to help with resource allocation.

Generalised social exchange systems. The original concept of 'generalised exchange' was proposed by Lévi-Strauss (1969) and it was introduced by Ekeh (1974) into social exchange theory studies which had been established by Homans (1961). The original definition of 'generalised exchange' is an exchange by more than two persons or groups. On the other hand, an exchange of two resources by two persons or groups at the same time is called 'restricted exchange' (Ekeh, 1974). Moreover, Guerin (2001a) pointed out that even in exchanges between two persons, these exchanges have other "generalised" aspects in most situations: the exchange of resources may be

generalised over a long time, over situations, and over behaviours.

According to Guerin (2001a), since most human social contingencies work through such generalised social exchange systems, they have some specific features as follows: (1) social contingencies can control sub-optimal or irrational behaviours for the observer, because there are no immediately return; (2) social contingencies can control behaviours beyond resources in immediate consequence; (3) social contingencies are less effected by satiation of resources; and (4) social contingencies enable delayed reinforcement of verbal behaviour.

For example, when Mr. A helps Mr. B's work though Mr. A is very busy, it seems to be irrational and Mr. A get nothing after his behaviour. However, as a result of this behaviour, Mr. A may get more resources through the social exchange system in the future. In social contingencies, "…even if satiated with some resource, having many intersecting exchange contingencies with another person can lead to the behavior continuing (Guerin, 2001a)". This feature of social contingencies accords to the property of generalised reinforcements. The animal studies showed that generalised reinforcements which are backed up many different reinforcers are less affected by satiation (Nevin, 1966).

This property of generalised reinforcement is concerned with delayed reinforcement of verbal behaviour, it seems to provide a more detailed account for generalised reinforcement on verbal behaviours (Skinner, 1957). Skinner categorised verbal behaviours by functions according to the three term contingency of reinforcement. For example, a *tact* is a verbal behaviour controlled by discriminative stimuli in the environment and by generalised reinforcement by the verbal community. However, Skinner (1957) did not make it clear how generalised reinforcing systems through verbal communities work or

provide any of the details.

Social systems as social resources. Another important feature of the social exchange system is that the membership itself is social resource. Therefore, maintaining social relationships works as powerfully as a "preventing contingency" (Malott, Whaley, & Malott, 1993, pp. 253-254). According to Guerin (2004), this idea is able to explain the function of ritual behaviours, gifts, and altruism as avoiding the loss of the membership of general exchange system. For example, men's neckties are physically meaningless things, but if they are not worn, the men would lose membership of groups in which generalised social exchanges carry them on. Gift-giving behaviour is another very effective way for keeping people interacting together. Similarly, if a person did not help a child who was drowning, he or she would be ostracised from belonging to the community.

Reputation or *status* is also able to be explained for the membership of general exchange system. For example, research on delinquent acts in adolescent groups by Emler and Reicher (1995) showed that lots of those acts were not done secretly by a single person, but performed by a group, and they concluded that those anti-social behaviours were done primarily to maintain a reputation within the group. This result can be explained that they were doing delinquent acts because those acts maintained their access to generalized social exchanges by the group through their reputation.

Moreover, generalised exchange systems can be referred to by abstract words such as 'family' or 'friend', even though these are difficult to observe. These abstract words can be use to control the listener's behaviours, because they are connected to social relationships. For example, "If you do that you're not

my friend anymore" can stop the listener's undesirable behaviour in the right context.

Limits of social exchange systems. These social contingencies by generalised exchange system do not always work. For, example, in a war or monetary breakdown, these contingencies may lose their power. They may also have less influence on relative strangers. In modern urban life, they may be less effective than in traditional communities. However, the concept of generalised exchange system provides a powerful device to analyse social behaviours in everyday life (Guerin, 2004).

Language Use in Social Contingencies

From the view of generalised exchange of social resources, Guerin (2003a, b, 2004) proposed a new functional categorisation which is different to that of Skinner (1957) and formalises and extends that of the discursive psychologies. It is that our language use can be divided into two functional categories: (1) the category of influencing someone to do something; and (2) the category of using and maintaining social relationships with words. Both categories are closely related with social contingencies by generalised exchange system but simply try to get at *the sorts of things people do with words*. The generalized exchange arguments and descriptions mean that we should not be looking for obvious outcomes of language use to explain the functioning, as Skinner's account tends to do (Skinner, 1957). We should be looking for more subtle and strategic outcomes over longer time spans and over social relationships, and this is where the discursive approaches relate closely.

Language Use for Influencing Someone to Do Something

This category is divided into two sub-categories: (1a) the function of

language to make a listener do something; (1b) the function to make a listener say something. Despite the fact that rhetorical strategies for getting people to do things are shaped and maintained by social contingencies in both case, there are some differences in contingencies. The sub-category of making a listener say something is a broader reconceptualisation of the discursive category of "establishing facts". Put in contingency terms, making a listener say something, out loud or to themselves, includes making a listener 'believe' something, agree with presented 'facts', and repeat something to others. Which of these occurs, or whether they begin saying something to others without 'truly' believing it, needs a more detailed analysis and will depend also upon the social context. For example, 'truly' believing something might involve an analysis of the person saying the same 'facts' in all contexts and not hedging on them at all.

Using language to get people to do things. People use various rhetorical strategies in order to gain listener's compliance when they ask something. For example, polite expressions such as "Could you please throw that cushion over to me?" are used instead of "Give me that cushion!" when the listener is not a close friend or family member. These strategies seem to be functionally selected in order to maintain social relationships. Because social relationships are an essential social resource, as stated above, the speaker has to avoid losing the social relationship with the listener.

Moreover, in order to gain a listener's compliance, the strategies "to make a listener say something", which will be discussed next, are used as well. Using those strategies, listeners' behaviour may be indirectly changed through changing their beliefs. For example, on TV advertisements, expressions like "Product A is very good" are used rather than "Please buy product A".

Using language to establish 'facts'. Unlike the case of "to make a listener do something", in the case of "to make a listener say something", the speaker does not directly get a resource from the listener. However, it can give the speaker more accessibility to resources in the future through a generalised social exchange system by changing the listener's behaviours. For example, the listeners' agreement with the statement "Spinach is good for your health" may change their behaviours, they may persuade other people, and market price of spinach may reduce as a result. Like this example, persuading often takes a form of factual statements or preference or liking for factual statements (attitude). Therefore, "establishing facts" by the speaker can control not only the listener's behaviour in the future but also the behaviour of other persons.

Strategies for "establishing facts". The results of recent studies by discursive psychologists (e.g., Edwards & Potter, 1993) seem to support this idea that "establishing facts" is used for controlling people, and many investigations of establishing facts in daily conversations have shown that factual statements are used to accomplish specific activities, and that these factual statements are warranted by various kinds of rhetorical strategies. I will now review some of the ways that have been found from conversations to establish facts with listeners.

Selective presentation of evidence. Potter, Wetherell and Chitty (1991) showed that many types of quantification rhetorics were selectively used according to their effectiveness *in context*. They analysed numerical and non-numerical quantification rhetoric in arguments concerned with facts. The materials were derived from the making of, and response to, a television programme about the effectiveness of cancer charities. The numerical quantification rhetoric can be indicated by an absolute quantity or a relational

quantity. Moreover, both a proportion (2500 out of 250,000) and a percentage (1 percent) can be used for an expression of a relational quantity, and absolute number can be expressed by different ways (250,000 vs. a quarter of million). According to Potter et al. (1991) these numerical formulations were selected for the contrast to alternative versions (hence as counterarguments). In addition, they pointed out that the definitions for calculation were arbitrarily chosen with the different procedures in order to obtain specific effects. For example, one definition of 'curable cancers' may be the cancer from which 50 percent of sufferers survive, whereas other definitions are possible.

Potter et al. (1991) pointed out that translations between numerical and non-numerical quantification can provide extreme case formulations such as 'brand new', 'completely innocent', 'forever', or 'every time'. For instance, the expression of 'only 1 percent' may have a similar function to an extreme case formulation of "none" or "never".

Selective use of social identities. Some studies have shown that the categories of social identity, including both self and group identities, are changed through the development of arguing. Edwards (1998) analysed the conversations of a married couple who came to their counsellor because they had marital problems. He focused on their use of the categories of 'girls' and 'women or married women'. Both the wife and the husband changed the category to describe the same people from the former to the latter, and vice versa. For example, the husband used the word 'a girl' when he described another woman that he moved in with. This switching can downgrade her status and it seems to be effective to deny serious relationship between them. These results show that social identities are changed through the development of arguing for

particular purposes.

These selective changes of social identities were found to concern the *authorisation* of statements. Antaki, Condor and Levine (1996) analysed the data from a corpus of natural English conversation collected in the 1970s (Svartvik & Quirk, 1980), which consisted of a conversation among three friends which turned from telling a story into a quarrel. At the beginning of the talk, the self identity of one participant was given as a 'recently qualified medical student'. After two hundred and fifty turns in the progress of the conversation, when he was offered counterarguments by a friend who had already been labelled as a 'professional linguist', he changed his self identity to 'a doctor' to support his claim, by rhetorically allying himself with medical authority.

Another example of use of social identities for authorisation is the analysis of the use of the category 'community leader' by Potter and Halliday (1990). They examined news on TV programmes and newspapers about a riot in Handsworth, England in September, 1985. They showed that the category of 'community leader' implied category-based attributes such as 'knowledgeable about the community' and 'leading the community', and that these attributes warranted claims on the news. This meant that people categorised as 'community leaders' became 'the persons who have a lot of knowledge about the community' and 'the persons who are leading the community', so that the claims became authorised. Wooffitt (1992) also reported that people who met paranormal events used their self identity such as 'policeman' to warrant their claim.

Strategies against counter-argument in "establishing facts". The results of discursive studies show that many strategies are selected against the

listener's refutation or in anticipation of a listener's refutation. Several examples of this are given.

Attribution management. Situational (external) attributions and dispositional (internal) attributions have different social properties and therefore effects against a listener's refutation, so speakers choose strategies according to those effects (Guerin, 2004). When a speaker attributes to a dispositional cause, it is difficult to refute because dispositional attributions are difficult or impossible for others to monitor (Guerin, 2004). On the other hand, when a speaker attributes to situational causes, he or she is difficult to refute, because those causes are apart from the speaker's stake or interest (Potter, 1996; Potter & Edwards, 1990).

Use of consensus. One of the common strategies for attribution management is the formation of consensus. Kelley (1967, 1973) proposed ANOVA model and the *covariation principle*, that observers make causal attributions using three types of information: *consensus*, *consistency*, and *distinctiveness* information. In a car accident, the agreement of a statement by three witnesses seems to be more persuasive than the utterance of one.

To examine this effect of consensus, Potter and Edwards (1990) analysed the dispute between a British politician, Nigel Lawson, and a group of journalists, and showed how consensus information is not just a report of how many people agree, but is used to warrant truth of an utterance and undermine alternative versions. According to Potter and Edwards (1990), the consensus was used in this case as a warrant of truth for the factual statements because many observers reported the same thing, so it became more plausible. However, such strategies were sometimes undermined by the claim that the agreement was the result of the

reporters having cooked up a story together in collusion. Therefore, independent corroboration is introduced into the strategies for stronger effectiveness, because it can prevent suggestion of collusion between witnesses.

It seems that extreme expressions can also be used to work up consensus. For example, the expression 'All then got the impression that...' can build up consensus (Potter & Edwards, 1990). Pomerantz (1986) pointed out that the use of extreme-case formulations also can work as consensus information. The description of the speaker's friend "Everybody who meets him, likes him" may be able to avoid the listener's attribution to the disposition of the speaker by using high consensus information.

Use of details. It seems that detailed and vivid descriptions can also be used for attribution management. Potter (1996) pointed out that detailed descriptions can provide the speakers with their identity as a witness. The advantage of the category entitlement of witness is that the speaker can make the listener's inference that the speaker's descriptions not having any evaluations of the events. According to Potter (1996), this distinction between the speaker's observation and evaluating it can avoid discounting by the listener that the speaker's statements are regarded as products of stake or interest, so that it is effective to warrant the speaker's statements. Another study about racial discourse in the Netherlands seems to support this idea. In the study by Verkuyten, Jong, and Masson (1994), participants frequently presented their personal experiences to justify their racist views. According to Verkuyten et al. (1994), those personal experiences were used because they were presented as independent of the speaker's concerns and racist views.

Use of passive voices. The use of passive voices may be another strategy

to manage attributions. Potter (1996) suggested that the concept of 'empiricist discourse' established through the study of the discourse of a group of biochemists in the sociology of scientific knowledge study by Gilbert and Mulkay (1994) can be applied to everyday discourses such as news reports. Gilbert and Mulkay (1994) pointed out that one of the prominent features of 'empiricist discourse' in scientific writing is grammatical impersonality, a grammatical form that minimises the author's action or involvement. For instance, instead of 'I found that...', the expression 'It was found that...' or 'The data reveal that…' are used in scientific papers. The passive voice may be another strategy to attribute to situational causes that avoids discounting by the listener that the speaker's statements are regarded as products of stake or interest. I think it has a similar effect to use of consensus and use of details.

Other strategies against counterargument. Pomerantz (1986) pointed out that some extreme case formulations are used to assert the speaker's claims against expected counterarguments. In an example she gives, the word 'brand new' was used by a plaintiff who was claiming damages from a dry cleaner on a dress, because of the expected counter-argument to scale down the plaintiff's damage by the presentation of the evidence that the plaintiff had owned the dress for months.

According to Potter (1996), rhetorical strategies to warrant factual statements can be divided into defensive rhetoric and offensive rhetoric. Defensive rhetoric is mainly focused on preventing a factual statement from being discounted or undermined, while offensive rhetoric is rhetoric mainly focused on reworking, damaging, or reframing an alternative description.

Potter (1996) pointed out that *vague* or *global information* may be an

important element of defensive rhetoric against an expected counter-argument, because it is difficult to undermine or ridicule. Some social identities also seem to be difficult to refute because of their *ambiguity*. Potter and Halliday (1990) pointed out that the category of 'community leader' is difficult to identify in a typical individual. They suggested that this ambiguity of the category of 'community leader' makes it difficult to criticism or challenge. Another example of social identities that have ambiguity with resistance to counter arguments is the category 'a friend of a friend'. Potter (1996) pointed out that many urban legends are told as the incidents of 'a friend of a friend', because it does not require the teller's accountability to make clear the questions or the problems of the story, and that the category 'friend' can warrant factuality better than the category 'somebody'.

With regard to *abstractness*, there is a series of studies on abstractness of words and the effects of this on listeners (Fiedler, Semin, & Bolten, 1989; Semin & Fiedler, 1988; Semin & Fiedler, 1989). Semin and Fiedler (1988) categorised verbs and adjectives which are used in describing persons into four types according to the levels of abstractness and context dependency: (1) Descriptive Action Verbs (DAV) are verbs which have the highest context dependency which reference single behavioral events or specific object and situation, and defined at least one physically invariant feature (e.g., 'call', 'touch', and 'kiss'); (2) Interpretive Action Verb (IAV) also refer to single behavioural events, but they are more interpretative and apart from specific physically invariant feature (e.g., 'cheat', 'imitate', and 'help'); (3) State Verb (SV) can describe a specific object person, however, they do not have any direct relations with single behavioural events any longer; (4) Adjectives (ADJ) such as 'honest' and 'aggressive' are the

most abstract term to describe a person (Fiedler, Semin, & Bolten, 1989). The results of the experiments using these four categories by Semin and Fiedler (1989) showed that when participants were challenged, they used more abstract words.

Use of hedges. Hedges are sometimes called mitigators (e.g., Ng & Bradac, 1993). According to Fraser (1980) these devices are used in order to reduce anticipated unwelcome effects on the listener. One of these usages is to make a criticism more palatable thus these devices can soften the listener's counter arguments.

Fraser (1980) classified these devices into following six types: (1) indirect speech act; (2) distancing techniques; (3) disclaimers; (4) parenthetical verbs; (5) tag questions; and (6) hedges. Some *indirect speech acts* such as "I must request that you leave" work to mitigate the contents of the speech, although not every indirect speech has the function of mitigation. According to Fraser (1980), indirect speech acts in congratulations such as "That was just great", "I am very pleased with the results of your efforts", or "I couldn't have done better myself" don't have the function of mitigation, because congratulations do not involve unwelcome effects. *Distancing techniques* are techniques that mitigate by manipulating the distance between the speaker referring and both the speaker and the listener. For instance, "FAA regulations require that all passengers fasten their seat belts" has more distance than "You are requested to fasten your seat belts". *Disclaimers* are expressions which preface the speaker's main idea to indicate the possibility that the idea may be incorrect. 'If I'm not wrong...' and 'unless I misunderstood you' are examples of disclaimers. The examples of *parenthetical verbs* are 'guess' in 'This is the right road, I guess', and 'feel' in 'I feel that I ought to try harder'. Fraser (1980) pointed out that a group of adverbs

including ‘presumably’, ‘admittedly’, ‘probably’ and ‘possibly’ also have the same function. *Tag questions* such as ‘I am right, aren’t I?’ are also important hedging devices (Holmes, 1984). *Hedges* are words such as ‘sort of’, ‘kind of’, ‘pretty much’ and ‘somewhat’. Lakoff (1973) pointed out that these expressions can make things fuzzier or less fuzzy, because these words reveal distinctions of degree of category membership. For example, in the sentence “A penguin is sort of a bird”, the words ‘sort of’ reveal the position of penguin in the ‘bird-ness’ hierarchy (Lakoff, 1973).

Language Use for Maintaining Social Relationships with Words

I have so far discussed just some of the strategies associated with establishing facts in conversation. The other major category of doing things to people with words for Guerin (2004) was the function of words in maintaining social relationships, and Guerin (2003b, 2004) pointed out some powerful strategies. First, just keep a listener’s attention may work to keep social interactions between the speaker and the listener. For example, strange and horrible tales such as urban legends can keep the listeners’ attention. Some uses of linguistic extremes can also keep the listener’s attention. Second, making the listeners’ like the speaker also can maintain social interactions. Linguistic accommodations like “I like spinach too” is an example. Third, it is also possible to manage the speakers’ status and reputation within a group. Forming the listeners’ impression of "a smart person" and "well informed person" may be one possible way. Moreover, categories of self identities and group identities can be used in order to not only warrant factual statement but also strengthen solidarity of the group.

Empirical studies of strategies for maintaining social relationships with

words. Akin to establishing facts, it seems that many empirical studies of everyday conversation show that diverse strategies are used for keeping social relationships. For example, between close friends or good acquaintances, the style of talking is usually more informal (Youssef, 1993), and self-disclosures are common (Richardson, 1988). While there are many ways to use language to form and maintain social relationships, I will focus on previous studies in the areas of 'phatic communion' and 'collaborative talk' because the latter will become important in the present research.

Phatic communion and ritual talk. Greetings in everyday conversations such as "Nice day today" have little informative value and are seldom attempts at establishing facts. Malinowski (1923) named similar types of talk "phatic communion". According to him, phatic communion is "a type of speech in which the ties of union are created by a mere exchange of words ", and examples are inquiries about health, comments on weather, and affirmation of some supremely obvious state of things (Malinowski, 1923).

Whether does 'phatic communion' have the function of maintaining social relationships or not? Laver (1975, 1981) focused on phatic communications in the opening and closing phases of conversation. According to Laver, phatic talk in opening phases has *propitiatory functions*, *exploratory functions*, and *initiatory functions*. In closing phases, he supposed the functions as *to mitigate possible sense of rejection* and *to consolidate a relationship*.

These studies are based on the assumption that there are two modes that can be discretely separated, and that the phatic mode is substantially different from the non-phatic mode, where some information is conveyed. However, it seems that the difference between these two modes depends on the context

(Coupland, Coupland & Robinson, 1992; Coupland & Ylänne-McEwen, 2000). Coupland et al. (1992) analysed elderly people's responses to "How are you?" in questions about health care. The participants answered with a wide range of responses from thanking ("All right thank you") to explicit reference to somatic or psychological problems ("I'm a long-standing asthmatic"), despite non-phatic responses being expected in such medical and gerontological context. In addition, the participants used various hedges with their responses (e.g., "not too bad"). Coupland et al. (1992) concluded that phatic communion should be treated as a predominant function of speech which is contingent upon particular contextualised episodes and momentary salience of particular interactional goals.

Collaborative talk. Collaborative talk is one speaker's completing the preceding sentence or unit by another speaker and thereby producing a consistent unit. It can occur at the level of syntax, such as sentences (e.g. Antaki, Dìaz & Collins, 1996; Dìaz, Antaki & Collins, 1996), or at larger levels (e.g. Cheshire, 2000; Eder, 1988; Lerner, 1992). Following a first speaker's saying "The capital of Australia", a second speaker's saying "is Canberra" is an example of the syntax level of collaborative talk.

The functions of collaborative talk have not been made clear in the literature yet. Cheshire (2000) showed that collaborative talk occurs more frequently between close friends. Eder (1988) pointed out that the function is to enhance solidarity among the narrators. According to her, co-narration of the shared experience can construct the shared perception and evaluation between the speakers, so that it may strengthen the bond of the narrators. Just how it might 'strengthen bonds' between speakers is not clear, though.

Coates (1997) discussed collaborative talk by using the notion of

'collaborative floor'. This notion was first raised by Edelsky (1981), who argued that this phenomenon was the difference between 'turns' and 'floors' in conversations. According to Edelsky, we have to divide the concept of 'floor' into different two kinds: 'single floor' and 'collaborative floor'. In the single floor, speakers take turns to occupy the floor. On the other hand, in the collaborative floor, the floor is opened to all speakers at the same time. Coates (1997) argued that the use of collaborative floor is prominent in women's friendly conversations, and she conclude that the function of such conversations is 'play' for the construction and maintenance of good social interaction rather than the exchange of information. Moreover, Guerin (2003b) suggested that those types of contributions to statements can enhance even more the group's generalised resource allocations, if the contribution would lead to more liking by the others and more resource access for the speaker.

Finally, as part of a broader analysis of some language use patterns, Guerin (2004) suggested that interrupting is usually considered rude since it loses resources and contingent outcomes for the first speaker who is interrupted. However, if a speaker allows an interruption to proceed, or even encourages it, then the failure of that speaker to make the second speaker accountable in the way they normally would be for interrupting, might be what leads to the strengthening of social bonds. This is similar to an analysis of black humour and telling horror stories, that the failure of the listeners to punish the speaker in the normal way is what strengthens the social bonds in these sorts of relationship-enhancing talk (Guerin, 2004, p. 232).

What is clear is that we do not know enough about collaborative talk, and one aim of this thesis is to look at social or ritual uses of food talk and explore

more about collaborative talk and how it functions in friendly conversions. This will expand our knowledge of how language can function to develop or enhance social relationships.

Strategies to Evade Negative Consequence for Social Relationship

When we try to 'establish facts', a possible negative consequence is not only challenging by a listener, but also loss of friendship to the listener. The strategies for evading negative consequence for friendship overlap with strategies against challenging (e. g., hedging), because the challenge by the listener spoils friendship between the speaker and the listener. For instance, the uses of *ambiguity*, *abstractness*, and *hedges* may be powerful strategies for keeping social relationship in addition to helping with establishing facts. Moreover, there are some other specific strategies for keeping social relationship rather than against challenging. For example, *apologies* are regarded as ultimate means for remaining in a relationship when the speaker fails to establish facts, and *politeness* can protect social relationships from the negative consequences of talking (Guerin, 2003a). Guerin (2003b) pointed out "Politeness has several functions, then: it can act with requests to make it more likely that the person will go along with the request, and it can use the social relationship to make it more likely that the relationship remains after any sort of interaction (Guerin, 2003b)". According to Guerin (2003b), in such cases, *hedges*, *apologies* and *politeness* are all blended into the strategies keeping social relationships in general.

Social Knowledge and Social Contingencies

The new approach to social contingency assumes social knowledge as language use in social context. Therefore, it may have any of the functions of language use discussed above, and leaves it to empirical documentation to analyse,

rather than guessing from a bare text, a category system, or from a list of words. We can now summarize the broad analyses of social knowledge according to the system I have briefly outlined.

Social Knowledge and Establishing Facts

First, social knowledge can be defined as knowledge which has been shared by people through the processes of "establishing facts". This means that: (1) when a new knowledge survived from counterarguments and refutations, the knowledge become consequently shared by people as social knowledge; (2) in order to survive counterarguments, various kinds of rhetorical strategies are used for warranting factuality of the knowledge. Moreover, when knowledge is believed by more people, it gains more power to control people. As previously stated, if "Spinach is good for your health." is believed by many people, then those people may not only change their behaviours, but also persuade other people.

Second, once facts become shared by people as 'social knowledge', they can be utilized in further ways. They can be used to warrant establishing other "facts", or to refute a person who is trying to establishing another 'fact'. Moreover, social knowledge may be used to justify speaker's behaviour in the claims by the speaker. Pomerantz (1986) pointed out that the expression of 'everyone has guns' justifies possession of guns. This encompasses the point of Potter and Litton (1985) that any individual can "know" several social representations and use them according to the context. The idea of Potter and Litton (1985) is that the same participants has a variety of different representations in his/her repertories, for examples, it is not that racists only know racist knowledge and non-racists do not, and he/she uses one of them

corresponding to different situations or contexts.

Social Knowledge in Maintaining Social Relationships

While social knowledge has traditionally been restricted to establishing facts, it is argued that a chief function of social knowledge is often that of keeping social interactions occurring rather than establishing facts:

> *It is the basis of some of the most widespread and weirdest conversation, precisely because its formation has nothing to do with what is said, at least not directly. It is also a large part of what is meant by socially constructed knowledge, since it is "constructed" for social functions unrelated to the content.* (Guerin, 2003a, p. 34).

How do people use social knowledge for maintaining social interactions? Some possible usages of social knowledge are expected.

Social knowledge as topics in phatic communion. First, people may use social knowledge as topics in phatic communion. Coupland and Ylänne-McEwen (2000) analysed why 'the weather' is a good topic of small talk. The weather is ubiquitously available for speakers, and the evaluations of the weather condition by people similar, for example, sunny day is 'nice' for the most people. Even complaining about the weather keeps the attention of a listener and can be functional if not overdone or used on the wrong person. Therefore, weather talk is able to achieve consensual evaluation towards intimacy. Social knowledge also has that ubiquitously availability because it is 'shared' by people. Moreover, if the evaluation to that knowledge is similar between the speakers, it can be good topic in phatic communion. For example, Guerin (1992b) mentioned a talk about the knowledge of "taking long baths leads to skin cancer":

> *For example, I could be sitting in a public bar telling my somewhat*

> *uninterested and intermittently attentive audience that cancer is caused through taking too many baths, and they might occasionally agree and nod their heads, especially if the same is done when it becomes their turn to talk.* (Guerin, 1992b, p. 1427).

In this case, because all members not only 'know' the knowledge about sun bathing and skin cancer, but also agree with it, it can be used as a group topic.

Collaborative talk of social knowledge. It is possible that not only 'real' shared experiences, but also some social knowledge can be presented as the form of collaborative talk in order to maintain social interaction. We have seen that Eder (1988) pointed out that co-narration of the shared experience can strengthen the bond of the speakers because it is able to establish a consensual evaluation by the speakers. Like the case of phatic communion, the shared experience of the speakers is used in collaborative talk because of its ability to achieve consensual evaluation. This suggests that if the speakers can compose consensual evaluation, there is no need that the topic is real experience by the speakers. As mentioned above, some social knowledge can form consensual evaluation between speakers. Therefore, it is possible that social knowledge is presented as the form of collaborative talk when speakers share that knowledge and have a similar evaluation toward it. How collaborative talk works when people disagree will be explored later in this research.

Other possible usages of social knowledge. Using social knowledge, a speaker could achieve verbal accommodation to the listener's preference to something, and the speaker could get the listener's liking for him/her. Social knowledge could create social identity of the speaker as a sensible person or an erudite person.

Research Questions

As mentioned above, to examine social knowledge of food from the social contingency perspective seems to produce plentiful understanding of food talk in everyday life. Therefore, the present research aimed to investigate the multiple roles of food in conversations. There are three main research questions as follows:

(1) Is the knowledge of food shared by people?

(2) How is social knowledge of food used in establishing facts?

(3) How is social knowledge of food used for establishing or maintaining social relationships?

First, it seems that there are few empirical research works proving the existence of shared knowledge of food as compared with that of health. For this reason, *the first study of this research will look at shared knowledge about foods among people*. Some further previous investigations of social knowledge of food which is shared by people will be examined at the beginning of that section.

Following this, *the role of food talk in 'establishing facts' will be investigated*, also trying to find out more about the processes of establishing facts in general. The aims will be the following questions: (1) In order to be shared by people as 'social knowledge', how are various kinds of rhetorical strategies used to warrant the factuality of the knowledge? (2) When the knowledge becomes shared by people as 'social knowledge', how is the knowledge used to warrant or refute establishing other "facts"?

Finally, in the final two studies of this research, some studies into the 'maintaining social relationships' function of social knowledge about food will be

conducted. For those studies, the focus will be mainly on social knowledge as presented in the form of collaborative talk. Whether such collaborative talk is used for maintaining social interaction or not will be examined.

Methodologies. Social Contingency Theory (Guerin, 2001a) does not have its own particular methodologies, but rather, adopts appropriate methodologies from all the social sciences and to a lesser extent from behaviour analysis. In the present studies, traditional methods of behaviour analysis such as single-subject design experiment are not suitable, because they cannot be conducted without spoiling the natural contingencies of people's conversations. Therefore, both quantitative and qualitative methods will be applied in the investigation of conversations:

1. To describe social knowledge about food, these studies will mainly apply quantitative methods that have been developed in social representation studies (e.g., Doise, Clémence, & Lorenzi-Cioldi , 1993).
2. For the investigations of the 'establishing facts' and 'maintaining social relationships' functions of social knowledge, qualitative methods will be used in a similar way to discourse analysis, looking at conversational data.

The methods of discursive psychology are appropriate to study 'establishing facts' aspects of social knowledge of food, because the results can be compared with many previous results in discursive psychology areas. Similarly, the methods which has been used in the previous sociolinguistics studies will be used when the functions of 'keeping interactions' are examined.

Study 1:

Exploring the Shared Social Knowledge about Food in New Zealand and Japan

To begin analysing people's social knowledge about food we first have to verify whether people share such knowledge or not. Recently, quantitative methods have been developed for the empirical approach to social representation utilizing factor analysis, cluster analysis, correspondence analysis, and multidimensional scaling (Doise, Clémence, and Lorenzi-Cioldi, 1993). For example, Hammond (1993) argued that quantitative methods should be used as heuristic and exploratory tools in order to describe shared representations, rather than in order to accept or reject the specific hypothesis. According to him, correspondence analysis is a good method to describe the relationship between subgroups of the participants and the representations when subgroups are identified. Following some criticism by Fife-Schaw (1993), however, I will use a slightly different method that shows consensus. In this way I hoped to use both some simple and some exotic foods to evaluate the degree of consensus in food types for both Japanese and New Zealand participants.

The Attribution Checklist Method

Fife-Schaw (1993) pointed out that the quantitative methodologies which are often used in social representation studies are based on traditional attitudinal methodologies which aim to examine variations and make comparisons between groups, so they might not be as appropriate to examine the degrees of consensus in social representations. Fife-Schaw (1993) therefore proposed a new method

to show degrees of consensus by cluster analysis. In this method, an attribute checklist forming a matrix of objects and their attributes is constructed from the results of a pilot study. The participants are then asked to answer the list by 'yes' or 'no', and the extent to which people share those attributes is then analysed.

According to Fife-Schaw (1993), the analysis consists of three stages. First, the number of clusters from participants who have similar judgements are found, and then the features of shared representations in each cluster are described using correspondence analysis or the like. The final stage is the analysis of relationships between cluster memberships and the individual's demographic variables.

To assess homogeneity, Fife-Schaw (1993) mentions three methods. The first method uses Cohen's kappa, which assesses agreement between two series of judges. The second method looks at the distances between clusters and the distances between each member of each cluster and the centre of each cluster. If the distance between two clusters is obviously greater than the average distances between members and cluster centre in each cluster, this suggests that there are two clusters of individuals which have different social representations. On the other hand, if the average distance between members and the cluster centre in each cluster is greater than the two cluster centre distance, it may that one social representation is shared only to a limited degree. The third method is back-tracing clusters in the result of hierarchical cluster analysis from a two cluster solution. If only one social representation is shared then a large number of members remain in one cluster and members in other clusters rapidly decay when the number of clusters increased.

Category Generation by Qualitative Methods

The attribution checklist method seems to be a well-designed method to understand how social knowledge about foods is shared by people. However, this method has some difficulties in practical use because the researcher needs two similar groups of large number of people for a pilot study and then the main study. The method by Fife-Schaw (1993) can be regarded as triangulation of qualitative method and quantitative method (Flick, 1998), because in the pilot study the attribute checklist is made from a data set qualitatively, and then another data set is analysed quantitatively.

To help with such triangulations, other researchers have developed better qualitative methods which classify data into categories for quantitative research (e. g., Mayring, 2001). Using these techniques the matrix of the objects and attributes for quantitative analysis can be made from the one raw data set, such as an open-ended questionnaire. Such qualitative methods include hermeneutic-classificatory content analysis (Roller, Mathes & Eckert, 1995), case-oriented quantification (Kuckartz, 1985), and qualitative content analysis (Mayring, 2000).

Most content analysis is a systematic and replicable technique for textual data that uses explicit rules of coding based on a predefined set of mutually exclusive and jointly exhaustive categories (Krippendorff, 1980). The qualitative content analysis (Mayring, 2000) on the other hand, is characterised by category generation using *summarizing content analysis*, *explicative content analysis*, and *structuring content analysis* techniques. *Summarizing content analysis* is an inductive technique in order to generate categories, in which the statements with the same meaning are first paraphrased, and then similar

paraphrases are bundled and summarized into higher level of abstraction. On the contrary, *explicative content analysis* is a deductive way for category generation in which diffuse, ambiguous or contradictory passages in the data are clarified by other parts of the data, or information outside the data (e.g., definitions taken from dictionaries). In this way, explicating paraphrase is formulated. Finally, structuring of the data is done through *structuring content analysis* process (Flick, 1998).

The Method for the Present Study

The present study applied a combination of qualitative and quantitative methods focusing on types of food items. It aimed to see how people use different knowledges according to food items, and how that knowledge is shared by people. To do this, the data from open-ended questionnaires which asked the reasons to eat or not to eat particular food items were categorised and coded by qualitative content analysis. Then, the sharing of knowledge of food was analysed by the quantitative method of cluster analysis. Finally the different uses of social knowledge according to food items were examined by quantitative methods such as correspondence analysis.

To assess the homogeneity between participants, Fife-Schaw's (1993) third method of using hierarchical cluster analysis of binary data was used. In cluster analysis of binary data, each data by an individual is regarded as one cluster in the first stage, and then the two most similar clusters (nearest clusters) are combined into one cluster. After this, the combination of nearest clusters is repeated again and again, until all data are combined into one cluster. The assessment of homogeneity is analysed by the tracing back of those results of clusters analysis.

To help understand this method, Figure 1.1 shows some ideal numbers of members in each cluster in the results of cluster analysis of the fictional data. In this case, the number of members is traced back from a 2 cluster solution to a 6 cluster solution. When social knowledge is shared by most of the members (1.1a), a large number of members remain in one cluster (from 99 to 92) and members in other clusters rapidly decay. If there are two groups sharing different social knowledge (1.1b), many members in two cluster remain (from 52 to 49, and from 48 to 45) while the numbers of members of other clusters rapidly decrease. If no social knowledge is shared by the members (1.1c), the members in all clusters rapidly decay.

There are questions about selecting both the resemblance coefficients and the clustering methods for hierarchical cluster analysis of binary data. With respect to the resemblance coefficient, the problem is how to deal with zero-zero matches (when neither of the paired individuals use the categories and both are marked '0'). When zero-zero matches are considered informative, the simple matching coefficient is usually used (Everitt, Landau, & Leese, 2001). This is the case in the present study, since all social knowledge is conceived as language use. So finding that neither of the paired individuals uses the category is equal in informative value to finding that both participants use it. Therefore the simple matching coefficient was employed in the present study.

With respect to clustering methods, the UPGMA clustering method (Unweighted Pair-Groups Method Average: also known as group average linkage clustering method) was employed. This was because it judges the similarity between pairs of clusters in a manner less extreme than other methods, giving more conservative estimates (Romesburg, 1984).

Method

Participants

Two samples were used, one from New Zealand and one from Japan. This was mostly for convenience but also to extend the diversity of food experiences that could be examined. With only samples from limited regions of these countries, there was no real intention of comparing across countries or cultures. However, some food items were added that would be usual for the Japanese participants but very unusual for the New Zealand sample.

One hundred and fourteen first year students in a psychology course at the University of Waikato, in Hamilton, New Zealand, responded to the English version of the questionnaire. They consisted of 93 females and 21 males. Their ages varied from 18 to 56 years, with a mean age of 27.9 years.

Twenty three second and third year students in a psychology course in the Teikyo University in Japan responded to the Japanese translation of the questionnaire. They consisted of 5 females and 18 males. Their ages varied from 20 to 23 years, with a mean age of 20.6 years.

Questionnaire Items

The questionnaires asked about 12 food items: *beef, pork, horse meat, spinach, dog meat, milk, sweets, locusts, butter, whale meat, French fries,* and *full cream*. These were variously selected from ordinary foods in most societies (e.g., beef, milk) and some foods which are eaten only in particular cultures (e.g., horse meat, locusts). Some were commonly considered good foods (beef, milk) and others were considered as unhealthy or as fattening (French fries, full cream). Some were very unusual for the New Zealand sample (whale meat) but not for the Japanese sample, and some were unusual for both (dog meat). The food items

were asked about in four different orders so the total list was mixed across participants.

For each food there were two questions requiring a yes or no answer, and three questions that were open-ended to allow for more explanation or accounting. The participants' experience of eating the food items and their opposition to the food items were asked by the following *yes/no questions*:

(1) "Have you ever eaten food A?"

(2) "Are you opposed to eating food A?"

In the *open-ended questions*, participants were asked:

(3) "Why do you eat food A or why don't you eat food A?"

(4) "Why do you think some people eat food A?"

(5) "Why do you think other people do not eat food A?"

Coding and Analysis

The results of open-end questions were categorised and coded using the qualitative content analysis of Mayring (2000). The results of each participant were quantified according to whether each category was used or not. For the assessment of the homogeneity, the quantified data of "Why do you think some people eat food A?" and "Why do you think other people do not eat food A?" were analysed by hierarchical cluster analysis based on the UPGMA clustering method with a simple matching coefficient.

In order to analyse the relationships between food items and categories, correspondence analysis was employed for the answers of four questions: "Why do you think some people eat food A?", "Why do you think other people do not eat food A?", "Why do you eat food A?" and "Why don't you eat food A?" In the correspondence analysis, the relationships were analysed between those

categories used by more than 5% of participants for each question about each food item. For all cluster analysis and correspondence analysis, SPSS 10.0 for Windows (SPSS Inc.) was used.

Results

Experiences and Oppositions

Table 1.1 shows the number of participants who reported having experience or not of eating the food items and those who were opposed or not to eating the food items. The large majority of New Zealand participants reported never having eaten horse meat, dog meat, locusts, or whale meat, while they had mostly eaten the rest of food items. In contrast, Japanese participants showed different responses to these four foods: no Japanese participant reported having eaten dog meat, but more than half of the participants had eaten horse meat and whale meat, and about 40% had tried locusts.

For the questions asking about opposition to eating these foods, a large number of New Zealanders showed opposition to eating dog meat and whale meat, whereas fewer opposed eating locusts and horse meat. No Japanese participants, on the other hand, opposed eating any food except a few for dog meat and whale meat.

Category Generation from the Open-Ended Questions

The qualitative content analysis was conducted in order to classify the data from the open-end questions into categories for cluster analysis and other quantitative analyses. The statements with the similar meaning or the ambiguous statements in the raw data were paraphrased and then they were summarised into the categories. Thirty sub-categories were generated by qualitative content analysis and they were united into eight categories finally.

These are summarized in Table 1.2 along with sub-categories.

The first category was ***Personal Preference*** and contained all items showing that a person liked the food or something about it, or did not like the food or something about it (negative personal preference). This broke down into four sub-categories:

(1) *Food A has good/bad taste, texture, smell, appearance* (e.g., "Tastes good", "Don't like the taste/smell/look/texture", "Unappealing appearance", "As a treat")

(2) *Food A is preferred over alternatives/alternatives are preferred over Food A* (e.g., "Don't like margarine", "Nicer than margarine")

(3) *Food A can add variety to the diet* (e.g., "I need a change")

(4) *Food A becomes the material of good/bad Dish B* (e.g., "It goes nicely in my coffee", "Because it adds a rich taste to desserts", "As a complementary good").

The second category ***Personal Factors*** was composed of five sub-categories:

(1) *Food A is eaten/not eaten because of personal experience* (e.g., "They were forced to eat it when they were young", "Brought up on it as a small child", "Never eaten them before", "Forbidden by parents")

(2) *Food A is eaten/not eaten because of curiosity/sensation seeking* (e.g., "Ate once to experiment I taste within overseas", "Exotic", "To try it")

(3) *Food A is eaten/not eaten because of personal beliefs* (e.g., "It is gross", "Don't like the idea", "The thought of it is repulsive")

(4) *Food A is eaten/not eaten because of personality* (e.g., "They're cruel and selfish")

(5) *Food A is eaten/not eaten because of lack/full of knowledge* (e.g., "Don't

know about nutritional value", "Not knowing how to cook it", "Socialisation", "They aren't aware it is horse meat").

The third category of ***Health or Physiological Factors*** consisted of six sub-categories:

(1) *Food A has good/bad nutritional value* (e.g., "It's nutritious", "High in iron", "High fat content")

(2) *Food A causes good/bad health consequence* (e.g., "For strong bones", "Give energy", "They don't want tooth decay", "Good for you", "Health conscious")

(3) *Food A is eaten/not eaten because of personal health condition* (e.g., "Diabetics", "Lactose intolerant", "Trying to lose weight")

(4) *Food A is eaten/not eaten because of personal physiological factors* (e.g., "They are addictive", "Satisfy sweet carving", "Sugar rush", "Energy boost", "Because it is filling")

(5) *Food A came from good/bad production processes* (e.g., "Because of the way the pigs are treated")

(6) *Food A is made from good/bad materials* (e.g., "Because it has less chemicals", "Possibility of poisoning spoiled meat.").

The ***Social or Cultural Factors*** category was composed of four sub-categories:

(1) *Food A is eaten/not eaten because of social or cultural reasons* (e.g., "Not socially accepted", "Traditional food source", "It is a common food item", "Prejudice")

(2) *Food A is eaten/not eaten because of effects of mass media or advertisement* (e.g., Green peace tells them not to", "Popeye's saying")

(3) *Food A is delicacy* (e.g., "Delicacy")

(4) *Food A is officially forbidden or authorised* (e.g., “Because in most countries it is illegal”).

The ***Factors Based on General Principles*** category consisted of three sub-categories:

(1) *Food A is eaten/not eaten because of reasons based on general principles* (e.g., “Morally wrong to kill living being”, “Animal rights”, “Endangered species”)

(2) *Food A is eaten/not eaten because of religious reasons* (e.g., “I am a Muslim”)

(3) *Food A is eaten/not eaten by vegetarians or vegans* (e.g., “Don't eat dairy products”).

The ***Availability or Economic Factors*** category was composed of six sub-categories:

(1) *Food A is eaten/not eaten because of lack/full of opportunity/availability* (e.g., “Not available to eat”, “I never had the opportunity”, “Readily available”)

(2) *Food A is eaten/not eaten because of economic reasons* (e.g., “They live in poor economical situations”, “Expensive”, “Reasonable cost”, "Can't afford them")

(3) *Food A is eaten/not eaten because of lack/full of alternatives* (e.g., “Shortage of other meats”, “Desperation”, “There is plenty of other food sources”, “Butter is in a lot of foods”)

(4) *Food A is served by somebody* (e.g., “Accompaniment to main meal at restaurants”, “Never been offered”)

(5) *Food A is offered in plenty or adequate in quantity* (e.g., “Locusts are not

very big so it would take a few to make a meal.")

(6) *Food A is easy/difficult to cook* (e.g., "Easy to prepare ","convenience").

The ***Factors about Food*** category had only one sub-category:

(1) *Food A is considered/not considered as food* (e.g., "Pet", "Domestic animal", "Beautiful creatures", "Because they're insects", "Not part of my staple diet").

The ***Others*** category was composed of only a few items that could not be placed easily together or elsewhere (e. g., "Food for breakfast")

Thus, the all participants' answers to the open-end questions were classified into eight categories, and for cluster analysis to assess the homogeneity between participants, and qualitative analyses to examine the relationships between food items and categories, all the answers were coded according to whether each category was used or not.

Assessment of Homogeneity

Figures 1.2 and 1.3 show the numbers of participants in each cluster from a two cluster solution to a ten cluster solution based on the similarities of the eight categories in answering: "Why do you think some people eat food A?" (Figure 1.2) and "Why do you think other people do not eat food A?" (Figure 1.3). They are based on the total answers for all 12 food items by 96 (for the first question) and 106 (for the second question) New Zealand and Japanese participants.

Both results show that a large number of members remain in one cluster and members in other clusters rapidly decay until the 10-cluster solution. So there is a lot of similarity across all participants on all food items. However, when cluster analyses are done for each of the foods separately, there are some differences and these differences appear before a 5-cluster solution.

Figures 1.4 shows the numbers of participants left in each cluster after separate cluster analyses of each food item using the question “Why do you think some people eat food A?" Figures 1.5 shows the same using the question “Why do you think other people do not eat food A?" With most of the food items, a large number of members remain in one cluster. Somewhat different solutions occurred for the question “Why do you think some people eat food A?" when asked about horse meat, locusts, and whale meat, and for sweets and French fries for the question “Why do you think other people do not eat food A?" For the latter two, the second clusters which consists of a number of Japanese participants from the largest cluster up to 4-cluster solution. In those the second largest clusters many members remain up to 10-cluster solution (see Figure 1.6 and 1.7).

These results suggest that it is necessary to conduct cluster analyses again separately for the assessment of homogeneity within New Zealander participants and within Japanese participants.

Figure 1.8 shows the numbers of participants in each cluster in the results of cluster analysis (from 2-cluster solution to 10-cluster solution) of the answers to “Why do you think some people eat food A?" (left) and “Why do you think other people do not eat food A?" (right) about all 12 food items by New Zealand participants only. Figure 1.9 shows those for the answers to “Why do you think some people eat food A?" about each food item (from 2-cluster solution to 5-cluster solution), and Figure 1.10 is for “Why do you think other people do not eat food A?” Figures 1.11 to 1.13 are those by Japanese participants only.

In most of these results, relatively large numbers of members remain in the largest cluster except some New Zealand answers about horse, locusts, and whale meat to “Why do you think some people eat food A?”, and those about

horse meat and locusts to “Why do you think other people do not eat food A?”

In short, the results of cluster analysis of the answers by all New Zealand and Japanese participants on all food items showed high homogeneities in the answers. However, when cluster analyses are done for each of the foods separately, relatively lower homogeneities are appeared on some food items. As to the results of cluster analyses of each food item within New Zealander participants and within Japanese participants, high homogeneities are shown on most of foods. This means that the answers of all New Zealand and Japanese participants have basically high homogeneities, though there are some differences between the countries. These results suggest that the qualitative analyses to examine the relationships between food items and categories should be done within New Zealand participants and within Japanese participants.

Category Use and Food Items

Why do people eat food A? Tables 1.3 and 1.4 show the number of New Zealand (Table 1.3) and Japanese participants (Table 1.4) by categories for the question, "Why do you think some people eat food A?” Only a very small number of participants used the categories of *Factors based on general principles* and *Considered/not considered as food*. For the rest of categories, the participants tended to use particular categories for specific food items. For example, both New Zealand and Japanese participants used more *Health or Physiological factors* for spinach and milk than for other food items, except a small loading on beef and pork.

Figure 1.14 shows the results of correspondence analysis of the data of the 12 food items for New Zealanders and Japanese in Table 1.3 and Table 1.4. The twelve food items can be clearly classified into three groups by relations to

specific categories: (1) the first group of foods connected to *Health or Physiological factors* which are spinach and milk; (2) the second group related to *Availability or Economic factors* and *Social or Cultural factors*, which consist of dog meat (both New Zealanders and Japanese), horse meat, locusts, and whale meat (New Zealanders only); (3) the third group relevant to *Personal Preference* and *Personal Factors*, which are composed of the rest of food items.

Why do people not eat food A? Tables 1.5 and 1.6 show the number of New Zealand (Table 1.5) and Japanese participants (Table 1.6) by categories in the answers to “Why do you think other people do not eat food A?" It can be seen that compared to the question of why people do eat foods, many more participants use the categories *Factors based on general principles* and *Considered/not considered as food*.

Figure 1.15 shows the results of correspondence analysis of the data of categories and the 12 food items. Like the answers to “Why do you think some people eat food A?", the food items can be separated into three groups, however the categories composing each groups are different from those of the former answers: (1) the first group related to *Factors based on general principles*, which consist of beef, pork, and whale meat; (2) the second group connected to *Social or Cultural factors, Availability or Economic factors, Considered/not considered as food*, and *Personal factors*, which are composed of horse meat, dog meat, and locusts; (3) the third group relevant to *Health or Physiological factors* and *Personal preference*, which are rest of food items.

Why do you eat food A? Table 1.7 and Table 1.8 show the number of New Zealand (Table 1.7) and Japanese participants (Table 1.8) by categories in the answers to "Why do you eat food A?", and Figure 1.16 shows the results of

correspondence analysis of the data of the categories and the food items. The differences of using categories by food items are less clear than the results of the question “Why do you think some people eat food A?", although both New Zealanders and Japanese show the connection between *Health or Physiological factors* and spinach and milk.

Why do you not eat food A? Table 1.9 and Table 1.10 show the number of New Zealander participants (Table 1.9) and Japanese participants (Table 1.10) by categories in the answers to "Why don't you eat food A?”, and Figure 1.17 shows the results of correspondence analysis of the data of categories and the food. There are many differences between New Zealanders and Japanese’. No Japanese participant used *Factors based on general principles* category in order to explain their eating of any food items, while two third of New Zealanders used this category for whale meat. For horse meat, New Zealand participants tended to connect it to *Social or Cultural factors* and *Considered/not considered as food*, whereas on the contrary, the Japanese related it to *Availability or Economic factors*. New Zealand participants also showed high connections between *Health or Physiological factors* and *Full cream*.

Comparing categories used to explain own or other behaviour. As to whether any one participant used the same category in the answers about reasons of himself/herself (the answers for “Why do you eat food A?” or “Why don't you eat food A?”) and the answers about reasons of people (the answers for “Why do you think some people eat food A?” or “Why do you think other people do not eat food A?”), Figure 1.18 (New Zealand participants) and Figure 1.19 (Japanese participants) shows the proportion of the participants who used each category as the reasons for the participant only, as the reasons for people only, and as the

reasons for both.

There are some differences between categories. For instance, many participants only used the *Social or Cultural factors* category for the question about other people, while lots of participants used *Personal preference* category and *Health or Physiological factors* category for both questions. In addition, for Japanese participants, many of them only used the *Availability or Economic factors* category for the question about themselves, while none of them used *Factors based on general principles* for that question.

Category use and the participants' experiences. Figure 1.20 and Figure 1.21 show the proportions of the participants using each category, according to whether the participant has eaten the target food in the answers to "Why do you think some people eat food A?" and "Why do you think other people do not eat food A?" by New Zealand (Figure 1.20) and Japanese participants (Figure 1.21). With the foods which the participants themselves have eaten, the participants more frequently used *Personal preference* and *Health or Physiological factors* categories in order to explain why people eat or do not eat. In those cases, New Zealand participants used *Personal preference* more frequently when they explained why people eat than when they explain why people do not, while there were no clear difference between those two conditions in the answers of Japanese participants.

On the other hand, more *Social or Cultural factors*, *Availability or Economic factors*, and *Considered/not considered as food* categories were used for the foods that the participants had not eaten. In those cases, New Zealand participants more frequently used *Social or Cultural factors* and *Availability or Economic factors* to explain why people eat, and participants of both countries

used *Considered/not considered as food* more frequently for the explanation of why people do not eat.

Discussion

First, the results of cluster analysis show that participants used knowledge about foods homogeneously. The homogeneities are apparent not only within New Zealand or Japanese participants, but also in all participants, except for the answers to “Why do you think some people eat food A?" for horse meat, locust, and whale meat, and the answers to “Why do you think other people do not eat food A?" for sweets and French fries. This suggests that social knowledge is shared way beyond the groups formed by real social relations among members.

In some New Zealanders’ answers, such as the answers about horse meat, locusts, and whale meat to “Why do you think some people eat food A?”, and those about horse meat and locusts to “Why do you think other people do not eat food A?”, homogeneities are relatively lower. Those foods are not familiar to New Zealand participants (See Table 1.1), so they may be due to low opportunity to talk about those foods.

The results suggest that social knowledge seems to be shared by people and goes beyond direct influence. How should we deal with those results from the view of social contingency? According to the perspective of language use in social contingency, social knowledge should be regarded as language use. Therefore, “social knowledge of food shared by people” means that people talk about the ‘knowledge’ of food with common understanding of the likely conversations and linguistic ploys that can be made. Of course, people have to learn the knowledge in order to talk about it, but it seems that the knowledge is

there like a “community repertoire” which can be drawn upon by each person for conversational uses.

With respect to the relationship between categories of knowledge and food items, the results suggest that participants selectively use different types of knowledge according to different food items. This tendency was clearer when the participants explained why people eat particular foods and why people do not eat them. In the answers to “Why do you think some people eat food A?” there were three groups of foods connected to different types of attributions. The first group was referred to knowledge about health by participants. The second group was connected to knowledge of social matters (*Availability or Economic factors* and *Social or Cultural factors*). The third group was in relation to dispositional attributions (*Personal preference* and *Personal factors*). In the similar way, the answers to the question “Why do you think other people do not eat food A” show three different types of food items.

The results show that the participants use different types of knowledge when explaining why they eat foods, and in explaining why they do not eat foods. When the participants answered to “Why do you think some people eat food A?”, *Health or Physiological factors* were strongly related to specific food items (spinach and milk) apart from other categories, while they used very frequently this category with *Personal preference* when they explained why people do not eat some food (spinach, milk, sweets, butter, French fries, and full cream). These results are not strange, because knowledge about the reasons why a specific food item is eaten, and those why it is not eaten, should be shaped by different social contingencies. They may be separately acquired by a person, and usually they are not used at the same time.

However, different use of categories beyond difference of food in two conditions (explaining why it is eaten and explaining why it is not eaten) may be caused by different social contingencies which generally operated on the participants. Very few participants used *Factors based on general principles* and *Considered/not considered as food* category when they explained why they or other people eat something. On contrary, both New Zealanders and Japanese used the *Factors based on general principles* category when they explained why people do not eat beef, pork, and whale meat. It is possible that social contingencies have shaped people to use different knowledge when they explain why they eat foods and when they explain why they do not eat foods. Those processes can be considered as stimulus control of verbal behaviours. Consequently, people might become to use the knowledge of *Factors based on general principles* only when they explain why people do not eat foods. The different uses of knowledge between the case of explaining reasons of people, and in the case of explaining reasons of themselves also can be explained in the same way.

Similarly, different uses of knowledge between the case of explaining reasons of people, and in the case of explaining reasons of themselves, can be explained by the different of social contingencies underlying each. The category of *Social or Cultural factors* is mainly used not for explaining their own reasons but for explaining the reasons of other people, suggesting that the strategy is less effective when persons explain their own behaviour in that way. However, this interpretation is partly inconsistent with the finding by discursive psychologists that self-categories as social identities are used to warrant reality of speakers' statements (Antaki et al., 1996; Edwards, 1998; Wooffitt, 1992). The results

may be related to stereotyping by outgroup homogeneity bias, and be concerned with group-serving bias, under which group members make dispositional attributions for their group's successes and situational attributions for outsider group's successes. Empirical study about those biases from Social Contingency perspective should be examined in a further study.

Although the results of cluster analysis showed high homogeneities of New Zealand and Japanese participants in most of the answers, in some aspects Japanese participants show different response to New Zealanders. Some result can be directly due to experience of eating. In the answers to "Why do you think some people eat food A?" fewer Japanese participants attributed horse meat, locusts, and whale meat to *Availability or Economic factors* and *Social or Cultural factors* than New Zealanders, presumably because of the relatively high experience of eating these food items by Japanese. The results of the analysis of the relationship between category use and the participants' experiences support this idea. Those categories are mainly used for the reasons about the foods which the participants have not eaten (See Figure 1.20 and Figure 1.21).

However, some differences may be the results by different contingencies when using social knowledge in two countries. No Japanese participant used *Factors based on general principles* when he or she explained why they do not eat a food. It is possible that such strategy is not appropriate in Japanese society where self-assertion is strongly abhorred. Less opposition to eating particular food by Japanese participants (see Table 1) supports this idea.

Overall, the results support the idea that the knowledge about food is shared by the participants. This means that people can express knowledge about food with a common repertoire even if that knowledge is not formed through the

groups, as Moscovici has implied. The results also showed that the participants use different knowledges according to difference of the food items and different contexts (explaining why it is eaten or why it is not eaten, explaining reasons for other people or for themselves). It is argued that that different contingencies work in accordance with those differences and shape conversations under those different conditions.

Study 2:

Rhetorical Features of Factual Statements about Foods on TV Advertisements

From the view of social contingencies, a large part of social knowledge is about factual statements shared by people through a process of 'establishing facts', and once shared by people, they can be used as a warrant for establishing other 'facts' or for counter-arguing against alternative 'facts'.

There are many questions that can be looked at around this topic, but for this research two questions were the focus:

(1) How are new factual statements about food warranted by rhetorical strategies in order to be shared by people?

(2) How are shared factual statements about food used to warrant or refute other 'facts'?

To explore this, Study 2 analysed factual statements presented about food on TV commercials. Language use on TV commercials has had some previous linguistic studies (Kumatoridani, 1984, 1989; Strauss, 2005). For example, Kumatoridani (1984, 1989) analysed the patterns of logical argumentations on TV commercials in Japan and the United States. According to the degree of argumentation, he categorised the logical relationships between situation (S), Product (P), and quality (Q) as follows: (1) "If S, then P because Q"; (2) "P has Q"; (3) "If S, then P"; and (4) "P" (Kumatoridani, 1989). The results found that the American commercials were more argumentative than the Japanese commercials.

With regard to the present study, factual statements on TV commercials were chosen because statements on TV advertisements about foods are usually new facts about them, at least on the first presentation. The advertiser presents some new information about those foods in order to make consumers buy them. This means that in those advertisements, strategies are likely to be used for establishing facts so they will be shared by people. Moreover, those strategies are likely to include ones aimed at preventing any counterarguments already shared by listeners in the social representations or 'community repertoires' explored in Study 1. So this was a good start on locating some of the ways that food statements are rhetorically made to look warranted.

Factual statements about food presented on television commercials were therefore analysed from a discursive perspective, which has proved useful in investigations of other facts in daily conversations (e.g., Potter & Wetherell, 1987). Several steps were followed for this.

First, for a quantitative analysis, the following two points were examined:

(1) What kind of factual statements were presented in each TV commercial?

(2) What kind of rhetorical strategies accompanied these statements?

The types of presented factual statements were categorised in terms of the sub-categories generated in Study 1. Then, in order to analyse the relationships between those categories and food types, correspondence analysis was employed. This enabled a comparison to the results of the correspondence analysis in Study 1 which showed the relationship between the categories of knowledge and food types.

To begin an analysis the rhetorical strategies, two were selected for analysis: *numerical quantification rhetoric* and *narrative and the use of detail* (Guerin, 2003b; Potter & Edwards, 1990, 1993). To give the indices of narrative and detail use rhetoric, the frequencies of (1) narrative use, and (2) enumeration were chosen as subjects by the following reason. It seems that detail use strategy is powerful against counterarguments not only because it can provide the speakers with their identity as a witness or experiencer (Beattie & Doherty, 1995; Potter, 1996), but also because it contains a lot of materials. According to Guerin (2003b), challenging a story can overwhelm a listener because they have to challenge all or most of the story and there is usually a lot of material involved in a story. This means that if the speaker presents a lot of materials, the listener must refute each piece. In short, narrative and detail use rhetoric seem to be powerful against counterarguments because it has the aspect of 'witness' and the effects of 'plentiful materials'. Therefore, 'narrative use' was chosen in order to examine the former, and 'enumeration' was chosen for checking the latter.

Second, for a qualitative analysis, the following two points were examined: (1) how did the rhetorical strategies appear with each type of factual statements, and (2) when more than one factual statement was presented in a commercial, what was the relationship between those statements. In the latter, how more than one factual statement was arranged in a commercial in order to prevent counterarguments by listeners was also analysed. For that purpose, the analysis focused on the logical relationship in the combination of two factual statements. For example, two statements may be combined by causality such as "fact A *hence* fact B" or "fact A *because* fact B". They might also be presented as a form of a conjunction such as "fact A *however* fact B" or "fact A *moreover*

fact B". These categories were different from the categories of Kumatoridani (1989), because Study 2 aimed to analyse the rhetorical strategies for 'establishing facts', rather than to compare the degree of argumentation in the results of previous studies.

From these qualitative and quantitative analyses, it was hoped that we might get an initial better understanding of how novel statements about food knowledge are presented to persuade people that the facts were true.

Method

Materials

All TV commercials that involved food products and which were on air from 6 am to midnight on three New Zealand TV stations and five Japanese TV stations, were recorded (see Table 2.1). This produced a corpus of 113 New Zealand TV commercials and 240 Japanese TV commercials to be analysed. More details of those commercials are shown in Appendix A (New Zealand commercials) and Appendix B (Japanese commercials).

Analysis

Coding. First, the foods presented in each TV commercial were easily categorised into the following nine food types:

(1) alcoholic drinks

(2) confectionery

(3) fresh foods

(4) nutritional supplements or functional foods

(5) preserved foods and ready meals

(6) restaurants and shops

(7) seasonings and sauce mixes

(8) soft drinks

Those eight categories were based on the fifteen categories by Japanscan (2001). They are (1) alcoholic beverages; (2) soft drinks; (3) confectionery and snack foods; (4) cereal products; (5); milk products; (6) frozen foods; (7) sauces, dressings, seasonings; (8) processed fats and oils; (9) marine products; (10) sugars; (11) canned and bottled foods; (12) health foods and drinks; (13) retort packaged foods; (14) soup; (15) others (Japanscan, 2001, pp. 19-21). Those fifteen categories were too many to analysis, so they were integrated into six categories according to their similarities, then the new categories of 'fresh foods' and 'restaurants and shops' were added. The factual statements about those foods presented in the commercials were then coded, based on 32 categories. These comprised the 30 sub-categories that were generated in Study 1, plus two new categories of "Food A is sold well", and "Buying Food A is offered a prize". Finally, the commercials were coded for the presence of three rhetorical strategies:

(1) numerical quantification rhetoric

(2) narrative use rhetoric

(3) enumeration rhetoric

The criteria of the coding were as follows. The expressions using numeric words except telephone numbers and the date and time were marked as *numerical quantification*. When not less than three sentences were narrated by the same person, it was marked as *narrative use*. Any auditory or visual listings of not less than three items were marked as *enumeration*.

An example from the corpus of *numerical quantification* would be, "98% fat free". An example from the corpus of *narrative use* would be, "Now, there is

a natural way to help maintain your heart health. There is also a natural way to maintain digestive balance. There is even a natural way to maintain woman's well being. Burgen, a natural, and mixing great taste with nutrition. Burgen taste comes naturally". An example from the corpus of *enumeration* would be, "We got Pam's cats food 79 cents each, Classic Cola and Spree 85 cents each, and Allen's family bag approximately 1 dollar 50 each, and Ingham size 16 frozen chicken only 5 dollars 99".

Quantitative and qualitative analyses. The relationships between food types and categories of factual statements were analysed by correspondence analysis. In the correspondence analysis, the number of commercials in each food type, and each category of factual statements except the categories of "Food A has sold well", "Buying Food A could get a prize", and "Others" were analysed. For the qualitative analyses, first the different uses of (1) numerical quantification rhetoric, (2) narrative use rhetoric, and (3) enumeration rhetoric for each factual statement were analysed. Second, for all cases in which more than one factual statement was presented within one commercial, the logical relationships between the combinations of two statements were examined.

Results

Quantitative Overview

The overall food types. Figure 2.1 and 2.2 show the percentage of TV commercials in each food type. In New Zealand commercials, the proportion of "Confectionery" was higher than in Japanese commercials. In contrast, many commercials of "Nutritional supplements, Functional foods" and "Preserved food, Ready meals" were presented in Japan.

The reliabilities of the coding. For the coding based on 32 categories,

10% of them were coded by a second coder who was a Japanese undergraduate student at Kyoto University who was taking a short period of study at the university of Waikato, and had been trained on the coding system and could read and write both English and Japanese fluently. The first attempt produced a somewhat lower agreement with Cohen's kappa indicating the two coders' agreement of the coding of 32 categories was $\kappa = 0.57$, and that of 6 main categories of Study 1 plus two new categories ("Food A is sold well" and "Buying Food A is offered a prize") was $\kappa = 0.64$. The main discrepancies were that the 2nd coder coded the commercials with statements which did not directly connect with food into "Others", and the commercials which did not state explicitly something into some categories such as "Taste", instead of "No factual statement used". Once this was corrected, the results improved to a good level with Cohen's kappa for 32 categories at $\kappa = 0.69$, and that for main categories at $\kappa = 0.78$.

The categories of factual statements. In the New Zealand commercials, 12 of the 32 categories of factual statements were used in coding. Thirteen of the 32 categories were used in the Japanese commercials. The number of uses of categories and food types are shown in Table 2.2 for the New Zealand commercials, and Table 2.3 Japanese commercials. Out of the 30 sub-categories that were generated in Study 1, with the exception of the category "Food A is officially forbidden or authorised" in the Japanese commercials, all those categories belong to only three main categories from Study 1:

(1) The main category "Personal Preference" represented by "Food A has good / bad taste, texture, smell, appearance" and "Food A becomes the

material of good/bad Dish B".

(2) "Health or Physiological Factors", represented by "Food A has good / bad nutritional value", "Food A causes good / bad health consequence", "Food A came from good / bad production processes", and "Food A is made from good/bad materials".

(3) "Availability or Economic Factors" represented by "Food A is eaten / not eaten because of economical reasons", "Food A is offered in plenty or adequate in quantity" and "Food A is easy / difficult to cook".

For the relationships between those categories and food types, it can be seen that in both the New Zealand and the Japanese commercials, the number of commercials without any factual statements in the message was highest for "Alcoholic drink", "Confectionery", and "Soft drink".

Figure 2.3 shows the results of a correspondence analysis of the categories and food types in Table 2.2 and Table 2.3. There are some common patterns in the New Zealand and Japanese commercials. The food type "Restaurants, Shops" is related to the factual statement "Food A is eaten / not eaten because of economical reasons". The food types "Alcoholic drink", "Confectionery", and "Soft drink" are concerned with the factual statement "Food A has good / bad taste, texture, smell, appearance". The food type "Nutritional supplements, Functional foods" is highly connected to the factual statement of "Food A has good / bad nutritional value", and "Food A causes good / bad health consequence". Overall, these results suggest that specific categories of factual statements are connected to specific food types, just like the results of Study 1 that showed particular categories of knowledge about food were connected to particular food items.

The Features of Rhetorical Strategy Uses

Table 2.4 shows the number of uses of numerical quantification rhetoric, narrative use rhetoric, and enumeration rhetoric on New Zealander and Japanese TV commercials by food types. In both New Zealand and Japanese commercials, the numerical quantification rhetoric was used more frequently for commercials based around “Restaurants, Shops”. On the other hand, the narrative use and enumeration rhetorics were mainly used for the commercials of “Nutritional supplements, Functional foods”.

Figures 4 to 6 show the proportions of uses of numerical quantification rhetoric, narrative use rhetoric, and enumeration rhetoric respectively on each factual statement (leaving out “Food A has sold well”, “Buying Food A could get a prize”, and “Others”) for both the New Zealand commercials and Japanese commercials.

The numerical quantification rhetorics on each factual statement. It can be seen that with the factual statements of “Nutritional value”, “Economical reasons”, and “Food A is offered in plenty or adequate in quantity”, more quantification rhetoric was used than for other categories in both New Zealand and Japanese commercials (Figure 4). When numerical quantification rhetorics were used on the factual statement “Nutritional value”, quantifications seem to be used to indicate that the product has fewer ingredients which have bad nutritional value. Usually, the bad ingredient mentioned was fat, in both New Zealand and Japan: “Arnott’s Salada is 98% fat free” (NZ004: Arnott's Salada), “22% less fat” (NZ100: Dairy Whip Aerosol Cream), “Salad-oil zero” (JP0743: Light Tuna Super Non-oil, translated by author) , “carbohydrate 70% off” (JP103: Tanrei Green Label, ‘Low-Malt Beer‘, translated by author) are examples.

One key feature noted for these quantifications is that they use extremely accurate figures such as 98% and 22%. There are indications of some good nutritional elements in some Japanese commercials: “16 or more kinds of nutrients” (JP044: Aojiru (Green juice) [Type A], translated by author), “It has about twice as much calcium as milk” (JP045: Aojiru (Green juice) [Type B], translated by author) “You can take dietary fibre of two lettuces by one pack” (JP104: Easy Fiber, translated by author). In those cases, rougher expressions with hedging are used.

The uses of numerical quantification on the factual statement “Economical reasons” mainly appear on TV commercials of “Restaurants and shops”. For example, the commercial of a Nagasaki Chanpon (Nagasaki style noodle soup) says “Only ¥380 with ten kinds of ingredients” (JP191: Nagasaki Chanpon [Type A], translated by author). Moreover, this type of quantification on the commercials of restaurants and shops sometimes combines with narrative use and enumeration rhetorics. For example, the commercial by New World Supermarket says “We’ve got Pam’s cats food 79 cents each, Classic Cola and Spree 85 cents each, and Allen’s family bag approximately 1 dollar 50 each, and Ingham size 16 frozen chicken only 5 dollars 99“ (NZ033: New World Supermarket [Type A]).

The numerical quantifications for the factual statements “Food A is offered in plenty or adequate in quantity” are simpler than on “Economical reasons”. “Favourite Mainland cheese is now in handy 125 gram packs” (NZ072: Mainland cheese [Type A]), and “10% increasing in quantity” (JP074: Alt Bayern, ‘Sausage‘, translated by author)” are examples.

The narrative and enumeration rhetorics on each factual statement.

A feature of narrative use rhetorics for the factual statements of "Nutritional value" is that the details are visually enumerated as supplementary information within the narrations. For example, with the narration of "It has more protein than meat, more calcium than milk, and a hugely impressive array of vitamins and minerals", the details of vitamins and minerals are presented visually and quickly (NZ110: Nature Bee). The names of each nutritive element are rapidly scrolled on the screen with the narration, "The Aojiru of Fancl is amazing. They squeeze juice from kale and freeze quickly. The green contains more than sixteen kinds of nutritive elements" (JP044: Aojiru [Type A], translated by author). In the commercial for Kouzu (Capsule of Chinese Vinegar), a bar chart of each amino acid in Chinese and Japanese vinegar is quickly presented with the narration "Kouzu contains natural amino acids about ten times as much of Japanese vinegar" (JP234: Kouzu [Type C], translated by author). Like these examples, the distinctive feature of this type of presentation is that the speed of visual presentations of detail is so fast that the contents cannot actually be read.

Certainly, this pattern of the combination of narrative use rhetoric and enumeration rhetoric is not always found on factual statements of "Nutritional value". In the following two New Zealander commercials there are no visual enumerations related to the narrations:

> *If you were thirsty and someone offered you a glass of water and then asked if you liked added sugar with it or artificial sweetener you'd say no - so if you want a Sports Water - choose Charlies. Charlie's Sports water - no added sugar or artificial sweeteners - guaranteed.*
> (NZ018: Charlies Spots Water [Type C])

We grow the finest quality rice varieties from all over the world. Like Koshi-Hikari, a sticky rice used to sushi, Arborio, a creamy rice ideal for risotto, and Fragrant Jasmine, perfect for Asians. We've even got a variety of rice, Doesn't Stick, so whatever your cooking, Sun Rice has the perfect rice (NZ091: Sun Rice)

On the factual statements "Food A came from good / bad production processes", visual presentations are also commonly used with the narrations, however, the style of the presentations is different from that mentioned above. The visual presentations in these cases tend to be dependent on the narration, rather than showing additional enumerative information. For example, in the commercial of Zahsai (Szechwan Pickles), pictures of the production are simply shown with the narration:

The Zahsai of Momoya is sprinkled with the spices secretly handed down in China, which are also used for Chinese medicine. After they pickle it in an earthen pot for a year and a half, it's quite different from the Zahsai pickled only in salt. Genuine Chinese traditional taste, the Zahsai of Momoya (JP140: Zahsai, translated by author)

The Features of Combining Two Factual statements

Table 2.5 and Table 2.6 show the frequencies of combining two factual statements when more than one factual statement was presented in a commercial in New Zealand (Table 2.5) and Japanese (Table 2.6) commercials. More combinations appeared in Japanese commercials than New Zealand commercials.

In New Zealand commercials, the following three combinations appeared most frequently: (1) “Taste” with “Nutritional value”, (2) “Taste” with “Health consequence”, and (3) “Nutritional value” with “Health consequence”. In Japanese commercials, the two most frequent combinations were “Nutritional value” with “Health consequence”, and “Taste” with “Food A is made from good/bad materials”. This means that the specific combinations of factual statements tend to appear on TV commercials.

Let me now turn to examine the details of each type of the logical relationship in the combination of two factual statements**.**

The causality of two factual statements. In some TV commercials, the causality between two factual statements was explicitly made. This usually takes the form of “fact A *hence* fact B” or “fact A *because* fact B”. The following extract is from a Japanese low-malt beer commercial and shows the connection of factual statements from “Food A is made from good/bad materials” with “Taste”:

> *A: It’s delicious! Why is it so delicious?*
>
> *B: Because Asahi Honnama uses the deep sea water which abounds in minerals and the nutritious barley extract. While being brewed the quantity is just right for the yeast to ferment. And this just balance makes the yeast work livelily. Therefore sharp taste and sufficiently delicious*
>
> *A: I see.*
>
> (JP008: Asahi Honnama [Type C], translated by author)

The combination of “Nutritional value” and “Health consequence” appeared in

both New Zealand (see Table 2.5) and Japanese (see Table 2.6) commercials, and while it seems to be easy to connect those two statements by causality, such combinations did not appear frequently. This means that there were few expressions in the commercials taking the form of "Food A has high nutritional values, *so that* it makes you healthy" or "Food A gives you healthy consequence *because* it is nutritious". For example:

> *Now, there is a natural way to help maintain your heart health. There is also a natural way to maintain digestive balance. There is even a natural way to maintain woman's well being. Burgen, a natural, and mixing great taste with nutrition. Burgen taste comes naturally.*
> (NZ001: Burgen Breads)

This example does not quite show an explicit relationship between "Nutritional value" and "Health consequence". Quite likely, many commercials report "Nutritional value" and assume the listeners will make an automatic connection to health benefits. This remains to be tested, however, in future studies.

The conjunction of two factual statements. In more cases, the combination of two factual statements takes the form of "fact A *however* fact B" or "fact A *moreover* fact B" rather than an explicit expression of causality between two facts. These types mainly appear as a combination of any factual statements with the factual statement "Economical reasons", and it takes the forms of "Food A is B, but it isn't expensive", and "Food A is B, as well as it isn't expensive". The following example was by a Japanese crab restaurant and is the combination of factual statements from "Taste" and "Economical reasons":

Deliciously, pleasantly, luxuriously, and moreover if you want to have it cheap, also come here to Kani-Douraku. Let's go gorgeously even for lunch. Oh! Why this price for all that! Of course in the evening to be so luxurious at this reasonable price. I am happy.

(JP080: Kani-Douraku (Crab Restaurant), translated by author)

In this case, the two factual statements are joined in both the ways mentioned above.

The combination of the factual statements "Food A is made from good/bad materials" and "Economical reasons" is also remarkable. For example, "Anrakutei makes natural taste, making the best use of strictly chosen materials. The real taste is given at a reasonable price" (JP005: Anrakutei (BBQ Restaurant), translated by author, but notice the hedging with 'reasonable'), "With ten kinds ingredients which are products of the sea and the countryside, Nagasaki Chanpon is 380 yen" (JP191: Nagasaki Chanpon [Type A], translated by author). These are other examples of the combination of some factual statement and the factual statement "Economical reasons".

These conjunctions also appear as the combination of some factual statement with the factual statement "Taste". The New Zealand commercial of 'Meadow Lea Hi Omega' spread says "Meadow Lea Hi Omega is the only spread that contains a rich source of long-chain omega 3. So try Meadow Lea Hi Omega with a great taste of Meadow Lea" (NZ049: Meadow Lea Hi Omega). The Japanese commercial of 'Aojiru (green juice)' says "The Aojiru of Fancl is amazing. You become clean from the inside of your body. It is also good for diet.

Moreover it's easy to drink readily" (JP045: Aojiru [Type B], translated by author). These are the combinations of factual statements from "Nutritional value" with "Taste"

The independent presentation of two factual statements. Some commercials do not show a clear relationship between factual statements. For example, the commercial of sterilized packed rice does not clearly show the connection of the factual statement "Food A is easy / difficult to cook" with "Taste". "Katokichi, the rice of 21st century. Two minutes in the microwave and it will be the same as just cooked. It is delicious" (JP089: Takitate Gohan (Sterilized Packed Rice), translated by author).

Auditory and visual presentation of the factual statements. In some commercials, one factual statement is visually presented with an auditory presentation of another factual statement. For example, in many Japanese commercials, the information of FOSHU approvals (foods for specified health use) by the government usually present just the factual statement "Food A is officially forbidden or authorised" visually with auditory statements about other categories.

Discussion

First of all, the results show that what kinds of factual statements are used on TV commercials depends on the food types. For example, the factual statement "Economical reasons" was mainly used on commercials of "Restaurants, Shops". The factual statements of "Nutritional value", "Health consequence", and "Good / bad production processes" appeared more frequently on the commercials of "Nutritional supplements, Functional foods" in Japan. On the other hand, for the commercials of "Alcoholic drink", "Confectionery", and "Soft

drink", no factual statements appeared or only the factual statement of "Food A has good / bad taste, texture, smell, appearance".

These results relate closely to the results of Study 1. The results of Study 1 showed that the participants connected the reason to eat 'unhealthy food', such as sweets and full cream milk, with the factual statements of "Factors of personal preference in diet", and they related the reason *not* to eat those foods to "Health or physiological factors". The participants also connected the reasons to eat 'healthy food' like spinach and milk with the factual statement of "Health or physiological factors". It would seem, then, that the factual statements in TV commercials might be arranged so as not to contradict those factual statements which are commonly shared by people. For example, when people share the knowledge "sweets are bad for your health", the advertising "it's tasty" does not contradict the knowledge directly, therefore the advertising may be effective.

For the uses of rhetorical strategies, numerical quantification rhetoric, narrative use rhetoric, and enumeration rhetoric each appeared in the commercials of specific food types (see Table 2.4). These differences seem to be the result of the differential use of those rhetorics on each type of factual statement. For instance, numerical quantification rhetoric use was mostly used on specific types of knowledge. It was rarely accompanied by the factual statement "Food A has good / bad taste, texture, smell, appearance".

Moreover, the styles of expression of quantification were different according to the type of factual statement. When the numerical quantification rhetoric was used with the expression of "Food A contains less bad ingredients" as the factual statement of "Nutritional value", or when it was used with the expression "Food A is sold at a reasonable price" as the factual statement of

"Economical factors", very accurate figures like 98% and 79 cents were used. On the other hand, when it was used with the expression of "Food A contains more good ingredients" as the factual statement of "Nutritional value", it formed rough numerical expressions with hedging. These results are consistent with the finding by Potter et al. (1991) that many types of quantification rhetoric were selectively used according to the effectiveness against counter-arguments. Potter et al. (1991) pointed out that the expression of 'only 1 percent' may have a similar function to an extreme case formulation of "none" or "never". It seems that very accurate figures like 98% and 79 cents in the results work as extreme case formulations in the same way. Potter et al. (1991) also pointed out vague quantification such as 'small number' can be used because it is effective as hedging against counterargument. The rough numerical expression in the results may work similarly. It seems that very accurate figures like 98% and 79 cents work as extreme case formulations, and rough numerical expression may work as hedging.

Similarly, with narrative use and enumeration rhetorics, differential use of these two rhetorics on particular factual statements appeared. When those rhetorics were used on the factual statement of "Food A came from good / bad production processes" and "Food A becomes the material of good/bad Dish B", or used on the factual statement "Nutritional value" without visual enumerations, it seemed that they worked to establish the speaker's identity as a witness, as pointed out by Potter (1996). However, when narrative use rhetorics were used on the factual statement "Nutritional value" with quick visual enumerations, the functions of narrative and detail use seemed to only be for the category entitlement of witnesses. In those expressions, many technical terms are shown

so rapidly so that the audience is barely able to read them. Even if it is only one, a statement based on special factual statement is more difficult to refute than others. If more than one special factual statement is presented at a time, it may be still harder. The advantage of this type of combination of narrative use and enumeration may be that the presentation has lots of special factual statements all at once, making counterarguments difficult.

The arrangement of factual statements against expected counterarguments using shared knowledge. When more than one factual statement was presented in a commercial, only rarely did the one factual statement logically warrant the other. In most commercials, the relation of those factual statements was the form of a conjunction such as "fact A *however* fact B" and "fact A *moreover* fact B", or those factual statements were presented independently.

What might cause this? One possible reason is that the arrangement of those factual statements runs against expected counterarguments involving shared knowledge from 'community repertoires'. If people share the following knowledge; "tasty foods are expensive"; "nutritious foods have bad taste"; "foods from good material are expensive"; or "easy cooked foods have a bad taste", when somebody says 'Food A is tasty', he or she may encounter the refutation, "Well, it may be tasty, but I think it's expensive". Or in another case, the utterance of "Food A has high nutritional value" may be refuted by television watchers by "How about the taste?" By using more than one factual statement, if the presenter says "Food A is tasty, but it's cheap" or "Food A is nutritious, moreover it's tasty", any shared counterargument can be assuaged.

In order to verify this hypothesis, a further study would need to examine

the following points: (1) whether people have that shared knowledge in the specific cases; and (2) whether people use those shared knowledge for counterarguments. It could also be that people have the shared counterarguments as a repertoire to anticipate others questioning them. So if a couple is watching an advertisement saying that Butter A has less fat and will prevent heart attacks, one person who uses a more fatty butter might anticipate and have rehearsed replies in case the other one makes a comment, and these replies might come from a shared community repertoire rather than be 'cognitively' invented on the spot by that person. This might be part of a bigger relationship conversation in which one calls the other 'fat' and 'lazy'.

For the moment, however, the discussion of this work is still based in the common assumption of most discursive analyses that statements and conversations are entirely or primarily about the establishing and refutation of facts—that conversations, advertisements, and counter-arguing against advertisements are primarily a serious matter of facts and logic. As was outlined in the Introduction, discursive analyses do not usually provide much in the way of analyses of talk or conversation that might just be functional to maintain or enhance relationships. We turn to this next to broaden our analyses of food talk.

Study 3:

Sentence Completions of Factual Statements about Foods (1)

Study 1 examined whether social knowledge of food was shared. The results showed that some knowledge about food was shared by the New Zealand and Japanese participants although there were a few interesting differences between samples from those countries. In Study 2, the relationships between the shared knowledge of food and the process of 'establishing facts' were investigated. For factual statements made in TV food commercials, several rhetorical strategies were found that could warrant factual statements in order to be shared by people, and there were some indications that 'factual' statements were arranged so as to pre-empt shared counterarguments. Now, in Study 3, how people use social knowledge of food for maintaining social interactions will be examined, as a further facet of food talk in a broader contextual analysis.

In the Introduction (pp. 41-44), some other functions of food talk were also raised by the general model, and in particular, how social knowledge and language could be used to enhance or maintain social relationships. Such forms included gossip, complaining, story-telling, rumours (Guerin & Miyazaki, 2006), self-disclosure, phatic communication, categories of solidarity, and self- or social-identity talk (Guerin, 2003a). While these are all interesting, they are very diverse and require different methodologies to observe and describe them (Guerin & Miyazaki, 2006). To show the broader patterns of the functions of food talk, the aim of this overall research, we should look at a single function for social relationship maintenance rather attempt to document them all. That would

need to be done over a range of studies.

One interesting use of language for enhancing or maintaining social relationships in some reported cases, briefly outlined in the Introduction, is the form of social talk called 'collaborative talk'. This is said to occur when one speaker completes a sentence or unit started by another speaker and in doing this produces a consistent unit. For example, it is possible that some social knowledge can be presented as the form of collaborative talk in order to keep social relationships functional. Therefore, Study 3 focuses on collaborative talk of food knowledge in natural conversations, and examines whether such collaborative talk has a function of maintaining social relationships.

The Suggested Functions of Collaborative Talk

In the Introduction some of the research of collaborative talk was outlined. It was made clear there that the functions of collaborative talk were not well-known, and that more would be discussed in this chapter. The broad functional outline from previous studies was that collaborative talk seemed to enhance relationships, but it is unclear how this occurs. Mostly it has been taken as a given, although Guerin (2004) suggested that the absence of punishment from the speaker who is 'interrupted' is what helps the relationship between the two.

There have been some recent studies of collaborative talk as sentence completions, mainly in Japanese, that suggest at least some more details of the possible functions of collaborative talk.

Collaborative talk in Japanese. Ono and Yoshida (1996) examined 19 transcripts of spontaneous casual conversations with a total length of approximately 100 minutes. In the data, they found only 20 cases of collaborative talk, and therefore concluded that collaborative talk was not very

common in Japanese. They went on to give both syntactic and pragmatic suggestions for why this might be so. Syntactic reasons were that:

(1) Japanese has postpositions instead of prepositions;

(2) Japanese is known to be a strict verb-final language;

(3) In Japanese, the main clause normally follows the subordinate clause.

According to these reasons, some types of collaborative talk in English cannot occur in Japanese because of the structure of sentences. For example, in English, there is the following type of collaborative talk in which the second speaker follows the preposition spoken by the first speaker:

A: Yesterday, I saw John at

B: The library

However, this type of collaborative talk does not occur in Japanese because there are no prepositions in Japanese sentence structures.

Ono and Yoshida (1996) also pointed out possible a pragmatic reason for few examples of collaborative talk, that in Japanese it might be impolite to provide additional information unexpected by the first speaker when the topic is belonging to the first speaker's 'private territory' (e.g., feelings).

Hayashi and Mori (1998) later criticised these conclusions. In a data-set of 17 Japanese conversations they found 65 clear cases of collaborative talk, which varied according to the possible functions of talk. It should be noted, however, that in terms of rates, Ono and Yoshida (1996) had 100 minutes of tape which is 0.20 collaborative examples per minute. Hayashi and Mori (1998) found 65 examples in six hours of tape, which is almost identical at 0.18 examples per minutes. So in terms of whether collaborative talk is common or not, these authors had almost identical rates but disagreed whether this was common or not.

Hayashi and Mori (1998) also suggested other reasons for collaborative talk from their samples. First, it was suggested that participants may have used collaborative talk for negotiating, displaying, and achieving a congruent understanding of the event being discussed. These include both cases in which the second speaker shares prior information about the event and cases in which the second speaker does not share. Second, the participants may have used collaborative talk in order to manage the alignment within a turn at talk. In such cases, the two speakers may also have been building a shared stance against other speakers. Finally, the two speakers may have used collaborative talk to negotiate disagreement and to work towards a mutual consensus.

For the latter two cases, examples of each may be helpful for understanding. The next transcript is the example of collaborative talk in order to manage the alignment.

1 K: *tada nanka moo tsurutsuru shitenai to:* (0.3) *I*[*yada kara::*]
but like now smooth do:NEG if disliked because
"But, uhm, because (I) don't like it if (the surface of my teeth) isn't smooth."
2 S: [*soo desu yo*] *ne::*.
So be FP FP
"I agree"
3--> K: *yappari tetteitekini::* (0.3)
expectedly thoroughly
"You know, thoroughly,"
4--> S: *migakimasu yo* [*ne::*.]
brush FP FP
"(We) brush (them), right?"

(Hayashi & Mori, 1998, p. 84)

This transcript is the conversation by participant K and S and they followed the expression of dislike of brushing teeth by two other participants who are not shown in the transcript. Against the listeners, participant K and S expressed their liking for brushing teeth by a sentence completion.

The following transcript is the example of collaborative talk to negotiate disagreement and to work towards a mutual consensus.

1 T: *kekkyoku:, goshujinsama ga, oya mitai ni nacchatte*
after all husband SUB parents like become:AUX
2 *°itsumademo istumademo kodomo no manma, °*=
forever forever child LK state
"After all, (their husbands become like (their) parents, and (they) remain forever in a child like state"
3 K: =soo desu ka ne:::,
so COP Q FP
"Is that right?"
4 (0.5)
5--> K: *ya <u>jisshitsu::</u> nanka: onna no hito ga,*=
well in.reality like woman LK person SUB
"Well, in reality, like, women are,"
6--> T: =*shiri ni shiite*[*tari shite*?
buttocks under lay:and do:and
"Like, sitting on the top of men?"
7 K: [*oo- nye:::::::::*
8 T: *kubota kun nanka wa ikanimo shikare souna taipu.*
Kubota Mr. Like TOP indeed laid seem type
"Kubota, (you) are indeed the kind of person who's likely to be dominated."

(Hayashi & Mori, 1998, pp. 85-86)

In this transcript, participant K showed disagreement with participant T's notion about the relationships between Japanese husbands and wives in line 4. Then participants K started to reduce the tension from disagreement in line 5, and participant T accepted it by a sentence completion.

Lerner and Takagi (1999) focused on those grammatical functions of the first speaker's utterance which can provide an opportunity for a second speaker to complete, because it foreshadows both a place where a next utterance could begin and a possible form for that next utterance. For example, if the first speaker uses the form of "If X", the second speaker can follow as the form of "then Y". To do this, Lerner and Takagi (1999) analysed the transcripts of English and Japanese conversations and showed that in both English and Japanese, collaborative talk can occur through these grammatical functions, although the

details were different for the differences of syntax structures of the two languages. For example, the stricture of “not X, but Y” in English is equal to “X-not->but, Y” in Japanese. It means that the linking item of ‘but’ belongs the second speaker’s first utterance in English, while it belongs the first speaker’s final utterance in Japanese (Lerner & Takagi, 1999).

Hayashi’s subcategories of collaborative talk. The most thorough discussion of subcategories of collaborative talk as sentence completion was from Hayashi (2003), who discussed “differential participation in situated activities though co-participant completion” (pp. 25-74) in Japanese conversation. According to Hayashi (2003), co-participant completion can be divided into the following six categories:

(1) Interactive achievement of shared perspective;

(2) Differential displays of empathetic understanding of another’s experience;

(3) Demonstrating shared yet independent knowledge;

(4) Assisted explaining;

(5) Delivering a response in the form of co-participant completion;

(6) Converting a less preferred action into preferred action.

‘Interactive achievement of shared perspective’. This form of collaborative talk is when the first speaker presents a perspective on some object or event, and the second speaker completes the sentence. According to Hayashi (2003), because a predicate (a verb, a predicate adjective, or a predicate nominal) usually occurs at the end of a sentence or a clause in Japanese, the second speaker’s completion often takes the form of supplying a predicate, and utterance-final elements such as auxiliary verbs and sentence-final particles that

follow this predicate. In this type of collaborative talk in Japanese, the second speaker often add the utterance-final elements (e.g., '*yo ne*') which have the function of achieving 'stance/perspective sharing'. Therefore Hayashi (2003) concluded that this type of collaborative talk has the function of showing 'agreement' more than showing 'understanding'.

'Differential displays of empathetic understanding of another's experience'. With the previous category, both the first and the second speakers have equal access to the event, so that the second speaker can independently evaluate it in principle. In 'Differential displays of empathetic understanding of another's experience', on the other hand, the second speaker does not know the first speaker's experience but the second speaker can add a predicate to the first speaker's utterance and show 'vicarious' understanding. The next fragment is the example of this category.

1	Harumi:	*demo:::(.) °onna no hito de irezumi no hito*
		but female LK person CP tattoo LK person
2		*tte::°*
		QT
		"Bu:::t(.) women with tattoos ((on their bodies))…"
3		(1.2)
4→	Seiji:	*mita koto nai*
		saw event not.exist
		"((you)) have never seen"
5	Harumi:	*u:::n.*
		"Right"

(Hayashi, 2003, p37)

In this fragment, a female participant (Harumi) and a male participant (Seiji) were talking about women with tattoos in public bathhouses. Seiji followed the Harumi's utterance by sentence completion in line 4, though the female section of the public bathhouse is inaccessible to men including Seiji.

'Demonstrating shared yet independent knowledge'. This category is

another case in which the second speaker shows congruent understanding by sentence completion. It is used for occasions such as negotiation of a meeting place; the second speaker uses completions in order to demonstrate that information is already shared. The next fragment is the example of this category.

1	Shin:	*asoko o:* (.) *tetete* *to orite* [*itta*]*ra=* there O MIM(steps) QT go.down: if "If((you)) do down ((the stairs)) there,"
		[ ]
2	Kumi	[ ] [*u:n.*] "Uh huh."
3	Shin:	*=SHOOmen NI:,=* front in "in front ((of you))"
4	Kumi:	*=u:n.* "Uh huh."
5	Shin:	*denwa ga- ano mi*[*dori*]*no denwa ga:* [*:*] phone SP uhm green LK phone SP "phones, uhm green phones…"
		[ ] [ ]
6→	Kumi:	[*aru.*] [*a*]*ru aru* exist exist exist "…are there" "…are there, are there."

(Hayashi, 2003, pp. 44-45)

In this fragment, Shin and Kumi were arranging a meeting place on the phone, and they were seeking the place for which both participants were familiar. When Shin described the location of payphones in line 5, Kumi used a sentence completion in order to show that she has already recognised the place of payphones where Shin told to her in line 6.

'Assisted explaining'. 'Assisted explaining' is an interesting and useful concept named by Lerner and Takagi (1999), that by completion, the second speaker adds supplementary information to the first speaker's explanation that helps the explanation usually. From the results of their analysis of English

and Japanese conversations, Lerner and Takagi (1999) showed that this type of collaborative talk occurs in both English and Japanese. According to Hayashi (2003), 'Assisted explaining' in Japanese is sometimes used in the particular local context such as a way of doing 'being a married couple', and the second speaker add the utterance-final elements which have the function to emphasis that it is the second speaker's own assertion. Moreover, 'Assisted explaining' occurs not only in the case that the first speaker and the second speaker have equal access to the matter being explained, but also in the case that the first speaker has less access. The next fragment is the example of such cases.

1	Sanae:	*soo ryoko chan nanka ippai sonna n shite:, = ano::* so Ryoko TL like a.lot such N do:and uhm "Right, Ryoko does that kind of thing a lot,=uhhm"
2		*.hhh (0.3) kama:- kamagasaki no:,* Kamagasaki LK ".hhh (0.3) in Kama:- Kamagasaki"
3	Ryoko:	*u:n.* "Uh huh"
4	Sanae:	*takidashi toka mo*[*:* food.drive etc. also "…a food drive, also,"
		[
5→	Ryoko:	[*u::n.* [*ikkai itta:.* once went "Uh huh. ((I)) went to, once."
		[
6	Sanae:	[*itta n ya tte.* went N CP OT "((she)) went to, ((I)) heard."

(Hayashi, 2003, p. 54)

In this fragment, Sanae talked about Ryoko's past experience of having done some volunteer work for the homeless which Sanae had not actually seen. In line 5, Ryoko added more exact information to Sanae's utterance by a sentence completion.

'Delivering a response in the form of co-participant completion'.

This is another case in which the first speaker has less access to the object or

event which is being talked about, but in this case, the listener is the first speaker. Using sentence completion, the second speaker provides information that the first speaker is recognisably seeking. Sometimes the first speaker who has a question to the second speaker use utterance which inviting completion by the second speaker to get an answer from second speaker. Moreover, when the second speaker finds some misunderstanding in the first speaker's utterance, the second speaker also uses the completion in order to correct it.

'Converting a less preferred action to preferred action'. Finally, 'Converting a less preferred action to preferred action' is when there is an imminent action such as disagreement between two speakers. Completion is used to reduce tension and to avoid conflict between the speakers. Using completion, the second speaker provides the next turn slot in which the first speaker can accept the second speaker's completion, and it works as an opportunity for the collaborative achievement. The Hayashi & Mori's (1998) transcript of 'collaborative talk to negotiate disagreement and to work towards a mutual consensus' which is quoted earlier may be a good example of those cases.

The Categorisation of Collaborative Talks according to Conversational Properties

While Hayashi's (2003) categorisation of collaborative talk is well designed, his categorisation has some assumptions about the functions of collaborative talks without empirical evidence. For example, the category of 'Differential displays of empathetic understanding of another's experience' assumes a function in which the second speaker can give 'empathy' to the first speaker. For the empirical studies of collaborative talk, it seems that the category must be composed of operationally defined criteria about conversational

properties. From the view of social contingencies, it also needs to focus on the consequences and antecedent events of collaborative talks, and how all the members of the conversation respond to it. To assist in this, I will draw out the main features that seem to divide categories of collaborative talk, and see how they might be put into a more systematic form.

Who is the listener? With regard to the consequences of collaborative talk, it seems that the most critical factors are the past and present listeners (Guerin, 2004). In the categories of Hayashi (2003), for 'Differential displays of empathetic understanding of another's experience' and 'Demonstrating shared yet independent knowledge', the second speaker talks to the first speaker, while in 'Assisted explaining', the listener is someone other than the first speaker. In the case of 'Interactive achievement of shared perspective', various situations are possible, the listener may be only the first speaker, the listeners may be others excluding the first speaker, or all of the member of the conversation except the second speaker may be the listeners. Therefore, collaborative talk will vary when the listeners vary.

The degree of sharing of the information. As we have seen in Studies 1 and 2, the degree to which information is shared before a conversation begins is important to the consequences and context of the ongoing talking. Hayashi (2003) introduced a classification developed by Labov and Fanshel (1977) for the access to the information by the first and the second speaker, which indicates how the shared information can be involved for two persons. The main possibilities are:

A-events: Known to A, but not to B.

B-events: Known to B, but not to A.

AB-events: Known to both A and B.

O-events: Known to everyone present.

D-events: Known to be disputable.

(Labov & Fanshel, 1977, p. 100).

When this categorisation is applied to collaborative talk, the listener's access to the information is not adequately covered, however. In some cases, the second speaker has not got the information previously, but only after the first speaker has spoken. This is the case with two of Hayashi's (2003) categories— 'Differential displays of empathetic understanding of another's experience' and 'Demonstrating shared yet independent knowledge'. For both, the second speaker does not have the necessary information before the conversations starts.

With reference to the listener(s), in all case of 'Assisted explaining' and some case of 'Delivering a response in the form of co-participant completion', the listener(s) does not have the information before the conversation. Moreover, in 'Interactive achievement of shared perspective', the first speaker must have the information but it is probable that the rest of the listeners do not.

Disagreement between the second speaker and listener. In some case of 'Interactive achievement of shared perspective', although the first speaker and the second speaker agree with the matter being talked about, it is possible that other listeners do not agree. Hayashi and Mori (1998) showed that the first and second speakers can use collaborative talk in order to establish a shared stance against the third party.

In the case when the second speaker corrects an incorrect understanding of the first speaker, such as in 'Delivering a response in the form of co-participant

completion' and in 'Converting a dispreferred action to preferred action', this shows that there is disagreement between the second speaker and the listener.

Beliefs versus attitudes. In some collaborative talk, the speakers can use them for not only co-construction of the information but also cooperative evaluation of the information. For example, the following two forms are possible as a collaborative talk:

A: The Japanese eat

B: Whales

or

A: The food culture of the Japanese is

B: Disgusting

Usually, the former is called 'belief' and the latter is called 'attitude' and in Hayashi's (2003) categories of 'Interactive achievement of shared perspective' and 'Differential displays of empathetic understanding of another's experience', both beliefs and attitudes can be constructed by collaborative talk.

A new categorisation according to conversational properties. Given these important properties of collaborative talk, new categories can be created according to the following criteria about social/conversational properties:

(1) Who is the listener?

(2) Has the 2nd speaker previously got the information?

(3) Has the listener previously got the information?

(4) Is there disagreement between the 2nd speaker and the listener?

(5) Is it belief or attitude?

This new categorisation is shown in Table 3.1, and it introduces some taxonomic changes to the earlier categorizations outlined above. For example, 'Interactive

achievement of shared perspective' by Hayashi (2003) is divided into five subcategories, whereas 'Differential displays of empathetic understanding of another's experience' and 'Demonstrating shared yet independent knowledge' are regarded as the same category.

Possible addition of functional grammatical units. According to Hayashi (2003), the second speaker in Japanese often adds utterance-final elements which have the function of showing 'agreement' more than showing 'understanding'. It seems that such grammatical units showing 'agreement' can be found in English. For example:

A: The Japanese eat not only whales but

B: Horses, don't they?

The tag question of 'don't they' by the second speaker seems to have the same function as those in Japanese. It may be found in the category of 'Interactive achievement of shared perspective' of English conversations (Stubbe & Holmes, 1995).

Similarly, the prompting by the first speaker in 'Delivering a response in the form of co-participant completion' can be found in English conversations. For example:

A: Perhaps, last year, you went to

B: Hong Kong, yes.

In this case, the second speaker provides information that the first speaker seems to be seeking by the form of sentence completion.

The Present Study

There are many unknowns in collaborative talk, even beyond finding out more about how it functions to develop and maintain social relationships.

Previous study suggests that collaborative talk occurs more frequently between close friends (Cheshire, 2000). In Study 3, therefore, collaborative talk as sentence completions of social knowledge about food in natural conversations was collected in four groups consisting of four to five friends. I first hoped to see how common collaborative talk was among friends talking about a 'social' topic (food). Second, the examples of collaborative talk found were placed into the new category system (Table 3.1) to find out how well they could be fitted, what examples there were that could not be fitted, and to examine this in relation to the food talks from Studies 1 and 2.

Method

Participants

Four Japanese groups were run, consisting of members who were friends. The first and the fourth groups were composed of different members of a balalaika ensemble, the second group was composed of members of a women's amateur soccer team and the husband of one group member, and the third group was composed of members of a science fiction fan club. The number of participants in each group was four except the second group which had five participants.

In the early stage of the study, the recruitment of New Zealander groups was attempted as well as Japanese groups. However, any New Zealander participants could not be found after all. The major focus of the studies was not cross-cultural comparisons, so that only Japanese data were analysed. Moreover, whether the members in a group were close friend or not, was given the highest priority in the recruitment. As a result, gender composition became the secondary matter.

Procedure

For the first and second groups, the participants were simply asked to talk about food for 30 minutes. In order to facilitate the conversations, for the third and fourth groups the topics of conversations were restricted to the following three: (1) food and its relation to health, (2) unusual food, (3) the ordinary foods they like and dislike. The participants of the third and fourth group were asked to talk about each topic for 10 to 15 minutes. All sessions were tape-recorded and later transcribed and translated. In all cases, the original Japanese is given in quotes below alongside the translation. The full transcripts are available from the author.

Analysis

Coding. All sentence completions were marked and it was noted: who was the listener; had the listener speaker previously got the information; had the 2nd speaker previously got the information; was there disagreement between the 2nd speaker and the listener; and whether a belief or attitude added (cf. Table 3.1).

To identify the listener and whether the listener had previously got the information, the preceding and following parts of the conversations were examined. For example, when the sentence completion followed a question by the third person, and it was an answer to the third person, then the third person was identified as the listener who did not previously have the information. For example:

A: Who were the assassinated US presidents?

B: Lincoln, Kennedy, McKinley, and

C: Garfield

In this case, the sentence completion by B and C is an answer to the question by A, so that A is identified as the listener who had not known who were assassinated. On the other hand, if there was the affirmation or negation by the first speaker of the sentence completion followed the sentence completion, the first speaker was identified as the listener who had already had the information.

For instance:

A: When I went to Japan, I saw people eating not only whales but

B: Horse meat

A: That's right

In this case, A is identified as the listener (for the completion) because of the affirmation "That's right".

Whether the second speaker had previously known the information was mainly inferred by the context of the conversation which indicated the private experience of 1st speaker, the shared experience of 1st and 2nd speaker, or the individual view by the 1st speaker. When the sentence completion followed a question by a third person, it was inferred that the second speaker had already known the information.

Results

Table 3.2 shows the number of the sentence completions, the number of the sentence completion sequences, and those numbers per minute. The number of sentence completions means that when more than one sentence completion of the same kind appeared in the short sequence of the conversation, it counted as one appearance. In each group, at least eight sequences of sentence completion appeared. As to the numbers per minute, not only on the number of sentence completion basis, but also on the number of the sequences basis, all group

generated sentence completions more frequently than the 0.20 per minute of Ono and Yoshida (1996) and 0.18 per minutes of Hayashi and Mori (1998). The sentence completions in all sequences were collaborations of belief, except one case in which the sentence completion was neither belief nor attitude. For this reason, the belief/attitude dimension was removed from analysis.

Table 3.3 shows the number of sentence completion sequences according the four remaining properties after belief/attitude was removed. In 11 cases, the third person was identified as the listener, and the first speaker was identified as the listener in 20 cases, however the listener could not be identified in the remaining 10 cases. Table 3.4 shows the number of the sequences of sentence completion according to the contexts employed to identify both the listener and whether the listener had previously got the information. 'Collaborative refutation to the third person' was the case that when there was the disagreement between the third person and the first and second speaker, two speakers refuted the third person using sentence completion. This will be outlined more fully below.

Table 3.5 shows the number of the sequences of sentence completion according to the contexts employed to identify whether the second speaker had previously got the information or not. In all cases, whether the second speaker had previously got the information was identified.

Let us now turn to examine the details of each type of sentence completion.

Sentence Completions When the Third Person is the Listener

The cases that the third person had not known the information, but the second speaker had. In this type of sentence completion, for six of the total of eight cases, sentence completions by the speakers appeared following a third

person's question. The following extract by the third group is a typical example of such cases.

Extract 21. (Group 3)

	244	Si:	*iya dakara konaida kaettara are mo atta yo kasupikai yooguruto* "Well, so when I went (my parents') home the other day there was Caspian Sea yoghurt"
	245	Ya:	(laughter) "(laughter)"
	246	Ko:	*e? nani? kasupikai yooguruto tte* "Eh, what is Caspian Sea yoghurt?"
	247	Si:	*e nannka* "Eh, something"
→	248	Sa:	*hayari* "a fashion"
	249:	Si:	*monosugoi hayateeru* "(It's) in great fashion"
	250	Ko:	*eiyou shokuhin de?* "Nutritious food?"
	251	Ya:	*yooguruto wa* {*yooguruto nanya kedo* "It's just {yoghurt, but"
→	252	Sa:	{*karada ni ii* {"good for the health"
→	253	Si:	*nanka* "somehow"
	254	Ko:	*tadano yooguruto nano?* "Is it just an ordinary yoghurt?"
	255	Si:	*iya dakara kasupikai yooguruto mukouno monosugoi choojumura kara tottekita kin de sono kin ga zuutto mawari mawatte ironna toko de* "Well, it is Caspian Sea yoghurt. The bacterium is taken from an awfully long-living village and the bacterium goes around to many places"
	256	Ko:	*chooju to kin ga kankei aru?* "Is there a relation between the long life and the bacterium?"
	257	Si:	*datte yooguruto tte choojushoku ja nai* "'Cause, yoghurt is a long-living food, isn't it?"

In this case, only participant Ko did not know what Caspian Sea yoghurt is, so he asked a question in line 246. Then participant Si started to answer in line 247 but

it was completed by participant Sa in line 248. Then participant Ko asked again in line 250 and participant Ya started to answer in line 251. This time, both participants Sa and Si followed and completed participant Ya's utterance.

The topic of next two extracts by the first group is also about Caspian Sea yoghurt. In this situation, only participant Ta does not know how to make Caspian Sea yoghurt, and she is asking the way to make it.

Extract 3. (Group 1)

	142	Ta:	*dou yatte tsukuru no? kin to nani?* "How do you make it? Bacterium and what?"
	143	Si:	*gyuunyuu dake* "Only milk"
→	144	To:	*gyuunyuu de tashite iku no* "(it) adds with milk"
	145	Ta:	*de dorotto suru no?* "Then does it become pulpy?"
	146	To:	*dorotto shite kuru nda oitoku to* "(It) becomes pulpy, if (it) is left"
→	147	Hi:	*yamaimo no you ni ne* "like a yam"
→	148	Si:	*juu jikan gurai oku to ne* "if (it) places for about 10 hours"
→	149	Hi:	*dorotto* "pulpy"

Extract 4. (Group 1)

	162	Ta:	*iremono wa kireina iremono ga iino?* "The container must be clean mustn't it?"
	163	Hi:	*ano ne gyuunyuu pakku no ue o ne* "The upper part of a milk pack"
	164	Si:	*gyuunyuu pakku* "Milk pack"
	165	Hi:	*gyuunyuu sukoshi* "Milk, a little"
→	166	Si:	*nonde nonde tsukatte ne* "drink it, drink it. Use it"
→	167	Hi:	*anou kotchi ni utsusu no ne aku desho sokoni kochira gawa no nokotta kasupi kai yooguruto o sore to tasu wake sou suruto ippai ni naru desho soshite futa*

			shimete hoon suru dake suru dake sorede ano ue ni ano napukin toka ne chotto oite "pour it hear. Then it has the room. So add the Caspian Sea yoghurt there. Then it becomes full. Put them lid on and keep it warm. Then on top of it, put a napkin and so on"
	168	Si:	*futa akete ne tisshu peepaa tusshu peepaa ni wagomu de futa o shite* "Take the lid off, tissue paper, put a rubber band around tissue paper"
→	169	Hi:	*ju jikan kara juuni jikan* "and from 10 to 12 hours"
	170	Si:	*sou sou sou* "Yeah, yeah, yeah"
	171	Hi:	*chotto kono* "just"
→	172	Si:	*oitoku no* "leave it"
	173	Hi:	*jouon dakara manatsu no toki wa are dattan dakedo* "Because it was normal temperature, in midsummer it was that"
	174	Ta:	*zembu nakunatchattara mata dou suru no?* "What do (you) do when all is finished?"
	175	Hi:	*dakara sukoshi nokoshi toku no* "So (you) set aside a little"
	176	To:	*nokoshi toku no* "Set aside"
	177	Hi:	*kasupi kai yooguruto o chotto hora zembu tabe naide chotto dakara tsugi kara tsugi kara kou tashite ke ba* "If (you) don't eat the Caspian Sea yoghurt up, and set aside a little, and add it one after another, then"
→	178	To:	*fuete kuru no* "(it) increase"
	179	Hi:	*youki ni ireru hitsuyou wa nai shi* "There's no need to put it in a container"

In these cases, sentence completions occurred very frequently. They appeared in line 144 and line 147 to 149 in extract 3, and in line 166, 167, 169, 172, and 178 in extract 4. In all cases, it seems that the second speaker just supplemented the first speaker's utterance rather than emphasising her independent contribution to the explanation.

In the examples mentioned above, only the third person who asked a

question had not got the information. In the next example, on the other hand, only the first and second speaker had had the information. In this case, participant Go was the husband of participant Te, and when participant Te was talking about the farm of the house next door, participant Ya asked her a question in line 90.

Extract 10. (Group 2)

	90	Ya:	*de nande jitakuyou ni tsukutte iru no?* “But why? Is (he) making them for his own family?”
	91	Te:	*uun* “No”
	92	Ya:	*shoubai?* “Is it business?”
	93	Te:	*shukka suru no shoubai nano dakedo ne mou ne kugatsu kara* “(He) consigns them. It's business. But from September”
→	94:	Go:	*juugatsu no muika daka nanka ni {shukka shita no ga saigo de* “on October 6th, {the last consignment was"
	95:	Te:	{*sou ne mou shukka shite sorega saigo de ato wa ne shinai n datte* {“Well, (he) consigned. After that (he) says (he) won't do it”
	96	A:	*hee* “Indeed!”

When participant Te answered the question by participant Ya in line 93, participant Go corrected her answer to the more exact version.

The next extract is the example of sentence completion when there was not the question by the third person.

Extract 25. (Group 3)

	673	Si:	*are wa ne chigau yo oishiku natta no yo gemmai wa* “That is. No, unpolished rice has become tasty”
	674	Ko:	*iya chigau chigau mukashi ne chuugakusei no koro ni oya ga yappari ne sono shizenshoku ni koronde desu ne uchi wa kyou kara gemmai desu tte itte mou saisho mou naichatte sa nani kore nande konna mon kwana akan tte de isshukan gurai kuttara narete sa umai na* “No, it's not that. Years ago, when I was in junior high-school, (my) parents were also absorbed in natural food and (they) said we were to have unpolished rice from that day, and in the beginning (I) cried saying what it was and why (I) had to eat it, but when (I) ate it for a week (I) got used to it and thought it tasty”
	675	Ya:	*aa* “Yeah”
	676	Si:	*uso* “It's a lie”
	677	Ko:	*honto honto* “It's true, true”
	678	Si:	*nattou mo issukan tabetara nareru?* “As to natto, will (you) get used to it in a week?”
	679	Ko:	*sonouchi oya ga akite desu ne mata hakumai ni modori mashita keredo* “In the meanwhile, (my) parents got tired of it, and (we) came back to white rice”
	680	Ya:	*ikinari gemmai ni suru sezu ni chotto zutsu mazete ikun ya* “(You) shouldn't change to unpolished rice suddenly but (you) should mix it little by little”
	681	Ko:	*sou sou hontou wa ne* “Yeah, yeah. Normally”
	682	Si:	*e kyokutan nano koko no oya* “Well, his parents go to extremes”
	683	Sa:	(laugh) “(laugh)”
	684	Ya:	(laugh) “(laugh)”
	685	Si:	*ikeba nandemo* “When we go to (their house), whatever it is”
→	686	Ko:	*oishii daro oishii daro tte itte kuwaseru wake desu yo arya henna kuimono ya nai* “(they) make us eat while saying ‘It's tasty, isn’t it? it's tasty, isn’t it?’. It isn't strange food
	687	(Pause 5 sec.) “(Pause 5 sec.)”	

In this case, participant Ko was talking about his parents, and he completed the utterance by participant Si in line 686 who was his wife.

Collaborative refutation to the third person. The following three extracts are cases when there was the disagreement between the third person and the first and second speaker.

In the first extract, participant Te (the third person), believed that spinach is not good for the health because of the lye. The participant Ka and A started to counterargument using sentence completion in line 318 and 319.

Extract 12. (Group 2)

	311	Te:	*hourensou ammari suki ja nainda yo watashi* "I don't like spinach very much"
	312	Ka:	*ee?* "Ah"
	313	A:	*nande?* "Why?"
	314	Te:	*nanka nantonaku* "I don't know why, but"
	315	A:	*naniga naniga tte aku?* "What? What? The lye?"
	316	Ka:	*aku?* "The lye?"
	317	Te:	*un aku aku ga sa karada ni warui youna kiga shite* "Yeah, the lye. I feel that the lye isn't good for the health"
	318	Ka:	*ee? hourensou wa* "What? the spinach"
→	319	A:	*karada ni iinja nai datte popai ga taberu gurai dakara* "is good for your health, isn't it? 'Cause even Pop-eye eats it"
	320	Te:	*aku wa yoku nai wa yo sou sou sou hourensou waa ga ii hito iru kedo ne nanka ne ano shuusan to iu no shuusan de sho are nannka shuusan ja nai no sorega chotoo kou* "The lye isn't good. There are some people like the spinach. But the oxalic acid, it's oxalic acid, isn't it? The oxalic acid, somehow it"

In the next extract, participant Ho and participant I talked about the Kusaya of flying fish being tasty. Kusaya is the fish dried after soaking in special salt water, preserved for years, and it is special product of Izu Islands. Participant Ho stressed that Kusaya of flying fish is tasty in line 777 and participant I agreed with him in line 778. Against them, participant Ke and O presented another 'fact' by the sentence completion that Kusaya is evil smelling.

Extract 40 (Group 4)

	777	Ho:	*tobiuo no kusaya tee oishii yo shiromi zakana de* "The Kusaya (fish dried after soaking in special salt water, preserved for years), of a flying fish is tasty. It's white fleshed fish"
	778	I:	*a oishii kamo sirenai* "Ah, it may be tasty"
	779	Ke:	*demo ano fustuu nioi de* "But generally, with the smell"
→	780	O:	*nioi de maitchau* "with the smell we are stumped"
	781	Ho:	*futsuu muro aji de sho muro aji desu ga ne ano tobiuo no kusaya tte iu no ore ooshima de katte kaetta mukashi ano sore shiromi no kusaya* "Generally it's blue mackerel, isn't it. It's blue mackerel. Years ago I bought the Kusaya of flying fish at Oshima and took it back. That was a white-fleshed Kusaya"
	782	Ke:	*aa* "Ah, yes"
	783	Ho:	*nioi wa onaji desu yo* "The smell is the same"
	784	I:	*oishisou* "It sounds tasty"
	785	Ke:	*iya da* "I don't like it"
	786	O:	*ichinichi juu niotte iru de shou* "Because it smells all the day"
	787	I:	*dakara oishii no wo tabeta kotoga nai koto ga* "Therefore, that you have not eaten a tasty thing"
	788	O:	*aa souka* "Ah, yes"
	789	Ke:	*dakedo demo gyaku ni ieba ano nioi dake de mou tabetaku nai tte I san no nattou sou sou ano nioi dake de atama itaku naru*

“But conversely, I don't want to eat with only that smell like Ms. I's natto. Yes, yes with only that smell I'll have a headache”

In these two extracts, each the listener had got the information which the first and second speaker presented, participant Te in Extract 12 had known “Spinach is good for health”, and participant Ho in Extract 40 had known “Kusaya is evil smelling”. On the other hand, in the next extract, participant Ke, who was the listener of the sentence completion, had not got the information “Japanese had eaten rabbits in former days” before the conversation started, and she was still doubtful about it when the talks were progressed. In line 520 and 521, participants I and O persuaded her by the sentence completion.

Extract 34. (Group 4)

511	I:	*usagi wa taberu tame ni katte katte masu yo ne* “(They) raise rabbits to eat, don’t they?”
512	Ho:	*usagi wa ore wa katte iru hito ga soba ni ita* “As to rabbits, a person who raised them was near me”
513	Ke:	*shokuyou no?* “For food?”
514	I:	*shokuyou no usagi wo* “Rabbits for food”
515	O:	*mukashi wa sou desu yo mukashi wa usagi wo shokuyou ni* “It was so in former days. In former days rabbits were for food”
516	Ho:	*nousagi wa kutte ta* “(We) used to eat hare”
517	Ke:	*nihonjin wa usagi wa tabenai to omotte ta* “I've thought that the Japanese don't eat rabbits”
518	Ho:	{*nousagi kutte ta ore yama itta toki ano gakusei bakkari de* {“(We) used to eat hare. When I went to the mountains there were only students”
519	O:	{*iya tabete ta* {“Yes, (they) ate (them)”
520	I	*sanjuunen gurai mae made* “Till about 30 years ago”

→	521	O:	*tabete ta* “(they) ate (them)”
	522	Ke:	*demo kitsune wa tabenai de sho demo* “But (we) don't eat foxes, do we?”
	523	Ho:	*tabenai* “(We) don't eat”

Sentence Completions When the First Speaker is the Listener

The cases that the second speaker had not got the information, but the first speaker had. In this case, the most typical example is the case when the first speaker talked his/her private experience, and the second speaker completes the utterance of the first speaker.

Extract 7. (Group 1)

	442	Hi:	*sou yo ne sou sorede shampuu toka mo ne sakki itta osu ne osu de ne ano rinsu mo mou sugoi tettei shiteru demo watashi nannka sore yattara ne kodomoga nanishiro chitchai toki nano yo yousuruni hora ne chiisai ko tte iunowa souiu tenkabutsu toka monosugoi eikyou ga aru kara okaasan gata ni koe o kakeru no tte hora souiu ne ano ne kosodate shiteiru okaasan ga sugoku shinkeishitsu ni natte hairiyasui ja nai uchi no ane nanka mo kosodate shinagara souyatte seikatsu seikyou kurabu ni haitte kou isshoukemmei undou ja nai kedo shite korega ii wayo tte iu no o susumerareru mama ni katte sou suruto ane no tokoro e ikuto tettei shiteru kara nankane kou nankane sou sou ano sentakumono ga ne* “That's right. And as to shampoo (she) rinses with vinegar as I told you before. It's exhaustive . I thought that if I did it for it was when my child was small, and small children were affected greatly by those additives, it would be easy to talk to the mothers who are bringing up small children are very nervous. My elder sister was in Seikatsu-Club coop while bringing up small children. (She) worked hard there and bought what was recommended. But when I went to my sister's house I noticed something. Yes, something. The washing”
→	443	Si:	*kibande kuru no* “had yellowed”
	444	Hi:	*sou usuyogorete iru no nanka ne masshiro ja nai no* “Yes. Had become somewhat dirty. It wasn't white”

	445	To:	*guree ni natte kuru ja nai shitagi toka ne* “It becomes grey, doesn’t it? Such as underwear”
	446	Hi:	*so so so so so* “Yeah, yeah, yeah”

In this extract, participant Hi talked about her elder sister, so that other participants cannot access the source of her utterance. Therefore, participant Si anticipated the probable next utterance by participant Hi, and uttered as a sentence completion in line 443. Then her anticipation was affirmed by participant Hi in the next turn.

Because the second speaker had not got the information about what the first speaker said, and he/she only estimate possible saying of the first speaker, sometimes the anticipation resulted in failure. The next extract is the example of such a case:

Extract 31. (Group 4)

	308	Ho:	*ano ne yasai wa yappari ne ano ne hi o tooshite onyasai ni shite kuwanai to ryou tore masen yo* “Well, vegetables must also be cooked and eaten hot. If not (you) can't eat a lot”
	309	O:	*aa onyasai ni shite* “Ah, yes. Cooked vegetables”
	310	Ke:	*sorekoso Ho san no toko to chigau no yo uchi wa ne asa kara kyabetsu no* {*yudeta no* “It's different from Mr. Ho's house. At our house, from the morning cabbage that is {boiled”
→	311	Ho:	{*nama? aa* {“fresh? Ah”
	312	I:	*haa kyabetsu desu ka* “Eh? Cabbage?”
	313	Ke:	*ne kyabetsu karuku yudeta no sorega mou dosatto dete kuru no* “Well, cabbage, just a little boiled. It is served in quantity”
	314	O:	{*oishii desu yo ne* {“(It) is tasty, isn't it?”
	315	I:	{*oishii desu ne* {“(It) is tasty”

	316	Ho:	*aa demo sou wa kuenai yo* “Ah, yeah, but (we) can't eat so much”
	317	Ke:	*de sorega ne asa kara konna ni dete kurun desu* “And that is served in such a quantity from the morning”

In this extract, participant Ke was the daughter of participant O and they were living together, and participant Ke was saying that participant O was making cabbage dish at breakfast. Participant Ho anticipated that it was fresh cabbage, so he tried to complete participant Ke’s saying before she finished speaking in line 311, though it was boiled cabbage in fact.

It seems that sentence completion is used for just a plain question to the first speaker in some cases.

Extract 22. (Group 3)

	426	Si:	*hokani mushi tabeta koto nai kedo aa inago mo onaji youna kanji shita kedo* “I've never eaten other insects. Well, locusts give me the same feeling”
	427	Ya:	*aa kutte miru ki ga nai* “Yeah, I don't feel like wanting to eat them”
	428	Si:	*toriaezu tabete mite inago ichido tabereba zettai* “First of all, eat them, the locusts. If you once eat them, absolutely”
	429	Sa:	*iya suupaa de inago no pakku utteta toki nimo* “No, when they were selling packs of locusts at a supermarket”
→	430	Si:	*chikazuka nakatta?* “(you) didn't approach?”
	431	Sa:	*chikazuka nakatta* “(I) didn't approach”

In this case, participant Si asked a question using the form of sentence completion with rising intonation, and participant Sa answered to her in the next turn.

This type of sentence completion also occurs when there is some

disagreement between the first and the second speakers.

Extract 15. (Group 2)

	464	Te:	*jaa sa yatsugashira tte suki?* “Then, do you like yatsugasira taros?”
	465	Ya:	*aa* “Yeah”
	466	Ka:	*aa yatsugashira mo nettori shite oishii no yo ne* “Yeah, yatsugashira is viscous and tasty”
	467	Te:	*oishii sou watashi are amari tabeta koto nai no ne uchi no inaka no hou dewa yatsugashira tte nai no satoimo shika de kotchi de saa dakara ammari suki ja nai no tabeta koto mo nai shi soreni satoimo wa torotoro tto shiteiru kedo nanka bokoboko shiteiru de sho* “Tasty? Is that so? I haven't eaten it much. In my birthplace there wasn't any yatsugashira, only Japanese taros. So I don't like it much here. I haven't eaten it. Besides Japanese taros are creamy but the other a little hard, don't you think?”
	468	A:	*un un* “Yeah, yeah”
	469	Te:	*are sore de iya nano* “That. That's why I don't like”
	470	Ka:	*jikan kakete yareba satoimo mitai ni* “If (you) take your time, like Japanese taros”
→	471	Te:	*naru kana?* “(they) may become? ”
	472	Ka:	*omizu ippai* “With a lot of water”
	473	A:	*sou nanda* “I see”

Participant Te thought that yatsugashira taros are less tasty than Japanese taros, so participant Ke refuted this in line 470, and then participant Te used sentence completion as the question to participant Ke.

The cases that both the first and the second speaker had known the information. Even in the cases that the second speaker already had had the information about what the first speaker said, the similar pattern to the cases when the second speaker had not known were appeared. It consists of (1) the first

speaker’s utterance; (2) the second speaker’s completion; and (3) the affirmation or negation by the first speaker.

Extract 19. (Group 3)

	143	Ya:	*nanka idenshi kumikae to ano are kakeawasete sa atarashii hinshu tsukutte iru yan* “They're making a new kind by genetically modification and by interbreeding”
	144	Si:	*idenshi kumikae daizu wa tsukatte masen toufu toka de sho* “It's the tofu which doesn't use genetically modified soybeans isn't it?”
	145	Ya:	*un ja nakute kome tsukuru no ni sa kakeawasete douno kouno tte* “Well, that's not it. In making rice they do various things after interbreeding”
	146	Si:	*a hai hai haenuki toka domannaka toka iu* “Ah, yes, yes. Such things named 'Haenuki' and 'Domannaka'”
	147	Ya:	*are datte kekkyoku* “Those are, after all”
→	148	Si:	*de idenshi kouhai yade* “hybridisations of genes”
	149	Ya:	*sou yaro are idenshi ijitte naika reberu de* “That's it. That is manipulating the gene, isn’t that? On the level”
	150	Si:	*idenshi reberu yaro* “On the level of the gene, isn’t it?”
	151	Ya:	*chokusetsu ijitterun ja nakute kekkyoku kakeawasete kakeawasete yaro* “(They) are not manipulating it directly. But after all (they) are interbreeding, interbreeding aren't they?”
	152	Si:	*kedo nihonjin to amerikajin ga kekkon shite kodomo kamae tara karada ni warui tte koto nai yaro* (laugh) “But if a Japanese marries an American and has a child, it isn't bad for the health, is it? (laugh)”
	153	Sa:	(laugh) “(laugh)”
	154	Ya:	*yousuruni sore o ziniteki ni suruka kouhai de suruka tte iu hanashi chau noka* “In short, it means that it's done artificially or by interbreeding, isn’t it? That is”

In line 148, participant Si anticipated what participant Ya said next, and

completed participant Ya's saying. Then her statement was confirmed by participant Ya in line 149. The next extract is the example of the variant as a question to the first speaker.

Extract 18. (Group 3)

	81	Ko:	*demo yuugai ka douka tte iu nowa nanka souiu* "But whether it's bad or not depends somehow on"
	82	Si:	*e? nani? datte uchi kenkou shokuhin tanonderu jan* "Eh? What? 'cause we order healthy food"
	83	Ko:	*aa souka souiu no wa yappari ishikiteki nande sho?* "Oh, I see. You are conscious in doing aren't you?"
	84	Si:	*munouyaku* "Non agricultural chemical"
→	85:	Ko:	*ja naito dame de sho?* "it must be, mustn't it?"
	86:	Si:	*un* "Yeah"

In line 85, participant Ko used sentence completion as a question to participant Si in order to verify his idea.

Extracts 19 and Extract 18 are examples which are similar to the cases in which the second speaker had not got the information. On the other hand, in other cases that the second speaker already had got the information, they have distinctive features which do not appeared in the former cases.

Extract 16. (Group 2)

495	Te:	*demo sa gohan toka sa otaku tachi wa are ano o hitori zutsu kouiu fuu ni moritsukeru?* "But as to meals do you serve each separately like this?"
496	Ya:	*e nani okazu?* "What? Do you mean side dish?"
497	Te:	*okazu* "Side dish"

	498	Ka:	*hitori zutsu kana* “Each separately, probably”
	499	Te:	*hitori zutsu kouiu fuu ni moritsukeru sou suruto iinda yo ne uchi nanka sa tsui mendoukusai kara tsukeru no wa hitori zutsu tsukenai to sa* “Do you serve each separately like this? It's nice to have it that way. It's troublesome eat my house, but each must be served separately, otherwise”
→	500	A:	{*tabenainda yo ne* {“they won't eat, will they?”
→	501	Ka:	{*tabenai* {“they won't eat”
	502:	Te:	*un yada kara maa dondon dasu janai suruto ne kotchi yatte mazu chotto jaa matte iru hito ga iru kara to omotte otsumami toka dasu to sa mou otoosan hitori de paku paku paku tte* “No, I serve one after another because I don't like it. I do one thing and then, thinking that many are waiting, I serve the relish. I find dad eating alone with a good appetite”
	503	Ya:	(laugh) “(laugh)”

In this extract, both participants A and Ka completed participant Te’s saying at the same time, and the remarkable point is that the second speaker added the utterance-final elements ‘*yo ne*’. According to Hayashi (2003), this type of utterance-final elements have the function of achieving ‘stance/perspective sharing’. However, this ‘*yo ne*’ appeared in only one case within total eight cases that both the first and the second speaker had got the information without disagreement.

Another feature of the cases that both the first and the second speaker had got the information is that the first speaker’s saying as the form of “If X”, is followed by the second speaker’s utterance as the form of “Then Y” in some cases. The next extract is an example of such cases.

Extract 39. (Group 4)

	768	Ho:	*are omoshiroi desu ne kansai no hito tte nattou kirai de sho* "It's interesting that the people of Kansai don't like natto (fermented-soybeans), do they?"
	769	Ke:	*un sou nano* "No, that's right"
	770	O:	*atchi wa ammari* "They don't much"
	771	Ho:	*de touhoku no hito wa kiraina hito ammari inai de sho touhoku kansai no otoko ga touhoku no josei to kekkon shitara sa nattou ku youni natta yo* "And among the people of the Tohoku region those who dislike are few, aren't they? The Tohoku region. Men of the Kansai region become to eat natto when he married a woman from the Tohoku region"
	772	Ke:	*sou nano are shuukan desu yo* "That's right. That is a habit"
	773	O:	*shuukan dato omou* "I think it's a habit"
	774	Ke:	*dakara kusaya kirai demo ooshima ikeba kekkon sureba* "Therefore though (a man) dislikes kusaya (fish dried after soaking in special salt water, preserved for years), if (he) go to Oshima and marry"
→	775	Ho:	*aa soryaa suki ni naru to omou yo ore* "ah, then, (he) will come to like it. I think"
	776	Ke:	*suki ni tabe zaru wo ebaku natte kuru dandan fuudo ni najimu* "(He) will like it. There is nothing but to eat it. (He) will get acclimated"
	777	Ho:	*tobiuo no kusaya tee oishii yo shiromi zakana de* "The kusaya of a flying fish is tasty. It's white fleshed fish"
	778	I:	*a oishii kamo sirenai* "Ah, it may be tasty"

The saying of "If X" by participant Ke in line 774 was followed by participant Ho's utterance of "Then Y" in line 775. This type of combination was appeared when there was disagreement between the first and the second speaker.

Extract 23. (Group 3)

	432	Si:	*chigau chigau kawahen kedo*

			“Well, well. (I) didn't buy them, but”
	433	Ya:	*attara* “If there were”
	434	Si:	*attara chotto tebete miru* “If there were, (I) would like to eat a little”
	435	Sa:	(laugh) “(laugh)”
	436	Si:	*uso nande minna boukenshin no nai* “Really? Why don't you all have a love of adventure?”
	437	Ya:	*muzukashii tokoro ya nen* “(It) is a delicate matter”
	438	Si:	*katte made wa tabetaku nain dayo ne* “(I) don't want to eat it even by buying it”
	439	Ko:	(laugh) “(laugh)”
	440	Ya:	*demo dareka ga* “But someone”
	441	Sa:	*aru tte koto wa moraimono?* “That you have them means (they) were given you?”
	442	Si:	*sou sou darekaga omoshirogatte motte kuru yan sorewa ano konaida itteta ano midoriiro no kechappu to issho ya to* “Yes, yes. Someone brings them amusingly. It's the same as the green ketchup I told you about the other day”
	443	Ya:	(laugh) “(laugh)”
	444	Si:	*murasakiiro no kechappu midoriiro no kechappu to dakara darekaga motte kitara* “Purple ketchup and green ketchup. So if someone bring them”
→	445	Sa:	*sono ziten de kotowaru* “at that point I will reject”
	446	Si:	*de zazamushi mo jibun no ie ni motte kaerou towa omowanai kedo dareka no tokoro ni motte ikun dattara ookee kamo ne tashikani* “And I don't want to take the zazamushi (caddis fly larvae) home, but it may be okay if I am to take them to somebody's house certainly”

In this extract, the participants were talking about strange foods, and in line 432 and 434, participants Si said that she would eat strange food a little if available, even though she did not buy it for herself. Participant Sa, who disagreed with participant Si, completed the utterance in line 444. As a result of this completion,

participant Sa succeeded in creating a statement which participant Si did not intend.

Sentence Completions in the Cases that the Listener was Unidentified

The cases that the second speaker had got the information. In nine cases within ten cases that the listener could not be identified, the second speaker was identified that he or she had got the information. In the following four cases in these nine cases, the utterance-final elements '*yo ne*' appeared in the second speaker's completion.

Extract 9. (Group 1)

	504	Ta:	*arerugii tte kawaisou da na* "I feel that allergy is miserable"
	505	Si:	*dakara yappari nakanaka hito ni yorunda yo ne* "But I think it depends on people"
	506	Hi:	*sou ne* "Yes, it does"
	507	To:	*sore tte genin ga sa* "And as to its cause"
→	508	Ta:	*tabemono to wakatte ireba sore o fusegeba yoin da yo ne* "if you know that it's food you can prevent it"
	509	Si:	*sou sou sou sou ja nai mitai nano sonna kantanna mon ja nai mitai* "Yeah, yeah, yeah. But it seems that it's not so simple"

Extract 14. (Group 2)

	353	Te:	*oishikatta sore tashikani ee to omotta watashi komatsuna no hou ga suki* "It was tasty, really. I thought it like that. I like komatsuna (Japanese mustard Spinach) more"
	354	Ka:	*aa* "Ah"
	355	Ya:	*demo komatsuna no hou ga eiyou* "But in komatsuna, more nutrition"
→	356	A:	*arunda yo ne tetsubun ga ne* "is, as to iron"

	357	Ka:	*karushiumu ga takainda yo ne* “High in calcium, isn’t it?”
	258	A:	*demo komatsuna no hou ga dotchikatte iu to are dayo ne kuse ga aru aji da yo ne* “But the taste of komatsuna is rather that, peculiar, isn't it?”
	359	Te:	*kuse aru?* “Peculiar?”
	360	A:	*un dotchikatte iu to nanka kuse aru to omou* “Yeah, I think it is rather peculiar”

Extract 37. (Group 4)

	628	Ke:	*shiranai de taberu to donna aji?* “How does it taste if (you) eat without knowing”
	629	Ho:	*iya mou goku futsuuno kou tampakushitsu sakana mitai na* “Well, it's just ordinary protein, like a fish”
	630	Ke:	*aa siromi no sakana* “Yeah, white fleshed fish”
	631	Ho:	*sou siromi no sakana* “Yes, white fleshed fish”
	632	I:	*a hora kae kaeru no shokuyou gaeru tte* “Ah, listen! frogs, edible frogs”
→	633	Ke:	*ga souda tte ii masu yo ne* “are like that, It's said that, isn’t it?”
	634	Ho:	*aa ne sou ne* “Ah, yes”
	635	O:	*are wa tori ni* “Chicken, They”
→	636	Ke:	*nite iru* “are like”
	637	I:	*tori no sasami mitai na kanji de* “(They) are like the light meat of a chicken”
	638	Ke:	*datte esukarugo datte sou ja nai ano katatsumuri dato omou to* “Well, the escargot is the same, isn't it? When we think that it's a snail”
	639	O:	*a esukarugo mo sou ne* “Ah yes, the escargot is the same”

Extract 38. (Group 4)

	733	Ke:	*demo sakki yotsuashi wa yotsuashi wa getemono towa iwanai tte Ho san ii mashita yo ne* “But a little while ago, Mr. Ho said that four-legged

			animals aren't called 'getemono', didn't you?”
	734	Ho:	*yotsuashi demo getemono wa arun ja nai desu ka yotsuashi no naka tatoeba hora nanka sono bubun de* “There are 'getemono' in the four-legged animals. Among the four-legged , there are, for example, some whose one part”
	735	Ke:	*bubun* “One part”
	736	Ho:	*sonna mono wa kuwanee darou tte no ga* “Which cannot be eaten (by people)”
	737	O:	*sou desu ne sou sou* “That's right. Yes, yes”
	738	Ho:	*konchuu toka* “Such as insects”
	739	Ke:	*koumori toka* “Such as bats”
	740	Ho:	*koumori* “Bats”
	741	I:	*koumori wa datte* “But bats”
→	742	Ke:	*taberu tte ii masu yo ne* “are eaten, it's said, isn’t it?”
	743	Ho:	*datte sore wa chanto shita menyuu de dasu yo* “‘Cause they are on a proper menu”
	744	Ke:	*aru mono ne* “They are”

Collaborative talk when a new knowledge is being constructed. The remaining, one case in which the listener could not be identified, has an interesting feature. In this case, participants were discussing about “Eating natto (fermented-soybeans) at dinnertime is better than at breakfast”.

Extract 5. (Group 1)

306	Si:	*sorewa ne tameshite gatten demo yatte ta yoru no hou ga nattou taberu naraba* “It was also said in "Tameshite Gatten (TV programme)", it is better to eat natto in the evening”
307	Hi:	*nande darou* “I wonder why”
308	Si:	*tabenai yori wa mochiron ii no yo* “Of course, it is good rather than not to eat”
309	Hi:	*yoru no hou ga ii no ne*

			“In the evening is better. Isn't it?”
	310	Ta:	*neteru toki ni are kana* “While we sleep, maybe that”
→	311	Si:	*nattoukin ka nanka de ne neteru to* “natto bacillus or something, while sleeping it”
→	312	Hi:	{*sore ga kappatsuka sarete* {“become active and”
→	313	Ta:	{*ketsueki ga kirei ni natchau no kana doumyakukouka ka nanka yobou de sho* {“blood becomes clean. Prevention of arteriosclerosis or something. Isn't it?”
	314	Hi:	*aa* “Well”
	315	Si:	*demo tabenai yori tabeta hou ga ii* “But it's better to eat than not to eat”
	316	To:	*yousuruni ii tabemono nano ne* “In short, it's good food isn't it?”
	317	Si:	*asa demo ii kedo tabenai yori wa tabeta hou ga ii kedo* “It's all right in the morning, but it's better to eat than not to eat”
	318	Hi:	*demo yoru no hou ga ii* “But it's better in the evening”
	319	To:	*yoru ga ii* “It’s good in the evening”

In this case, not only the second speaker but also the first speaker had not known the information about the matter on which they were speaking. This means that they were constructing a new knowledge, through sentence completions.

Discussion

The first point to note is that all sentence completions in the results of the present study except one case were for co-constructions of beliefs rather than attitudes. This means that sentence completions in the results are collaborative constructions of factual statements by two speakers. Therefore, when examining the functions of these activities from the view of social contingencies, it is necessary to pay attention to the contingencies of establishing ‘facts’, as well as the contingencies of enhancing or maintaining social relationships.

The second point to note as that there was a lot of diversity in the

functions and strategies of collaborative talk. While the examples could be broadly placed into Table 3.1, there were many subtleties when a closer analysis of individual conversations was made.

The social contingencies of 'assisted explaining'. When the first and the second speaker knew about a matter, and the listener was the third person who had not known it, the second speaker added some information to the first speaker's utterance by sentence completion. These cases seem to be equal to the concept of 'Assisted explaining' by Lerner and Takagi (1999), but the new feature shown in the results of the present study was that such sentence completions often appeared after a third person's question. This suggested another possible function of this type of sentence completion that has not been raised before, as follows.

When considering the function of answering a question from the view of social contingencies, it seems that there is more functioning than just establishing 'facts' by an answerer. In this present situation, the information emitted by an answerer itself works as an object of the generalised social exchange system. In other words, in collaborative cases the answerer gives information as if it were a gift to a questioner. According to Guerin (2004), gift-giving behaviour is a very effective ways for keeping relationships together. In the case of 'Assisted explaining', the second speaker can give the 'gift' to the questioner thorough sentence completion.

If so, Hayashi's (2003) finding that the second speaker emphasises their independent contribution in the explanation is quite reasonable, because presenting the different types of 'gift' to the questioner is more effective for keeping interaction going between the questioner and the second speaker. In the

results of the present study, however, the second speakers tended to supplement details to the first speaker's saying rather than to add new information. Extracts 3 and 4 are typical examples of such cases, which seem to be inconsistent with this idea of 'Assisted explaining' as gift giving, because presenting the same types of 'gift' to the questioner may be less effective for keeping interaction between the questioner and the second speaker. However, it is natural when considering that information giving is also an activity of establishing 'fact'. This means that 'Assisted explaining' is establishing 'facts' by the first and the second speaker to the questioner. As mentioned in the Introduction, in establishing 'facts', consensus formation and detail use are effective strategies against counter-argument by the listener. Because of these advantages, the second speaker may tend to supplement details to the first speaker's saying and thereby give it more credence.

Collaborative refutation to the third person. The results showed that when the third person was the listener and there was the disagreement, the first and the second speaker refuted the third person using sentence completion. These results also can be explained from the view of consensus formation in establishing 'fact'. The function of this type of sentence completion seems to be making the listener's counter-argument to the first and the second speaker's talk more difficult through consensus formulation.

The sentence completions affirmed or negated by the first speaker. When the second speaker did not have the information that the first speaker had, sentence completions appeared in this following sequence: (1) the first speaker's utterance; (2) the second speaker's completion; and (3) the affirmation or negation by the first speaker.

This pattern was also seen in the cases when the second speaker had got the information from what the first speaker talked about. This is natural because even though the second speakers already have the information about the first speakers' sayings, the second speakers do not know exactly the next utterance by the first speakers. Therefore, they have to anticipate the probable next utterance alike.

What is the function of this type of sentence completion? If it is assumed, as most writers do, that it shows the second speaker's understanding, a question can be raised. Because the second speaker only guesses what the first speaker says next, the probability that the second speaker's anticipation is wrong is not low. In fact, this happened in the results of the present study (see Extract 31 given earlier). Does the failure of anticipation by the second speaker result in showing not his / her understanding but misunderstanding?

This type of sentence completion may have the function of showing the second speaker's understanding in spite of the failure of anticipation. The reason is that even if the second speaker's final conclusion, inferred from what the first speaker said, is wrong, the second speaker can show that he / she comprehended the first speaker's saying itself.

Moreover, the second speaker may show that his / her comprehension itself was wrong thorough sentence completion in the worst case. However, in such a case, the second speaker can at least show that he / she had paid attention to the first speaker's utterance using sentence completion. After all, the function of this type of sentence completion can be regarded as enhancement of the relationship between the first and second speakers through showing that the second speaker is paying attention to the first speaker and understanding it.

The sentence completions with the agreement showing grammatical unit. In the present study, utterance-final element '*yo ne*' was found in some sentence completions. According to Hayashi (2003), this has a function of showing agreement between the first and the second speakers. It seems to be true that these types of utterance-final elements have a function of showing agreement. However, when thinking of social contingencies of it, one question remains: whom does 'showing agreement' affect? Is it the first speaker or the third person?

Unfortunately, it is difficult to answer to this from the results here, because the new coding scheme in Study 3 did not estimate the cases in which the listener could not be identified, and the listener could not be identified in the cases where '*yo ne*' appeared except one case in which the first speaker was identified as the listener. Therefore two possible contingencies can be assumed for the time being. If the listener is the first speaker and 'showing agreement' works on him / her, the function of 'showing agreement' is just enhancing the relationship between the first and the second speaker with words. On the other hand, if the listener is the third person, the function of 'showing agreement' is consensus formation like the case of collaborative refutation to the third person, rather than simple enhancement of the relationship.

In order to verify which assumption is right, a good way would be to investigate whether agreement showing grammatical units such as '*yo ne*' appear or not when there is disagreement, though they did not appear in three such cases in the present results. If such grammatical units appear in collaborative refutation to the third person, it can be concluded that the function of agreement showing grammatical units is mainly consensus formation for establishing 'fact'.

Therefore, in Study 4, sentence completions in more controversial situations were investigated to see what happens to sentence completions in the social context of disagreement.

Study 4:

Sentence Completions of Factual Statements about Foods (2)

The results of Study 3 suggested diverse possible functions of sentence completions corresponding to their conversational properties. Table 4.1 shows the final categories of sentence completions and their inferred functions according to the conversational features shown in the results of Study 3.

For sentence completions when the first speaker was the listener, the sentence completions were often followed by the affirmation or negation by the first speaker. This occurred both when the second speaker had known what the first speaker said or when they had not known. The function of this type of sentence completion seems to be enhancement of the relationship between the first and the second speakers through showing the second speaker's attention and understanding to the first speaker's utterance. Similarly, Hayashi's (2003) notion of 'Converting a less preferred action to preferred action' and 'Delivering a response in the form of co-participant completion' also seem to work as enhancements of the relationship through the development of conversations, although examples were not found in the results of Study 3. In short, when the first speaker is the listener, sentence completions seem to function to promote relationship between two speakers by developing the conversations.

When the third person is the listener, on the other hand, the functions of sentence completions seem to be concerned with the function of establishing 'facts'. When the first and the second speaker refute the third person using sentence completion, it is nothing else than the co-construction of a 'fact' by two

speakers, because it is the cooperative construction of another version of 'fact' in order to emulate the one that the listener has presented. The functions of 'Assisted explaining' seem to be more complex, though it seems to involve co-construction of a 'fact' as well, but the 'fact' constructed by the speakers is used as a kind of 'gift' in order to enhance the relationship between the listener and the speakers.

However, in the cases for which the listener could not be identified, the functions of sentence completions as collaborative construction of factual statement could not inferred, though that in some cases the second speakers used the utterance-final element '*yo ne*' that is regarded as having a function of showing agreement between the first and the second speaker.

There are two different ideas about the function of these sentence completions which the listener could not be identified. The first is that collaborative construction of a sentence may work as establishing 'facts' against the third person who is the listener. If so, the agreement shown by two speakers works as a consensus formation for establishing 'facts'. The second is that it may have a function of enhancing relationships between the first and second speakers, meaning that the constructed agreement itself works as a relationship enhancer between the two speakers.

In addition, the speakers may construct not only beliefs —factual statements—but also attitudes—evaluations of the factual statements—although no clear example was found in all the results of Study 3. It seems that one possible function of the collaborative construction of attitudes is enhancement of the relationship between speakers through the cooperative construction of negative evaluation of something. Negative evaluation is more likely to produce

disagreement between a speaker and all of listeners than positive evaluation, and it may increase the risks that the speaker loses social relationships to the listeners. The shared negative evaluation can reduce those risks, because the negative evaluation by two speakers has less risks of isolation than that by only one speaker. The study of complaining by Alicke et al. (1992) seems to support this idea. In their results, most complaining just worked in getting the listener's agreement not in establishing facts or changing the situation. However, such functions of the collaborative construction of attitudes are not clear either.

The Present Study

Study 4, therefore, aimed to identify the functions of sentence completions as collaborative construction of factual statements and attitudes in cases for which the listener cannot be identified. To do this, two conditions were introduced into collaborative discussions about the social knowledge of food in natural conversations about food by the group composed of friends or people acquainted with each other. The first condition was that participants were asked to speak about a topic that all participants knew about for which all of them agreed or all of them disagreed ('All agree' condition). In the other condition, participants were asked to talk about a topic that all of them knew but for which there was disagreement about it between participants ('Some agree' condition).

The research question to be examined was whether the functions of the sentence completions as collaborative construction of factual statements and attitudes are simply establishing 'facts' against a third person who was the listener. If the function of those types of sentence completions is simply establishing 'fact', then:

(1) The participants should use them more frequently in order to

warrant or negate the topic in ‘Some agree’ conditions, because they have to refute opponents each other using establishing ‘facts’.

(2) The participants should not use them in order to warrant or negate the topic in ‘All agree’ conditions, because they do not have to establish ‘facts’.

In other words, if the participants use the collaborative construction of factual statements and attitudes more frequently in the ‘All agree’ conditions, or they use them in order to warrant or negate the topic in ‘All agree’ conditions, then this suggests that those type of sentence completions have functions beyond simple establishing of ‘facts’ with listeners.

For this purpose, in Study 4, the frequencies in each type of sentence completion in ‘All agree’ conditions and ‘Some agree’ conditions were measured. In addition, whether the collaborative constructions of factual statements used in order to warrant or negate the topic or not was examined.

Method

Participants

Five Japanese groups consisting of four members who were friends were participants. The third group was composed of the same members as the fourth group of Study 3, and the members of the fourth group were the same members of the first group of Study 3. For these two group, the sessions for Study 4 were conducted one and a half year (the third group) and two years (the fourth group) after the sessions of Study 3. The other three were new groups. Table 4.2 shows the details of participants.

Procedure

Before the study, the experimenter showed a list of statements about food

(Appendix C) and asked whether each participant knew the statements and whether each participant agreed or disagreed. Then, according to the answers by the participants, topics were selected from the list according to the following two conditions: (1) all speakers knew and all speakers agreed or disagreed ('All agree' condition); or (2) all speakers knew and some speakers agreed and others did not agree ('Some agree' condition). The number of statements in each condition was four, therefore, the number of statements in the whole study was 8. When the number of selected statements in either condition was less than four, the participants were allowed to think of other topics, similar to those on the list.

Participants were then asked to talk about each factual statement as a topic for 8 to 10 minutes. The order of the 8 topics was arranged in consideration of order effects. For Group 1, Group 3, and Group 5, the first, the fourth, the sixth, and the seventh topics were topics of 'All agree' condition, and the rest were topics of 'Some agree' condition. On the other hand, for Group 2 and Group 4, the topics of 'All agree' condition were the second, the third, the fifth, and the eighth topic.

Analysis

Coding. All sentence completions were marked and categorised into the following seven types which are given in Table 4.1:

(1) The sentence completions when the first speaker is a listener

(2) Assisted explaining

(3) Collaborative refutation to the third person

(4) Collaborative construction of factual statements with the agreement showing grammatical unit

(5) Collaborative construction of attitudes with the agreement showing

grammatical unit

(6) Collaborative construction of factual statements without the agreement showing grammatical unit

(7) Collaborative construction of attitudes without the agreement showing grammatical unit.

All the sentence completions that the first speaker was identified as the listener were marked as *the sentence completions when the first speaker is a listener*. This category included the cases that the second speaker had not got the information, but the first speaker had (e.g., Extracts 7, 31, 22, and 15 in Study 3), and the cases that both the first and the second speaker had known the information (e.g., Extracts 19, 18, 16, 39, and 23 in Study 3).

The sentence completions in which the third person was identified as the listener were divided into *assisted explaining* and *collaborative refutation to the third person*. The cases in which the third person had not known the information, but the second speaker had, were marked as *assisted explaining*. This category included both the cases that the sentence completion followed the third person's question (e.g., Extracts 21, 3, 4, and 10 in Study 3) and the cases without the question by the third person (e.g., Extract 25 in Study 3). When there was the disagreement between the third person and the first and second speaker (e.g., Extracts 12, 40, and 34 in Study 3), the sentence completions were marked as *collaborative refutation to the third person.*

For the cases that the listener was unidentified, sentence completions were divided into following four categories: (4) *collaborative construction of factual statements with the agreement showing grammatical unit*, (5) *collaborative construction of attitudes with the agreement showing grammatical*

unit, (6) *collaborative construction of factual statements without the agreement showing grammatical unit*, and (7) *collaborative construction of attitudes without the agreement showing grammatical unit*. The criteria were (1) whether the sentence completion constructed factual statements or attitudes; and (2) whether there were the agreement showing grammatical units.

The definition of the agreement showing grammatical units were in accordance with those by Hayashi (2003). They were: (1) '*yo ne*' or '*yo na*' after a predicate; (2) '*mon ne*' or '*mon na*' after a predicate; and (3) tag-question-like element after a predicate, such as '*jan(ai)*', '*yan*' (Hayashi, 2003, p. 30).

With regard to the sentence completions marked as *collaborative construction of factual statements with* or *without the agreement showing grammatical unit*, whether those sentence completions were warranting or negating the topic or not were checked. Discursive psychologists (e.g., Edwards & Potter, 1993) argued that factual statements are warranted by various kinds of rhetorical strategies including use of other factual statements. The factual statements 'warranting or negating' the topic mean the statements that is warranting or negating the topic directly. For example, the statement "Bread is high in calories" is directly warranting the topic "Eating bread gain weight more than eating rice". On the other hand, the factual statements 'relevant' to the topic mean the statements that is not warranting or negating the topic directly. For instance, "Tomato is a brightly coloured vegetable" is not warranting the topic "Brightly coloured vegetables are good for the health" directly. For that purpose, those sentence completions were categorised into following four types (1) Factual statements that just paraphrased of the topic; (2) Factual statements warranting or negating the topic; (3) Factual statements relevant to the topic; and (4) Other

factual statements.

Results

Table 4.3 shows the topics chosen by participants. Some topics were chosen by more than one group. However, the degree of agreement by the members varied between groups. For example, all participants in Group 4 agreed with the topic “Living on a plain diet is good for the health”, while only some members of Group 3 agreed with it.

Table 4.4 shows the numbers of the turns in which participants used sentence completions across the total number of sessions and those numbers per minute. The members of each group used sentence completions over fifty times in total, except Group 1 which was composed of all males. As to the numbers per turn, Group 3 and Group 4, who also participated in Study 3, generated sentence completions more frequently than in Study 3. The frequency of sentence completions by Group 3 increased from 0,41 per minute (Study 3) to 0.65 per minute (study 4), and that by Group 4 increased from 0.78 per minute (Study 3) to 1.00 per minute (Study 4).

Table 4.5 shows the number of the sentence completion turns by each participant and its proportion in total turns of the participant. Generally male participants tended to use less sentence completions. For all participants, these proportions between male and female were significantly different at 5% level (p= 0.002, Mann-Whitney U test), though for all participants except Group 1, they were not significantly different at 5% level (p= 0.0523, Mann-Whitney U test).

Table 4.6 shows the numbers of sentence completion turns according to the categories of sentence completion. Participants used sentence completions most frequently when the first speaker was the listener. For sentence

completions when a third person was the listener, both “Collaborative refutation” and “Assisted explaining” were used in a small number of cases. For sentence completions when the listener was not identified, participants most frequently used the sentence completions of “Collaborative construction of factual statements without the agreement showing grammatical unit”. Only one sentence completion was “Collaborative construction of attitude with the agreement showing grammatical unit”.

Figures 4.1 to 4.6 show the proportions of the number of turns in which each categories of sentence completion appeared per total number of turns over the 'Some agree' and 'All agree' conditions. Figure 4.1 is that of “The sentence completions when the first speaker is a listener”, Figure 4.2 is that of “Assisted explaining”, Figure 4.3 is that of “Collaborative refutation to the third person”, Figure 4.4 is that of “Collaborative construction of factual statements with the agreement showing grammatical unit”, Figure 4.5 is that of “Collaborative construction of factual statements without the agreement showing grammatical unit”, and Figure 4.6 is that of “Collaborative construction of attitude without the agreement showing grammatical unit”.

For “The sentence completions when the first speaker is a listener”, it seems that there was no difference between the two conditions. Regarding “Assisted explaining”, “Collaborative refutation to the third person”, “Collaborative construction of factual statements with the agreement showing grammatical unit”, and “Collaborative construction of attitude without the agreement showing grammatical unit”, it seems that the differences between the participants were more prominent than the differences between the conditions.

However, most of the participants used “Collaborative construction of

factual statements without the agreement showing grammatical unit" more frequently in the 'All agree' condition than in the 'Some agree' condition. For all participants except Group 1, who only used small numbers of sentence completions, this difference between two conditions was significant at the 5% level by Friedman's test (chi-square =6.25, *df* = 1, *p*= 0.01), while the difference between the participants is not significant (chi-square = 21.57, *df* = 15, *p*= 0.12). For all participants, this is also significant at the 5% level by Friedman's test (chi-square = 4.05, *df* = 1, *p*= 0.044), while the difference between the participants is not significant (chi-square = 28.84, *df* = 19, *p*= 0.07).

Table 4.7 shows the numbers of collaborative constructions of factual statements according to the categories of factual statements. Participants co-constructed factual statements warranting or negating the topic by sentence completion not only in the 'Some agree' condition, but also in the 'All agree' condition, and more statements were constructed in the latter. For factual statements relevant to the topic, the number of co-construction in the 'All agree' condition was also lager than that in the 'Some agree' condition. From Tables 4.8 to 4.11 show the detail of the co-constructed factual statements in those four cases. In the 'All agree' condition, various factual statements warranting or negating the topic were co-constructed while one topic such as "'Nabe' is a healthy and convenient Japanese cuisine" was discussed (see Table 4.9), on the other hand, those factual statements appeared once per topic in the 'Some agree' condition (see Table 4.8). It seems that the differences in the total number of the co-constructed factual statements warranting or negating the topic between the conditions in Table 4.7 seems to be the results of the difference of the number of the sentence completions per topic. Table 4.8 and 4.9 show that while the

participants were speaking one topic, they co-constructed factual statements warranting or negating the topic more frequently in the 'All agree' condition than in the ‘Some agree’ condition.

For factual statements relevant to the topic, in both the 'Some agree' condition and the 'All agree' condition, a variety of factual statements were co-constructed while the same topic was talked (see Table 4.10 and Table 4.11). For example, while the topic “Imported vegetables are not safe” in the 'Some agree' condition was discussed, 7 factual statements relevant to the topic were co-constructed in total (see Table 4.10), and when the participants talked about “Brightly coloured vegetables are good for the health” in the 'All agree' condition, 9 factual statements of that type were generated by sentence completions (see Table 4.11).

Discussion

First of all, the results show that the participants used sentence completions as “Collaborative construction of factual statements without the agreement showing grammatical unit” more frequently in the ‘All agree’ conditions. This suggests that the function of this type of sentence completion is not merely establishing ‘facts’, because there is no disagreement in ‘All agree’ conditions so the speakers need not establish ‘facts’ in order to persuade the others.

Undoubtedly, this type of sentence completion basically can have the function of establishing fact, because they were also used for persuasions in the ‘Some agree’ conditions (see Table 4.8). The participants used them in order to warrant or negate the controversial topic. For example, the participants co-constructed the factual statement “*With unpolished rice we eat the part which*

is most affected by chemicals" for warranting the topic "Unpolished rice is not always good for the health". However, the uses of this type of sentence completion in 'All agree' conditions cannot be explained by the function of establishing 'facts'. What are the functions of this type of sentence completion, then?

The co-construction of the factual statements warranting or negating the topic in the 'All agree' conditions. Participants also co-constructed the factual statements warranting or negating the topic by sentence completions in the 'All agree' conditions (see Table 4.9). In those cases, for instance, the participants co-constructed the factual statement "There isn't thing that doesn't suit 'nabe'" that can warrant the topic "'Nabe' is a healthy and convenient Japanese cuisine", though they did not have to persuade anybody who was opposed to the topic using shared 'community repertoires' mentioned in Study 1.

This contradiction can be explained by noting that the factual statements in the 'All agree' conditions were co-constructed not as the factual statements to warrant the topic but as factual statements relevant to the topic, although those factual statements had the form of warranting the topic. This meant that those factual statements have the same functions as the factual statements relevant to the topic which the participants co-constructed both in the 'Some agree' conditions (see Table 4.10) and in the 'All agree' conditions (see Table 4.11). If so, the question becomes simpler, and focuses on why the participants co-constructed the factual statements relevant to the topic.

The functions of the co-construction of the factual statements relevant to the topic. The possible functions are as follows. First, the second speaker can show to the first speaker that she/he has the same factual statement relevant to

the topic to that the first speaker has. This seems to function more simply than showing an agreement about the topic itself. When the first and the second speaker agree about the topic, the second speaker can show that the agreements between two speakers are not only about the topic itself, but also about the relevant things. Furthermore, even if there is disagreement about the topic between two speakers, the second speaker can show that they have agreements except topic itself. Thus, the co-construction of the factual statements can enhance the relationship between the speakers.

In addition, if not less than one listener had not been familiar with the presented factual statement, for example, if someone in the group had not known the 'fact' which was co-constructed by two speakers, it may have a function similar to that of 'Assisted explaining'. This means that the presentation of the factual statement works as a 'gift' to the listener and the co-construction of the factual statement enables to keep interaction between not only the listener and the first speaker but also between the listener and the second speaker.

Moreover, presenting factual statement relevant to the topic, namely adding the new information concerned with the topic, seems to have a function to just carry on the conversations. The speakers can continue the conversations by supplementing with new but relevant information.

The difference between genders. The results showed that female participants tended to use sentence completions more frequently than male participants. This seems to support previous research that collaborative talk appears mainly in female conversations (e.g., Coates, 1997). However, it would be too hasty to conclude something about the difference between genders in Japan, because the participants of Study 4 were not chosen by random sampling.

Moreover, the results of Study 4 suggest that the contents of topics and the degree of intimacy may be other important variables for the frequencies of sentence completions. Both groups who participated in Study 3 generated sentence completions more frequently in Study 4, so it may be the effect of the selected topics. Otherwise, their degree of intimacy might increase. It is possible that the facts that they participated in Study 3 themselves can be used as topics for enhancing their relationships in their everyday conversations. In order to verify the difference between genders, further studies in more controlled conditions are needed.

General Discussion

In the present studies, social knowledge about food was investigated from the view of Social Contingency Theory (Guerin, 1994, 1998, 2001a, 2003a, b, c, 2004), which is a functional approach thoroughly combining social dynamics with language use. The two main functional units for language use are for establishing 'facts' in order to "control" listeners and outcomes, for both good and manipulative reasons, and for maintaining social relationships with various uses of words.

While these studies only looked at some aspects of the different functions, the usefulness of the present results is to begin to get a better overall picture of the uses of language in everyday social life and place further studies into a generic framework rather than haphazardly conduct studies linking pieces of language to bits of social life. For example, the functions for maintaining relationships through food talk must also include any rumours involving food (such as the famous "McDonald's burgers have rats/cockroaches/ etc. in them", Guerin & Miyazaki, 2006), conversations that focus attention through complaining about foods and restaurants, and other general banter such as conversations telling stories about recipes that have been tried by the speakers. These cannot all be dealt with in one set of studies but the present work aimed to look at this framework as a way of grounding the manifold studies that are needed.

Summaries of the Studies

In Study 1, whether people shared knowledge about foods or not was examined by a questionnaire method with qualitative and quantitative analyses. Some rhetorical features were then investigated in Study 2 about how foods were

talked about on TV commercials. Finally, in Study 3 and Study 4, the functions of shared knowledge about food for maintaining social interactions when the factual statements about foods presented as the form of 'collaborative talk' were examined.

A summary of Study 1. In Study 1, 114 New Zealand participants and 23 Japanese participants answered free-format questionnaires which asked the reasons for themselves and other people eating or not eating 12 particular food items. Those answers were classified into categories by qualitative content analysis (Mayring, 2000), which is a qualitative method to generate categories from textual data. The result was that 8 categories and 30 sub-categories of the knowledge about foods were generated. The homogeneity of those categories for each food item between participants was assessed by Fife-Schaw's (1993) method of using hierarchical cluster analysis of binary data. The results of cluster analysis showed high homogeneities of New Zealand and Japanese participants in the most of the answers, although in some aspects, Japanese participants show different response to New Zealanders.

Finally, the relationships between categories of knowledge and food items were examined by correspondence analysis. The results showed that the participants selectively used different types of knowledge according to food items especially when they had to explain why people do eat or do not eat particular foods. For example, in answer to the question, "Why do you think some people eat food A?", the twelve food items can be clearly classified into three groups by relations to specific categories: (1) a first group of spinach and milk connected to *Health or Physiological factors*; (2) a second group consisting of dog meat (both New Zealanders and Japanese), horse meat, locusts, and whale meat (new

Zealanders only) related to *Availability or Economic factors* and *Social or Cultural factors*; and (3) a third group composed of the rest of food items relevant to *Personal Preference* and *Personal Factors*.

Interesting differences were then found for how participants used the same category when answering about reasons for himself/herself versus the answering for reasons of other people. For example, many participants only used the *Social or Cultural factors* category for the question about other people, while lots of participants used *Personal preference* category for both questions. Overall, the results supported the idea that the knowledge about food is shared by the participants, and there is a background repertoire of knowledge that is utilized in conversations.

A summary of Study 2. In Study 2, factual statements about foods from a corpus of 118 New Zealand TV commercials and 249 Japanese TV commercials were coded according to the categories of food knowledge generated in Study 1, and analysed by both quantitative and qualitative methods. The relationships between the categories and food types in TV commercials were examined by correspondence analysis. The results of correspondence analysis showed that the categories of factual statements tended to be selectively used depending on the food types. For example, the food types "Alcoholic drink", "Confectionery", and "Soft drink" were concerned with the factual statement "Food A has good / bad taste, texture, smell, appearance" and the food type "Nutritional supplements, Functional foods" was highly connected to the factual statement of "Food A has good / bad nutritional value", and "Food A causes good / bad health consequence". These results related closely to the results found in Study 1.

The strategic uses of three rhetorical strategies within the television

advertisements were also examined: (1) numerical quantification rhetoric; (2) narrative use rhetoric; and (3) enumeration rhetoric. For instance, quantification rhetoric was used more on the factual statement of "Nutritional value", "Economical reasons", and "Food A is offered in plenty or adequate in quantity" than for other categories. When more than one factual statement was presented, the relation between the factual statements in most of the commercials was of a conjunction such as "fact A *however* fact B" and "fact A *moreover* fact B", or else the two factual statements were presented independently, rather than the one factual statement logically warranting the other such as "fact A *hence* fact B" and "fact A *because* fact B".

A summary of Study 3. In Study 3, collaborative talk as sentence completions in natural conversations about food was investigated as one exemplar of talk being used to maintain relationships. Four groups of four or five Japanese friends had conversations for 30 to 45 minutes about foods and all sentence completions were qualitatively analysed from the point of view of social contingencies, that is, looking closely at the consequences for what was said. From a review of previous work on collaborative talk, the analysis focused on the consequences and antecedent events of collaborative talk, and the following conversational properties were examined: (1) who the listener is; (2) the degree of sharing of the information between the speakers; (3) the degree of sharing of the information between the 2nd speaker and the listener; (4) disagreement between the 2nd speaker and the listener.

The results suggested some possible functions of sentence completions of knowledge about food as follows: (1) the function when the first speaker was the listener may include enhancement of the relationship between the first and the

second speakers through showing the second speaker's attention and understanding of the first speaker's utterance, because those sentence completions were often followed by the affirmation or negation by the first speaker; (2) when the third person was the listener, and a first and second speaker refuted the third person using sentence completions, the function seemed to be establishing 'facts'; (3) in the cases of 'assisted explaining' (Lerner & Takagi, 1999), in which a third person had not known the information, but the first and second speakers had, the functions may have been not only establishing 'facts' but also enhancement the relationship between the listener and the speakers. In these interesting cases, it was theorized that the constructed 'facts' may have worked as a kind of 'gift' to the listener.

A summary of Study 4. In Study 4, five Japanese groups of four friends were asked to talk about four food topics all participants either agreed or disagreed ('All agree' condition) about, and a further four food topics for which there was disagreement between participants ('Some agree' condition). The frequencies of sentence completions in both conditions were measured according to the following categories of sentence completion: (1) the cases when the first speaker was the listener; (2) the cases when the first and the second speaker refuted a third person using sentence completion; (3) the cases of 'assisted explaining'; (4) the cases when the listeners could not be identified, and the second speakers used the grammatical units such as '*yo ne*' which are usually regarded as utterance-final elements having a function of showing agreement between the speakers; (5) the cases when the listeners could not be identified, and the second speakers did not used the grammatical units.

The results showed that the participants used sentence completions more

frequently in ‘All agree’ conditions when the listeners could not be identified, and the second speakers did not used the grammatical units. This difference was statistically significant at the 5% level by a Friedman's test. As to whether the sentence completions were warranting or negating the topic or not, the participants co-constructed the factual statements relevant to the topic as well as those warranting or negating the topic in the both conditions. These results suggested that the function of this type of sentence completion is not merely establishing ‘facts’, but also enhancing the relationship between the speakers through showing agreement about the relevant things to the topic.

Discussion

How people come to share knowledge. The results of Study 1 suggest that social knowledge about foods seems to be shared by people. From a social contingency perspective, social knowledge should be regarded as language use tied to social processes. Therefore, “social knowledge of foods shared by people” means that people talk about the factual statements about foods with common patterns that are shaped and maintained by social contingencies.

Like the concept of ‘interpretative repertoire’ (McKinlay et al., 1993; Potter & Wetherell, 1987), this idea focuses on language use by individuals, so that it is free from the conceptual and methodological problems in social representations theory that were identified in the Introduction: (1) problem of defining groups; (2) problems of different levels of consensus within groups; (3) problems of the contextual variation by individuals; and (4) ambiguity from individual cognitive processes (Harré, 1984; McKinlay et al., 1993; Potter & Litton, 1985). However, it also means the renunciation of the traditional explanation of generating processes of social representation. It needs to explain

how people become to talk about the factual statements about foods in shared ways.

Shaping speakers' repertoires by social contingencies. When a person talks about a factual statement, it means that that factual statement is already a member of his/her repertoire. Those speakers' repertoires may be somewhat similar to "scripts" in cognitive psychology, but they are more fluid and less deterministic than "scripts", and reliant on social context. The view of Social Contingency Theory (Guerin, 2004) suggests that those speakers' repertoires are shaped by social contingencies thorough social interactions. The idea of Social Contingency Theory is based on tree-term contingency in Behaviour Analysis, so that the shaping of the selective use from the speakers' repertoires can be regarded as the results of stimulus control of behaviour. When a factual statement is already a member of the speaker's repertoire, it means the speaker acquired the behaviour of saying that statement. Then if the speaker shaped to say that statement according to situations, it can be regarded as the results of stimulus control of that verbal behaviour. As a result of shaping, he/she comes to selectively use them from the acquired repertoire according to their functions.

The important point about this from the present studies is that the shaping for a person's repertoire, or their "motivation" to use statements to use a more traditional psychology perspective, is not only about the content of that talk but also about the listeners' past and present responses to that talk. This means that repertoires consist not only of meaningful and useful items but socially interesting and socially useful items *whether or not they are true or even believed by that person*. This is the same reasoning as arguments that talking about scary or anxiety-provoking topics is not to (usefully) reduce the anxiety but rather that

such talk is socially useful for all sorts of reasons, especially including the enhancement and maintenance of social relationships (Guerin, 1998, 2001b). We do not talk about fearful things to assuage our fear but because they make good attention-getting stories; we do not carryout religious practices to reduce our fear of the unknown or life after death, but because talking about fearful unknowns is socially effective.

Once again, the important point is that the presence of these items in a repertoire or not is more about their usefulness in social conversations than whether they are true beliefs or not. So the social shaping of repertoires leads to more homogenous repertoires than people assembling a list of beliefs with which they agree or not.

Two processes of sharing knowledge. The results of the present studies suggest that not only the process of shaping the speakers' repertoires and using them, but also the process that a new factual statement becomes a member of the repertoire progresses through social interactions. The latter can be called *getting repertoire process*, while the former can be named *shaping and using repertoire process*. For example, the results of Study 1 showed relatively lower homogeneities in New Zealanders' answers about horse meat, locusts, and whale meat. It can be explained using the concept of *getting repertoire process*. Those foods are not familiar to New Zealanders, so that they may have few opportunities to talk about those foods, so this means that the chances of getting factual statements about those foods into their repertoires are fewer. As a consequence, the lower homogeneities may occur.

The participants' selective use different types of factual statements according to food items in the results of Study 1 may also be more concerned with

getting repertoire process than *shaping and using repertoire process*. It may be not that the participants did not use some combinations of factual statements and food items from their repertoire, nor that those combinations were removed from the repertoire because of uselessness by social contingencies, but it may be that those combinations have never been in the participants' repertoire through social interactions, so that they could not use them in the answers. For example, "Muslims don't eat pork" may be in their repertoire, however it is unlikely that "Muslims eat spinach" has got in their repertoire through social interactions.

On the other hand, the different use of knowledge between explaining reasons for other people or for themselves, may be connected with *shaping and using repertoire process*. For example, the category of *Social or Cultural factors* was mainly used by participants not for explaining their reasons but for explaining the reasons that other people eat certain foods or not. In those cases, the participants already have the combinations of factual statements and food items in their repertoire, and they selectively use it.

The results here also seem to show that in order to get into people's repertoire, a new factual statement has to survive counterarguments and refutations as a *getting repertoire process*. In the results of Study 1, the high homogeneities that appeared are not exclusively with New Zealand or Japanese participants, but for all participants, except for a few food items. This suggests that when people get the same factual statement as *getting repertoire process*, it is due to education or mass-communication as well as real communication by people. How, then, does the information from education or mass-communication survive counterarguments? The results of Study 2 provide some answers to this.

Counter arguments using social knowledge as consensus. When a

factual statement becomes shared by people as ‘social knowledge’, it means that a consensus (of practice) can be assumed by people and then used as a further rhetorical strategy. As mentioned in Chapter 1, consensus information is an effective strategy against counter-argument by the listener in establishing ‘facts’, because it is difficult to refute. This effectiveness may also work when consensus formation is used to warrant or refute other ‘facts’. Therefore, when somebody tries to establish a new ‘fact’, social knowledge may be effective as a counterargument against it.

The rhetorical features of TV commercials in Study 2 were explained by different types of possible counterarguments using social knowledge. First, the particular categories of factual statements were selectively used according to the food types of TV commercials, and these results related closely to the results of Study 1 which showed that the participants selectively use different types of knowledge according to food items. This means that the factual statements in TV commercials are presented not to contradict those statements shared by people. Second, the rhetorical strategies of numerical quantification, narrative use, and enumeration appeared in the commercials with specific categories of factual statements, and their styles of expression were different with the categories. Third, when more than one factual statement was presented in a commercial, the relations between the factual statements either took the form of a conjunction such as “fact A *however* fact B” and “fact A *moreover* fact B”, or else the factual statements were presented independently. As discussed in Chapter 3, these three features are easy to understand if it is assumed that the rhetoric features on TV commercials are pre-emptive against possible counterarguments.

Sentence completions and the processes of sharing knowledge. The

results of Study 3 and Study 4 suggest some possible functions of sentence completions of factual statements about foods. Some type of sentence completions may have the function of establishing 'facts', some sentence completions may have the function of keeping and enhancing social interaction, and, moreover, some sentence completions may have both these functions. What, then, are the relationships between those functions and the processes of sharing knowledge? The concepts of *getting repertoire process* and *shaping and using repertoire process* mentioned above can help to understand this.

When a third person is the listener, the function of sentence completions may be basically to establish facts. In these cases, the factual statement presented by a sentence completion has already been in the repertoire of both the first and the second speaker. This means that two speakers selectively used the factual statements from their repertoire as *shaping and using repertoire process*. On the other hand, in some cases it is probable that the collaboratively constructed factual statement is not yet in the listener's repertoire. Especially for the cases of 'assisted explaining', the listeners do not have the factual statement in their repertoire. In these situations, if the listener accepts the collaboratively constructed statement as a 'fact', it becomes a new addition to the listener's repertoire through *getting repertoire process.*

When the first speaker is the listener, the function of sentence completions is more commonly enhancement of the relationship between the first and the second speakers by showing the second speaker's attention and understanding of the first speaker's utterance. In some of the cases in my data, the sentence completions occurred when the second speaker had known what the first speaker said. Like cases when a third person is the listener, if the second

speaker accepts the factual statement constructed by the sentence completion, it becomes a new addition to the second speaker's repertoire.

Finally, with the cases when listeners could not be identified, the results of Study 4 suggested that those types of sentence completion have a function of enhancing the relationship between the speakers by showing agreement about the things relevant to the topic. It is another example of *shaping and using repertoire process,* in which factual statements in the repertoire of both the first and the second speaker are used. Moreover, if there is a third person who has not been familiar with the presented factual statement, it may work as *getting repertoire process* like the cases mentioned above.

In conclusion, sentence completions are not only a process in which the speakers use factual statements from their repertoire with common patterns, but also a process in which the listeners or the second speaker get new factual statements into their repertoire. Once again, however, adding to the repertoire occurs as much through social influence as through the 'truth' of those statements.

Practical implications for interventions to change people's food habits. The latest survey of dietary habits by the Ministry of Health in New Zealand (Ministry of Health, 1999) showed the necessity to change people's food habits. In order to change people's food habits, it needs interventions to alter peoples' knowledge about foods, as well as providing good foods and persuading people that they are good for you. Although the results of the present studies only dealt with a few possible functions of social knowledge about foods shared by people, and only looked at some types of food talk, we can suggest some better ways to intervene.

For diffusing new and more correct knowledge about foods, it seems

necessary to consider what kind of factual statements about food are shared by people, and to take measures to incorporate the functions of those statements rather than just assume that the truth of statements will see them added to repertoires. Those shared statements can be used as counterarguments against new information. Moreover some factual statements shared by people, such as in the cases of 'assisted explaining', may survive even though their contents are wrong, because they have the function of keeping or enhancing interaction between people. With regard to the interventions for racist and prejudicial talk, Guerin (2003a) pointed out the necessities to identify those conversational functions:

> *The problem identified in this article, however, is that when talk is mis-analysed as persuasion to do or say something, and it is really functioning to regulate social relationships, then these interventions are not likely to work well. Attempts to just persuade people to stop will not succeed and may ruin social relationships (and hence alienate the person trying to change racism), and attempts to establish opposite facts will miss the point because the speaker was not even trying seriously to establish facts in the first place.* (Guerin, 2003a, p. 38).

Like interventions for racist talk, effective strategies according to thee function of shared factual statements about food may be needed. For example, Guerin (2003a) suggested that one possible intervention is to replace the racial talk having the function of keeping social relationship with other interesting stories which have the same function. This strategy can be conducted in the cases of shared statements about foods as well. It means that a "interesting but scientifically wrong" story about food can be replaced with the "interesting and

scientifically correct" story.

The methodological features of the present studies. Because Social Contingency Theory (Guerin, 2001a) does not have its own particular methodologies, the present studies were conducted by various combinations of quantitative and qualitative methods. There is no real problem in this providing one does not use the quantitative results to try and stand as representative statistics for larger populations (such as claiming that the number of sentence completions found in Studies 3 and 4 can stand as representative samples of the population so we can extrapolate the results to everyone).

There are many examples of this mixing in the present studies. In Study 1, the categories of the knowledge about food were generated by a qualitative method and then those categories were examined by hierarchical cluster analysis correspondence analysis in a more quantitative way. On the other hand, the rhetorical features of TV commercials in Study 2 were quantitatively outlined first and then their details were examined by qualitative methods. An hypothesis about the function of sentence completions was generated through qualitative analyses in Study 3 and then that hypothesis was examined quantitatively in a slightly more experimental way in Study 4.

The results that came from this show that those combinations of quantitative and qualitative methods are useful in understanding social contingencies in everyday life. Qualitative methods can find subtle features of the phenomena which are overlooked by quantitative methods, but on the other hand, observed phenomena can be generalised by quantitative methods with statistical analyses (kept within the sample in these cases). Thus, both methods may be essential to understand social contingencies in everyday life.

Future studies. The results of the present studies show only a few features of social knowledge about foods from a social contingency perspective. For example, looking at how parents persuade their children to eat certain foodstuffs would be a useful addition to the start made here. Therefore, along these lines, further studies about both *getting repertoire process* and *shaping and using repertoire process* of social knowledge about foods and other matter are needed.

As to *getting repertoire process*, studies to understand better how and why people get the same factual statements into their repertoire should be conducted. Study 2 focused on the speakers' rhetorical strategies when they presented new factual statements, however, how the listeners' responses to them are not clear yet. The results of Study 3 and Study 4 suggested that the functions of some type of sentence completions are not only enhancing the social relationship but also establishing 'facts'. For example, in the cases of 'assisted explaining', the co-constructed statement is a new 'fact' for the listener. However, whether the listener put the established 'facts' into their repertoire, and how it is done are still unknown. The empirical studies when listeners face the new information in such situations are needed.

With regard to *shaping and using repertoire process*, the identifications of the functions of factual statements shared by people may be subjects for future studies. The results of Study 2 suggested that the factual statements on TV commercials are shaped against possible counterarguments using shared knowledge. Therefore, the empirical study to examine whether people actually use shared knowledge for counterargument or not should be the subject in the next step. The results of Study 3 and Study 4 suggest some possible functions

of shared factual statement to enhancing the social relationship. For example, the results of Study 3 suggested that 'assisted explaining' may work as a kind of 'gift', and the results of Study 4 suggest that some types of sentence completions may work as enhancing the relationship between the speakers through showing agreement about the relevant things to the topic. The empirical verifications of those functions are also needed.

Moreover, apart from social knowledge, the results of the present studies suggested some possible functions of collaborative talk as sentence completion. The further studies of the functions of collaborative talk from a social contingency perspective are also needed. For example, the results of Study 3 suggested that the function when the first speaker was the listener may be enhancement of the relationship between the first and the second speakers through showing the second speaker's attention and understanding. However, some types of examples of sentence completions when the first speaker was the listener were not found in the results of Study 3 and Study 4. There were no examples of 'Demonstrating shared yet independent knowledge', 'Converting a less preferred action to preferred action', and 'Delivering a response in the form of co-participant completion' in Hayashi's (2003) categories. More studies focused on the functions of sentence completions when the first speaker is the listener should be conducted.

Conclusion

Overall, the results of the present studies suggest some possible social contingencies involved both when people get knowledge about food and when they use it. The results of Study 1 showed that people have shared repertoires about food. This means that people have the same factual statements about food

in their repertoire, and they use them in a common way. For the rhetorical features of factual statements on TV commercials shown in the results of Study 2, it can be explained that those statements are shaped against possible counterarguments using the knowledge shared by people. The results of Study 3 and Study 4 suggested some possible functions of sentence completions of factual statements about food. It seems that those sentence completions have both the functions of establishing 'facts' and the functions of enhancing social interaction. Moreover, those functions may be concerned with not only the process that the two speakers use the factual statements from their common repertoire, but also the process that a new factual statement becomes a member of repertoire of a person who is unfamiliar with it.

Because the present studies are the first attempt at empirical research of social knowledge from the broad of social contingencies, some unclear points still remain. For example, when a new factual statement is presented, how does the listener get it into their repertoire and whether people actually use shared knowledge for counterarguments are not clear yet. Further research based on the results of the present studies should be conducted.

Moreover, apart from the results of the present studies, it is necessary to conduct further empirical investigations of social knowledge and other social language uses from the view of social contingency. For example, Social Contingency Theory suggests that the function of rumours may be mainly keeping social interaction rather than reducing anxiety or establishing 'facts' (Guerin & Miyazaki, 2006). As the next steps, empirical verification of those functions of rumours is needed.

In the present studies, it was shown that some quantitative and qualitative

methods are useful to understand social contingencies in everyday life. Those methods may be helpful for further empirical investigations in order to identify the functions of those language uses.

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Appendix A : The list of New Zealander TV commercials

No.	Company	Product	Length
NZ001	Allied Foods Co., Ltd.	Burgen Breads	30sec.
NZ002	Arnott's New Zealand Ltd.	Arnott's Emporio [Type A]	30sec.
NZ003	Arnott's New Zealand Ltd.	Arnott's Emporio [Type B]	30sec.
NZ004	Arnott's New Zealand Ltd.	Arnott's Salada	20sec.
NZ005	Arnott's New Zealand Ltd.	Arnott's Shapes BBQ	30sec.
NZ006	Arnott's New Zealand Ltd.	Arnott's Shapes Pizza	30sec.
NZ007	Arnott's New Zealand Ltd.	Arnott's Tim Tam	10sec.
NZ008	Arnott's New Zealand Ltd.	Arnott's Vita-Weat	15sec.
NZ009	Au'some Candies, Inc.	Flic'n'lic Candy	15sec.
NZ010	Bundaberg Brewed Drinks Pty. Ltd.	Bundaberg Ginger Beer	30sec.
NZ011	Burger King New Zealand	Burger King	15sec.
NZ012	Cadbury Confectionery Ltd.	Favourites [type A]	15sec.
NZ013	Cadbury Confectionery Ltd.	Favourites [type B]	30sec.
NZ014	Cadbury Confectionery Ltd.	Roses	30sec.
NZ015	Cerebos Gregg's Ltd.	Gregg's Distinction	15sec.
NZ016	Charlies Trading Co., Ltd.	Charlies Spots Water [Type A]	15sec.
NZ017	Charlies Trading Co., Ltd.	Charlies Spots Water [Type B]	15sec.
NZ018	Charlies Trading Co., Ltd.	Charlies Spots Water [Type C]	15sec.
NZ019	Coca-Cola Amatil (NZ) Ltd.	Aquana	30sec.
NZ020	Coca-Cola Amatil (NZ) Ltd.	Coca-Cola	15sec.
NZ021	Coca-Cola Amatil (NZ) Ltd.	Vanilla Coke [Type A]	30sec.
NZ022	Coca-Cola Amatil (NZ) Ltd.	Vanilla Coke [Type B]	30sec.
NZ023	Coca-Cola Amatil (NZ) Ltd.	Powerade	30sec.
NZ024	Crozier's Turkeys Ltd.	Crozier's Turkey	15sec.
NZ025	DB Breweries Ltd.	DB Export Gold	30sec.
NZ026	DB Breweries Ltd.	Heineken	30sec.
NZ027	Effem Foods (NZ) Ltd.	Celebration	30sec.
NZ028	Effem Foods (NZ) Ltd.	Starburst [Type A]	20sec.
NZ029	Effem Foods (NZ) Ltd.	Starburst [Type B]	20sec.
NZ030	Effem Foods (NZ) Ltd.	Uncle Ben's Rice	15sec.
NZ031	Fantastic Snacks (NZ) Ltd.	Fantastic Rice Crackers	15sec.
NZ032	Ferrero Australia Pty. Ltd.	Ferrero Rocher	15sec.
NZ033	Foodstuffs (NZ) Ltd.	New World Supermarket [Type A]	30sec.
NZ034	Foodstuffs (NZ) Ltd.	New World Supermarket [Type B]	30sec.
NZ035	Foodstuffs (NZ) Ltd.	New World Supermarket [Type C]	10sec.
NZ036	Frucor Beverages Ltd.	fresh-up [Type A]	15sec.
NZ037	Frucor Beverages Ltd.	fresh-up [Type B]	15sec.
NZ038	Frucor Beverages Ltd.	G Force [Type A]	15sec.
NZ039	Frucor Beverages Ltd.	G Force [Type B]	15sec.
NZ040	Frucor Beverages Ltd.	H2Go [Type A]	15sec.
NZ041	Frucor Beverages Ltd.	H2Go [Type B]	30sec.
NZ042	Frucor Beverages Ltd.	V [Type A]	15sec.
NZ043	Frucor Beverages Ltd.	V [Type B]	15sec.
NZ044	Glev Pty. Ltd.	Pizza Haven [Type A]	10sec.
NZ045	Glev Pty. Ltd.	Pizza Haven [Type B]	15sec.
NZ046	Goodman Fielder New Zealand Ltd.	Blubird Rice Chips	15sec.
NZ047	Goodman Fielder New Zealand Ltd.	Bluebird Snacker	15sec.
NZ048	Goodman Fielder New Zealand Ltd.	CC's Chips	15sec.
NZ049	Goodman Fielder New Zealand Ltd.	Meadow Lea Hi Omega	30sec.

(list continues)

Appendix A (continued)

No.	Company	Product	Length
NZ050	Goodman Fielder New Zealand Ltd.	Murphy's Thick cut	15sec.
NZ051	Goodman Fielder New Zealand Ltd.	Olivani	15sec.
NZ052	Goodman Fielder New Zealand Ltd.	Uncle Tobys Le snak [Type A]	5sec.
NZ053	Goodman Fielder New Zealand Ltd.	Uncle Tobys Le snak [Type B]	5sec.
NZ054	Goodman Fielder New Zealand Ltd.	Uncle Tobys Le snak [Type C]	5sec.
NZ055	Goodman Fielder New Zealand Ltd.	Uncle Tobys Roll ups	15sec.
NZ056	Griffin's Foods Ltd.	Huntley & Palmers Merito	30sec.
NZ057	Healtheries of Australia Pty.	Energy Boost Tablets	45sec.
NZ058	Heinz Wattie's Ltd.	Wattie's Tomato sauce	30sec.
NZ059	Kellogg (Aust.) Pty. Ltd.	Kellogg's Disney Muesli Bars	30sec.
NZ060	Kellogg (Aust.) Pty. Ltd.	Kellogg's Nutri-grain	30sec.
NZ061	Krispa Foods (NZ) Ltd.	Krispa Poppa Jacks	15sec.
NZ062	Lion Breweries Ltd.	Lion Red	60sec.
NZ063	Lion Breweries Ltd.	Speights	60sec.
NZ064	McDonald's New Zealand	BBQ Bacon Cheeseburger [Type A]	15sec.
NZ065	McDonald's New Zealand	BBQ Bacon Cheeseburger [Type B]	15sec.
NZ066	McDonald's New Zealand	Mcdonald's	60sec.
NZ067	Nestle New Zealand Ltd.	Life Savers Chewz	30sec.
NZ068	Nestle New Zealand Ltd.	Milo	15sec.
NZ069	Nestle New Zealand Ltd.	Nesle Nesquick	15sec.
NZ070	Nestle New Zealand Ltd.	Nestea Cool	30sec.
NZ071	New Zealand Milk Ltd.	Anchor Milk	30sec.
NZ072	New Zealand Milk Ltd.	Mainland cheese [Type A]	15sec.
NZ073	New Zealand Milk Ltd.	Mainland cheese [Type B]	30sec.
NZ074	New Zealand Vegetable & Potato Growers' Federation	New Zealand Vegetables	15sec.
NZ075	New Zealand Wines & Spirits Ltd.	Baileys	30sec.
NZ076	New Zealand Wines & Spirits Ltd.	Smirnoff	15sec.
NZ077	New Zealand Wines & Spirits Ltd.	Stella Artois	60sec.
NZ078	Nice and Natural Ltd.	Bumble Bars	30sec.
NZ079	Pam's Product Ltd.	Products [Type A]	30sec.
NZ080	Pam's Product Ltd.	Products [Type B]	30sec.
NZ081	Paton's Macadamia Plantations Pty. Ltd.	Paton's Macadamia Royals	15sec.
NZ082	Pez Candy, Inc.	Pez	30sec.
NZ083	Pillsbury (NZ) Ltd.	Frescarini	10sec.
NZ084	Progressive Enterprises Ltd.	Cowntdown	15sec.
NZ085	Progressive Enterprises Ltd.	Foodtown & Woolworths	30sec.
NZ086	Red Bull Australia Pty. Ltd.	Red Bull Energy Drink	30sec.
NZ087	Restaurant Brands.New Zealand Ltd.	KFC [Type A]	15sec.
NZ088	Restaurant Brands.New Zealand Ltd.	KFC [Type B]	30sec.
NZ089	Restaurant Brands.New Zealand Ltd.	Pizza Hut [Type A]	5sec.

(list continues)

Appendix A (continued)

No.	Company	Product	Length
NZ090	Restaurant Brands.New Zealand Ltd.	Pizza Hut [Type B]	5sec.
NZ091	Ricegrowers' Co-operative	Sun Rice	30sec.
NZ092	Sanitarium Health Food Company	Sanitarium Ricies	30sec.
NZ093	SmithKline Beecham Ltd.	Ribena	30sec.
NZ094	SmithKline Beecham Ltd.	Ribena Squee-Zee	15sec.
NZ095	Streets Ice Cream Pty. Ltd.	Magnum Cone	15sec.
NZ096	Streets Ice Cream Pty. Ltd.	Paddle Pop Paw Prints	45sec.
NZ097	Subway New Zealand	Subway Sandwiches & Salads	30sec.
NZ098	Sweetline Distributors Ltd.	Chupa Chups [Type A]	30sec.
NZ099	Sweetline Distributors Ltd.	Chupa Chups [Type B]	30sec.
NZ100	Tatua Co-Operative Dairy Co. Ltd.	Dairy Whip Aerosol Cream	30sec.
NZ101	The Natural Confectionery	The Natural Confectionery Co.	30sec.
NZ102	The Wrigley Company (NZ)	Hubba Bubba	15sec.
NZ103	The Wrigley Company (NZ)	Wrigley's Extra for Kids	30sec.
NZ104	Tip Top Ice Cream Co Ltd	Trumpet [Type A]	30sec.
NZ105	Tip Top Ice Cream Co Ltd	Trumpet [Type B]	30sec.
NZ106	Tip Top Ice Cream Co., Ltd.	Chiu	15sec.
NZ107	Tip Top Ice Cream Co., Ltd.	Fruju Pulp Frusion	15sec.
NZ108	Tip Top Ice Cream Co., Ltd.	Moritz Ice Cream	15sec.
NZ109	Tip Top Ice Cream Co., Ltd.	Popsicle	15sec.
NZ110	Topline International Ltd.	Nature Bee	60sec.
NZ111	Unilever (NZ) Ltd.	Noodles Tonight	30sec.
NZ112	Valentines Restaurant & Bar (NZ) Ltd.	Valentines Restaurant	15sec.
NZ113	Wendco (NZ) Ltd.	Wendy's Old Fashioned Hamburgers	5sec.

Appendix B : The list of Japanese TV commercials

No.	Company	Product	Length
JP001	Ajinomoto Co., Inc.	Obento Arabiki Hamburg (Frozen Hamburger Steak)	15sec.
JP002	Ajinomoto Co., Inc.	Yawaraka Wakadori Karaage (Frozen Fried Chicken)	15sec.
JP003	Ajinomoto General Foods, Inc.	Maxim	15sec.
JP004	Anrakutei Co., Ltd.	Anrakutei (BBQ Restaurant)	15sec.
JP005	Anrakutei Co., Ltd.	Anrakutei (BBQ Restaurant)	15sec.
JP006	Asahi Breweries Ltd.	Asahi Honnama (Low-Malt Beer) [Type A]	15sec.
JP007	Asahi Breweries Ltd.	Asahi Honnama (Low-Malt Beer) [Type B]	15sec.
JP008	Asahi Breweries Ltd.	Asahi Honnama (Low-Malt Beer) [Type C]	30sec.
JP009	Asahi Breweries Ltd.	Asahi Super Dry (Beer) [Type A]	15sec.
JP010	Asahi Breweries Ltd.	Asahi Super Dry (Beer) [Type B]	30sec.
JP011	Asahi Breweries Ltd.	Asahi Super Dry (Beer) [Type C]	30sec.
JP012	Asahi Breweries Ltd.	Minori-Zanmai (Beer)	15sec.
JP013	Asahi Soft Drinks Co., Ltd.	Jyuroku-Cha (Tea)	15sec.
JP014	Asahi Soft Drinks Co., Ltd.	Wonda Morning Shot (Cannned Coffee)	15sec.
JP015	Asahiryokuken Co., Ltd.	Ryokko-Aoziru	30sec.
JP016	BBL Japan Co., Ltd.	Lipton Yellow Label Tea Bag	15sec.
JP017	Best Amenity Corp.	Zakkoku-Mai (Rice with Cereals [Type A]	15sec.
JP018	Best Amenity Corp.	Zakkoku-Mai (Rice with Cereals [Type B]	15sec.
JP019	Bourbon Corp.	Gobou Snack	15sec.
JP020	Bourbon Corp.	Paribre Strawberry	15sec.
JP021	Bunmeido Confectionery Co., Ltd.	Castella (Traditional Sponge Cake)	15sec.
JP022	Calpis Co., Ltd.	Ameel-Nomu-Yoghurt	15sec.
JP023	Calpis Co., Ltd.	Ameel-S	15sec.
JP024	Calpis Co., Ltd.	Kenchaou (Tea)	15sec.
JP025	Choya Umeshu Co., Ltd.	Umeshu (Ume-Plum Liqueur)	15sec.
JP026	Choya Umeshu Co., Ltd.	Sararitoshita Umeshu (Low Alcohol Umeshu)	15sec.
JP027	Choya Umeshu Co., Ltd.	Umeshu Pio	15sec.
JP028	Choya Umeshu Co., Ltd.	Umesshu (Umeshu & Soda)	15sec.
JP029	Coca Cola (Japan) Co., Ltd.	Aquarius	15sec.
JP030	Coca Cola (Japan) Co., Ltd.	Canada Dry Ginger Ale	15sec.
JP031	Coca Cola (Japan) Co., Ltd.	Georgia (Canned Coffee) [Type A]	15sec.
JP032	Coca Cola (Japan) Co., Ltd.	Georgia (Canned Coffee) [Type B]	30sec.
JP033	Coca Cola (Japan) Co., Ltd.	Sou-Ken-Bi-Cha (Tea)	15sec.
JP034	Dojindo Functional Foods Inc.	King Agaricus 100	60sec.
JP035	Duskin Co., Ltd.	Mister Doughnut	15sec.
JP036	Dydo Drinco, Inc.	Blend Coffee Dark Roasted (Canned Coffee)	15sec.
JP037	Dydo Drinco, Inc.	Demitasse Coffee (Canned Coffee)	15sec.
JP038	Ebara Foods Industry Co., Inc.	Kimchi Nabe no Moto	15sec.
JP039	Ebara Foods Industry Co., Inc.	Korean Nabe Series	15sec.
JP040	Ebara Foods Industry Co., Inc.	New product	15sec.
JP041	Ezaki Glico Co., Ltd.	Almond Chocolate	15sec.
JP042	Ezaki Glico Co., Ltd.	Pocky	15sec.
JP043	Ezaki Glico Co., Ltd.	Pocky G	15sec.
JP044	Fancl Corp.	Aojiru (Green juice) [Type A]	15sec.

(list continues)

Appendix B (continued)

No.	Company	Product	Length
JP045	Fancl Corp.	Aojiru (Green juice) [Type B]	15sec.
JP046	First Baking Co., Ltd..	Mugi-Yutaka (Bread)	30sec.
JP047	Frente Co., Ltd.	Pinky	15sec.
JP048	Fujicco Co., Ltd	Fujicco	15sec.
JP049	Fujiya Co., Ltd.	Fujiya Milky (Candy)	30sec.
JP050	Gekkeikan Sake Co., Ltd.	Petit Moon (Sake)	15sec.
JP051	Gekkeikan Sake Co., Ltd.	Sake "Tsuki" [Type A]	15sec.
JP052	Gekkeikan Sake Co., Ltd.	Sake "Tsuki" [Type B]	15sec.
JP053	Hagoromofoods Co., Ltd.	Papatto Rice (Sterilized Packed Rice) [Type A]	15sec.
JP054	Hagoromofoods Co., Ltd.	Papatto Rice (Sterilized Packed Rice) [Type B]	15sec.
JP055	Hakusui-sha Corp.	Hi-Sour	60sec.
JP056	Hakutsuru Sake Brewing Co., Ltd.	Hakutsuru "Maru" (Sake)	5sec.
JP057	Hamaotome Co., Ltd.	Iwashi－Furikake	15sec.
JP058	Hamaotome Co., Ltd.	Kuro-San-Honey (Flavoured Sybean Flour)	15sec.
JP059	Hanamaruki Co., Ltd.	Fuumi Ichiban (Miso)	15sec.
JP060	Harada Tea Manufacturing Co., Ltd.	Yabukita Blend (Green Tea) [Type A]	15sec.
JP061	Harada Tea Manufacturing Co., Ltd.	Yabukita Blend (Green Tea) [Type B]	15sec.
JP062	Higa Industries	Domino's Pizza "Truffe Millefeuille Quattro"	15sec.
JP063	House Foods Corp.	Curry Risotte	15sec.
JP064	House Foods Corp.	Hokkaido Stew (Stew Roux)	15sec.
JP065	House Foods Corp.	House Stew (Stew Roux)	15sec.
JP066	House Foods Corp.	Kokumaro Curry (Curry Roux) [Type A]	15sec.
JP067	House Foods Corp.	Kokumaro Curry (Curry Roux) [Type B]	15sec.
JP068	House Foods Corp.	Kokumaro Curry (Curry Roux) [Type C]	15sec.
JP069	House Foods Corp.	Pan-de-Gratin (Gratin Sauce Mix)	15sec.
JP070	House Foods Corp.	The Curry (Curry Rox)	15sec.
JP071	House Foods Corp.	Tofu Hamburger Steak	15sec.
JP072	House Foods Corp.	Tongari Corn (Corn Snack)	15sec.
JP073	Inaba Foods Co., Ltd.	Light Tuna Super Non-oil	15sec.
JP074	Ito Ham Foods, Inc.	Alt Bayern (Sausage)	15sec.
JP075	Ito Ham Foods, Inc.	Ganso Aburi Yaki (Vacuum-Packed Grilled	15sec.
JP076	JA Zennoh Gunma	Vegetables produced in Gunma Prefecture	15sec.
JP077	JA Zennoh Gunma	Vegetables produced in Gunma Prefecture	15sec.
JP078	Japan Sangaria Beverage Co., Ltd.	Kakugiri Ringo	15sec.
JP079	Japan Tobacco, Inc.	Roots (Canned Coffee)	15sec.
JP080	Joy Road Inc.	Kani Douraku (Crab Restaurant)	30sec.
JP081	Kanebo Foods Co., Ltd.	Amaguri Muichaimashita	15sec.
JP082	Kanebo Foods Co., Ltd.	Frisk [Type A]	15sec.
JP083	Kanebo Foods Co., Ltd.	Frisk [Type B]	15sec.
JP084	Kanebo Foods Co., Ltd.	Pipitto-Awachu	15sec.
JP085	Kao Corp.	Kenko-Econa Cooking Oil	30sec.
JP086	Kappa Create Co., Ltd.	Kappa Sushi (Sushi Restaurant)	15sec.
JP087	Kasugai Seika Co., Ltd.	Nodo-ni-Sukkiri	15sec.
JP088	Katokichi Co., Ltd.	Reitou Sanuki Udon (Frozen Udon Noodle)	15sec.
JP089	Katokichi Co., Ltd.	Takitate Gohan (Sterilized Packed Rice)	15sec.
JP090	Kenkoukazoku Co., Ltd.	Dentou Ninniku Rannou (Capsule of Garlic & Egg yolk) [Type A]	15sec.
JP091	Kenkoukazoku Co., Ltd.	Dentou Ninniku Rannou (Capsule of Garlic & Egg yolk) [Type B]	30sec.

(list continues)

Appendix B (continued)

No.	Company	Product	Length
JP092	Kenkoukazoku Co., Ltd.	Dentou Ninniku Rannou (Capsule of Garlic & Egg yolk) [Type C]	30sec.
JP093	Kenkoukazoku Co., Ltd.	Dentou Ninniku Rannou (Capsule of Garlic & Egg yolk) [Type D]	60sec.
JP094	Kenkoukazoku Co., Ltd.	Dentou Ninniku Rannou (Capsule of Garlic & Egg yolk) [Type E]	60sec.
JP095	Kenmin Foods Co., Ltd.	Yaki Beefun	15sec.
JP096	Kentucky Fried Chicken Japan Ltd.	\980 Pack	15sec.
JP097	Kentucky Fried Chicken Japan Ltd.	Chicken Cutlet Sandwich Japanese Style	15sec.
JP098	Kiku-Masamune Sake Brewing Co., Ltd.	Sake "Kiku-Masamune Pin"	15sec.
JP099	Kirin Beverage Corp.	On-Kirin (Soft Drinks) [Type A]	15sec.
JP100	Kirin Beverage Corp.	On-Kirin (Soft Drinks) [Type B]	15sec.
JP101	Kirin Brewery Co., Ltd.	Kirin Chuhai Hyouketsu	15sec.
JP102	Kirin Brewery Co., Ltd.	Kirin Tanrei (Low-Malt Beer)	15sec.
JP103	Kirin Brewery Co., Ltd.	Tanrei Green Label (Low-Malt Beer)	15sec.
JP104	Kobayashi Pharmaceutical Co.,Ltd.	Easy Fiber	15sec.
JP105	Kyowa Engineering Co.,Ltd.	Agaricus Mushroom "Senseiro"	15sec.
JP106	Kyowa Engineering Co.,Ltd.	Senseiro Propolis	15sec.
JP107	Lotte Co., Ltd.	Almond Chocolate	15sec.
JP108	Lotte Co., Ltd.	Ghana Milk Chocolate	15sec.
JP109	Lotte Co., Ltd.	Xylitol Gum +2	15sec.
JP110	MannanLife Corp.	Konnyaku-Batake (Fruit Flavoured Glucomannan) [Type A]	15sec.
JP111	MannanLife Corp.	Konnyaku-Batake (Fruit Flavoured Glucomannan) [Type B]	15sec.
JP112	Marudai Food Co., Ltd.	Kunsei-Ya (Sausage)	15sec.
JP113	Maruka Foods Co., Ltd.	Peyang Sauce Yakisoba (Instant Fried Noodle) [Type A]	15sec.
JP114	Maruka Foods Co., Ltd.	Peyang Sauce Yakisoba (Instant Fried Noodle) [Type B]	15sec.
JP115	Marukome Co., Ltd.	Kyo Kaiseki (Miso)	15sec.
JP116	Marukome Co., Ltd.	Ryoutei no Aji (Miso)	15sec.
JP117	Marumiya Corp.	Mabo-dofu (Mapo Tofu Mix)	15sec.
JP118	Marumiya Corp.	Mazekomi Wakame	15sec.
JP119	Marusan-Ai Co., Ltd.	Soymilk and Miso [Type A]	15sec.
JP120	Marusan-Ai Co., Ltd.	Soymilk and Miso [Type B]	15sec.
JP121	Marutomo Co., Ltd.	Ika Soumen (Squid)	15sec.
JP122	Marutomo Co., Ltd.	Katsuo Tuya Kezuri (Dried Bonito Shavings)	15sec.
JP123	McDonald's Japan	Big Mac	15sec.
JP124	McDonald's Japan	Cheese Cutlet Burger	15sec.
JP125	McDonald's Japan	Happy Set (Kids Menu) [Type A]	15sec.
JP126	McDonald's Japan	Happy Set (Kids Menu) [Type B]	15sec.
JP127	McDonald's Japan	Nattoku Value	15sec.
JP128	Meiji Dairies Corp.	Oishi Gyuunyuu (Milk) [Type A]	15sec.
JP129	Meiji Dairies Corp.	Oishi Gyuunyuu (Milk) [Type B]	15sec.
JP130	Meiji Seika Kaisha Ltd.	Kotsubu-Choco Series	15sec.
JP131	Meiji Seika Kaisha Ltd.	Meiji Milk Chocolate	15sec.
JP132	Meiji Seika Kaisha Ltd.	Mogi-mogi Series Meiji Gummy	15sec.
JP133	Meitanhonpo Co., Ltd.	Koshiki Bainiku Ekisu	15sec.

(list continues)

Appendix B (continued)

No.	Company	Product	Length
JP134	Mitsui Norin Co., Ltd.	Green Tea	15sec.
JP135	Mitsui Norin Co., Ltd.	Nitto Daily Club (Tea)	15sec.
JP136	Mitsukan Co., Ltd.	Aji Pon	15sec.
JP137	Mitsukan Co., Ltd.	Kinnotsubu Fuwatoro (Natto)	15sec.
JP138	Momoya Co., Ltd.	Kimchi no Moto [Type A]	15sec.
JP139	Momoya Co., Ltd.	Kimchi no Moto [Type B]	60sec.
JP140	Momoya Co., Ltd.	Zahsai (Szechwan Pickles)	15sec.
JP141	Monteroza, Inc.	Shirokiya (Bar Restaurant)	15sec.
JP142	Morinaga & Co., Ltd.	Carré de Chocolat	15sec.
JP143	Morinaga & Co., Ltd.	Morinaga Cocoa	30sec.
JP144	Morinaga & Co., Ltd.	Pote-Long	15sec.
JP145	Morinaga & Co., Ltd.	Werther's Original	30sec.
JP146	Mycal Corp.	Bargain Sale	15sec.
JP147	Myojo Foods Co., Ltd.	Ippei-chan (Instant Noodle)	15sec.
JP148	Myojo Foods Co., Ltd.	Myojo Charumera Tonkotsu-aji (Instant	15sec.
JP149	Nagatanien Co., Ltd.	Asage (Instant Miso Soup)	15sec.
JP150	Nagatanien Co., Ltd.	Fukahire Mabo dofu	15sec.
JP151	Nagatanien Co., Ltd.	Matsutake-no-Aji Osuimono (Instant Japanese Soup)	15sec.
JP152	Nagatanien Co., Ltd.	Ochazuke	15sec.
JP153	Nagatanien Co., Ltd.	Ramen Chazuke	15sec.
JP154	Nagatanien Co., Ltd.	Sushi-Taro	15sec.
JP155	Nestle Japan Ltd.	Brite	30sec.
JP156	Nestle Japan Ltd.	Gold Blend (Instant Coffee)	30sec.
JP157	Nestle Japan Ltd.	KitKat White	90sec
JP158	Nestle Japan Ltd.	Milo	15sec.
JP159	Nestle Japan Ltd.	Single Bean (Canned Coffee)	15sec.
JP160	Nippon Milk Community Co., Ltd.	Megmilk (Milk) [Type A]	15sec.
JP161	Nippon Milk Community Co., Ltd.	Megmilk (Milk) [Type B]	15sec.
JP162	Nippon Suisan Kaisha, Ltd.	Frozen Chanpon	15sec.
JP163	Nippon Suisan Kaisha, Ltd.	Frozen Daigaku-Imo	15sec.
JP164	Nisshin Oillio Group Ltd.	Bosco Oleve Oil	15sec.
JP165	Nisshin Oillio Group Ltd.	Nisshin Canola Oil Healthy Light	15sec.
JP166	Nissin Food Products Co.,	Don Bei (Instant Noodle)	15sec.
JP167	Nissin Food Products Co.,	Gonbuto (Instant Udon Noodle) [Type A]	15sec.
JP168	Nissin Food Products Co.,	Gonbuto (Instant Udon Noodle) [Type B]	30sec.
JP169	Nissin Food Products Co.,	Men Shokunin (Instant Noodle)	15sec.
JP170	Nissin Food Products Co.,	Miso Cup Noodle Hong Kong Style [Type A]	15sec.
JP171	Nissin Food Products Co.,	Miso Cup Noodle Hong Kong Style [Type B]	30sec.
JP172	Nobel Confectionary Co., Ltd.	Hachimitsu Kinkan Nodo-ame (Candy) [Type	15sec.
JP173	Nobel Confectionary Co., Ltd.	Hachimitsu Kinkan Nodo-ame [Type B]	15sec.
JP174	Nobel Confectionary Co., Ltd.	Nodo Kuroame (Candy) [Type A]	15sec.
JP175	Nobel Confectionary Co., Ltd.	Nodo Kuroame [Type B]	15sec.
JP176	Nobel Confectionary Co., Ltd.	VC-3000 Nodo-ame (Candy)	15sec.
JP177	Norwegian Seafood Export Council Japan	Salmon from Norway [Type A]	15sec.
JP178	Norwegian Seafood Export Council Japan	Salmon from Norway [Type B]	15sec.
JP179	Oriex Co., Ltd.	Ryukyu Moromi-su (Okinawan Vinegar)	30sec.
JP180	Otsuka Pharmaceutical Co.,	Pocari Sweat [Type A]	15sec.
JP181	Otsuka Pharmaceutical Co.,	Pocari Sweat [Type B]	15sec.

(list continues)

Appendix B (continued)

No.	Company	Product	Length
JP182	Oyster Hanging Culture Fisheries Cooperatives (South	Korean Oyster	15sec.
JP183	Pfizer Consumer, Inc.	Clorets	15sec.
JP184	Pfizer Consumer, Inc.	Recaldent Gum	15sec.
JP185	Procter & Gamble Far East,	Pringles	15sec.
JP186	Q.P. Corp.	Aohta Okayu (Vacuum-Packed Rice Porridge)	30sec.
JP187	Q.P. Corp.	Fukairi Goma Dressing (Roasted Sesame)	30sec.
JP188	Q.P. Corp.	Kewpie Mayonnaise	15sec.
JP189	Q.P. Corp.	Pan-kobo (Bread Spread)	30sec.
JP190	Riken Vitamin Co., Ltd.	Sozairyoku (Soup Stock)	30sec.
JP191	Ringer Hut Co., Ltd.	Nagasaki Chanpon [Type A]	15sec.
JP192	Ringer Hut Co., Ltd.	Nagasaki Chanpon [Type B]	30sec.
JP193	S Foods, Inc.	Kotetsuchan Motsunabe	15sec.
JP194	S&B Foods, Inc.	Hoshi Mitsu no Stew (Stew Roux)	30sec.
JP195	Sanyo Foods Co., Ltd.	CupStar (Instant Noodle) [Type A]	15sec.
JP196	Sanyo Foods Co., Ltd.	CupStar (Instant Noodle) [Type B]	15sec.
JP197	Sanyo Foods Co., Ltd.	CupStar (Instant Noodle) [Type C]	15sec.
JP198	Sapporo Breweries Ltd.	Gyokuro iri Ocha (Green Tea)	30sec.
JP199	Sapporo Breweries Ltd.	Namashibori (Low-Malt Beer)	15sec.
JP200	Sapporo Breweries Ltd.	Sapporo Beer	15sec.
JP201	Sapporo Breweries Ltd.	Yebisu Beer	15sec.
JP202	Seven-Eleven Japan Co., Ltd.	-	15sec.
JP203	Seven-Eleven Japan Co., Ltd.	Obento (Lunch Box)	15sec.
JP204	Seven-Eleven Japan Co., Ltd.	Shin Temaki Onigiri	15sec.
JP205	Shikishima Baking Co., Ltd.	Pasco Chozyuku (Bread)	30sec.
JP206	Shin-Shin Foods Co., Ltd.	Pickles [Type A]	15sec.
JP207	Shin-Shin Foods Co., Ltd.	Pickles [Type B]	15sec.
JP208	Shinsyu Shiga-ichi Co., Ltd.	Miso	30sec.
JP209	Showa Sangyo Co., Ltd.	Olein Rich (Cooking Oil)	15sec.
JP210	Showa Sangyo Co., Ltd.	Tempura Dai Sakussen (Tempura Batter)	15sec.
JP211	Somi Foods Industry Co., Ltd.	Somi no Tsuyu (Soup Stock)	60sec.
JP212	Suntory Ltd.	Boss (Canned Coffee)	15sec.
JP213	Suntory Ltd.	Dakara	15sec.
JP214	Suntory Ltd.	Oolong Tea [Type A]	15sec.
JP215	Suntory Ltd.	Oolong Tea [Type B]	30sec.
JP216	Taisho Pharmaceutical Co.,	Choles-Care [Type A]	15sec.
JP217	Taisho Pharmaceutical Co.,	Choles-Care [Type B]	15sec.
JP218	Takeda Food products, Ltd.	Lemon Water	15sec.
JP219	Tateyama Brewing	Sake "Tateyama"	30sec.
JP220	The Executive Committee for Sales Promotion Project of Engei-Kochi	Vegetables produced in Kochi Prefecture	15sec.
JP221	The National Dairy Promotion and Research Association	Milk	15sec.
JP222	Toh Syohten	Nabe no Tsuyu (Soup for Nabe)	15sec.
JP223	Tohato, Inc.	Caramel Corn [Type A]	15sec.
JP224	Tohato, Inc.	Caramel Corn [Type B]	15sec.
JP225	Tosaturu Brewing Co., Ltd.	Sake "Tosaturu"	30sec.
JP226	Tsubohachi Co., Ltd.	Tsubohachi (Bar Restaurant)	30sec.
JP227	Yakult Honsha Co., Ltd.	Yakult	15sec.
JP228	Yakult Honsha Co., Ltd.	Yakult 400	15sec.
JP229	Yamada Bee Farm	Propolis Granular A.P.C	30sec.
JP230	Yamayoshi Seika Co., Ltd.	Wasa-Beef	30sec.

(list continues)

Appendix B (continued)

No.	Company	Product	Length
JP231	Yamazaki Baking Co., Ltd.	Shin Syokkan Sengen (Bread)	15sec.
JP232	Yazuya Co. ,Ltd	Kouzu (Capsule of Chinese Vinegar) [Type A]	15sec.
JP233	Yazuya Co. ,Ltd	Kouzu (Capsule of Chinese Vinegar) [Type B]	30sec.
JP234	Yazuya Co. ,Ltd	Kouzu (Capsule of Chinese Vinegar) [Type C]	60sec.
JP235	Yazuya Co. ,Ltd	Kouzu (Capsule of Chinese Vinegar) [Type D]	60sec.
JP236	Yogashi-ho West Co., Ltd.	Dry Cake	30sec.
JP237	Yomeishu Seizo Co., Ltd.	Yomeishu (Medicinal Alcoholic Beverage)	30sec.
JP238	Yomeishu Seizo Co., Ltd.	Yomeishu (Medicinal Alcoholic Beverage)	30sec.
JP239	Yoshikei Development Co.,	Home Catering	30sec.
JP240	Yotchan Foods Co., Ltd.	Cut Yotchan	15sec.

Appendix C : The list of statements about food for Study 4

The statements about food items used in Study 1.

(1) American beef is safe from BSE (Mad Cow Disease).

(2) The religious precept not to eat pork by Muslim is rational because it can prevent from parasites.

(3) Horse meat isn't eaten in any Western countries.

(4) Spinach is bad for your health because of oxalic acid.

(5) Before the 18th century dog meat had been often eaten in Japan.

(6) Milk is the best calcium source.

(7) Eating sweets does not cause tooth decay.

(8) In former days, locust was a common food item anywhere in Japan

(9) Butter is more healthy than margarine

(10) Europeans who oppose eating whale meat are ethnocentric.

(11) In Japan, French fries are diffused by Japan McDonald's.

(12) Full cream is too greasy for the most people.

The statements about food appeared in Study 3.

(1) It is better to take two kinds of ferment food because it effects one another

(2) People from Kansai (Osaka region) don't like natto (fermented-soybeans).

(3) Foods sold in coop stores are safety.

(4) Australian beef is safe because the way of slaughtering is different from Japan.

(5) Most foods are affixed the label of not genetically modified.

(6) Synthetic seasonings are bad for your health.

(7) Genetically modified foods are safe.

(8) Caspian sea yoghurt is good for your health.

(9) River fish such as carps are too stinking to eat.

(10) The tastes of instant noodles for western Japan is different from those for eastern Japan.

(11) All Europeans don't eat octopus.

(12) In China, people make ducks eat soap to fatten up.

(13) Some people are just putting mud on ordinary vegetables, and selling them as ‘organic vegetables’.

(14) Japanese used to eat hare till about 30 years ago.

(15) Dojo-nabe (loach cooked in hot pot) is very cruel because living loaches are boiled.

(16) For domestic use, Americans don’t use agricultural chemical, they use it to export to Japan.

Tables and Figures

Table 1.1. The number of the participants who had eaten food items and opposed eating food items

	Items	Experience of Eating				Opposition to Eating			
		Yes	No	N/A	% Yes	Yes	No	N/A	% Yes
New Zealand Participants	Beef	112	2	0	98.25	8	104	2	7.02
	Pork	112	2	0	98.25	13	98	3	11.40
	Horse Meat	6	106	2	5.26	69	44	1	60.53
	Spinach	109	5	0	95.61	5	108	1	4.39
	Dog Meat	7	105	2	6.14	88	25	1	77.19
	Milk	105	9	0	92.11	6	108	0	5.26
	Sweets	114	0	0	100.00	8	104	2	7.02
	Locusts	2	111	1	1.75	44	68	2	38.60
	Butter	114	0	0	100.00	8	106	0	7.02
	Whale Meat	1	113	0	0.88	92	21	1	80.70
	French Fries	113	1	0	99.12	4	109	1	3.51
	Full Cream	102	12	0	89.47	9	105	0	7.89
Japanese Participants	Beef	23	0	0	100.00	0	23	0	0.00
	Pork	23	0	0	100.00	0	23	0	0.00
	Horse Meat	14	9	0	60.87	0	23	0	0.00
	Spinach	23	0	0	100.00	0	23	0	0.00
	Dog Meat	0	23	0	0.00	4	19	0	17.39
	Milk	23	0	0	100.00	0	23	0	0.00
	Sweets	23	0	0	100.00	0	23	0	0.00
	Locusts	9	14	0	39.13	0	23	0	0.00
	Butter	23	0	0	100.00	0	23	0	0.00
	Whale Meat	16	7	0	69.57	3	20	0	13.04
	French Fries	23	0	0	100.00	0	23	0	0.00
	Full Cream	22	0	1	95.65	0	23	0	0.00

Table 1.2. Summary of the Generated Categories and Sub-Categories

Category	Sub Category
Personal Preference	Food A has good / bad taste, texture, smell, appearance Food A is preferred than alternatives / alternatives are preferred than Food A Food A can add variety to the diet Food A becomes the material of good/bad Dish B
Personal Factors	Food A is eaten / not eaten because of personal experience Food A is eaten / not eaten because of curiosity / sensation seeking Food A is eaten / not eaten because of personal beliefs Food A is eaten / not eaten because of personality Food A is eaten / not eaten because of lack / full of knowledge
Health or Physiological Factors	Food A has good / bad nutritional value Food A causes good / bad health consequence Food A is eaten / not eaten because of personal health condition Food A is eaten / not eaten because of personal physiological factors Food A came from good / bad production processes Food A is made from good/bad materials
Social or Cultural Factors	Food A is eaten / not eaten because of social or Cultural reasons Food A is eaten / not eaten because of effects of mass media or advertisement Food A is delicacy Food A is officially forbidden or authorised
Factors Based on General Principles	Food A is eaten / not eaten because of reasons based on general principles Food A is eaten / not eaten because of religious reasons Food A is eaten / not eaten by vegetarians or vegans
Availability or Economic Factors	Food A is eaten / not eaten because of Lack / full of opportunity / availability Food A is eaten / not eaten because of Economical reasons Food A is eaten / not eaten because of lack / full of alternatives Food A is served by somebody Food A is offered in plenty or adequate in quantity Food A is easy / difficult to cook
Factors about Food	Food A is considered / not considered as food categories
Others	Others

Table 1.3. The number of the participants by categories in the answers to "Why do you think some people eat food A?" (NZ Sample)

Item	Category								Number of Participants
	Personal Preference	Personal Factors	Health or Physiological Factors	Social or Cultural Factors	Factors Based on General Principles	Availability or Economic Factors	Considered /not considered as Food	Others	
Beef	82 (0.73)	25 (0.22)	46 (0.41)	21 (0.19)	2 (0.02)	30 (0.27)	3 (0.03)	0 (0.00)	112
Pork	95 (0.85)	17 (0.15)	15 (0.13)	15 (0.13)	4 (0.04)	24 (0.21)	2 (0.02)	2 (0.02)	112
Horse Meat	33 (0.33)	18 (0.18)	3 (0.03)	36 (0.36)	1 (0.01)	58 (0.59)	3 (0.03)	2 (0.02)	99
Spinach	71 (0.62)	6 (0.05)	90 (0.79)	10 (0.09)	6 (0.05)	21 (0.18)	2 (0.02)	0 (0.00)	114
Dog Meat	28 (0.27)	13 (0.12)	7 (0.07)	55 (0.52)	4 (0.04)	61 (0.58)	5 (0.05)	0 (0.00)	105
Milk	71 (0.63)	16 (0.14)	90 (0.80)	8 (0.07)	1 (0.01)	17 (0.15)	0 (0.00)	0 (0.00)	113
Sweets	93 (0.82)	15 (0.13)	38 (0.34)	4 (0.04)	0 (0.00)	5 (0.04)	0 (0.00)	7 (0.06)	113
Locusts	27 (0.29)	17 (0.18)	12 (0.13)	42 (0.45)	3 (0.03)	47 (0.51)	5 (0.05)	0 (0.00)	93
Butter	99 (0.88)	30 (0.27)	12 (0.11)	8 (0.07)	1 (0.01)	14 (0.12)	1 (0.01)	0 (0.00)	113
Whale Meat	37 (0.35)	19 (0.18)	9 (0.08)	49 (0.46)	3 (0.03)	34 (0.32)	6 (0.06)	1 (0.01)	107
French Fries	88 (0.77)	9 (0.08)	5 (0.04)	13 (0.11)	0 (0.00)	59 (0.52)	1 (0.01)	1 (0.01)	114
Full Cream	103 (0.94)	9 (0.08)	7 (0.06)	8 (0.07)	0 (0.00)	12 (0.11)	0 (0.00)	1 (0.01)	109

Note: Numbers in the brackets indicate the proportion of the participants who used each category.

Table 1.4. The number of the participants by categories in the answers to "Why do you think some people eat food A?" (Japan Sample)

Item	Category								Number of Participants
	Personal Preference	Personal Factors	Health or Physiological Factors	Social or Cultural Factors	Factors Based on General Principles	Availability or Economic Factors	Considered /not considered as Food	Others	
Beef	20 (0.91)	1 (0.05)	5 (0.23)	2 (0.09)	0 (0.00)	3 (0.14)	1 (0.05)	0 (0.00)	22
Pork	15 (0.65)	3 (0.13)	8 (0.35)	2 (0.09)	0 (0.00)	3 (0.13)	1 (0.04)	0 (0.00)	23
Horse Meat	18 (0.78)	1 (0.04)	3 (0.13)	3 (0.13)	0 (0.00)	3 (0.13)	1 (0.04)	1 (0.04)	23
Spinach	15 (0.65)	0 (0.00)	18 (0.78)	1 (0.04)	0 (0.00)	1 (0.04)	0 (0.00)	0 (0.00)	23
Dog Meat	11 (0.48)	2 (0.09)	1 (0.04)	8 (0.35)	0 (0.00)	8 (0.35)	5 (0.22)	0 (0.00)	23
Milk	16 (0.70)	3 (0.13)	18 (0.78)	2 (0.09)	0 (0.00)	4 (0.17)	0 (0.00)	0 (0.00)	23
Sweets	19 (0.83)	1 (0.04)	8 (0.35)	1 (0.04)	0 (0.00)	1 (0.04)	0 (0.00)	3 (0.13)	23
Locusts	15 (0.68)	2 (0.09)	2 (0.09)	7 (0.32)	0 (0.00)	2 (0.09)	1 (0.05)	0 (0.00)	22
Butter	17 (0.77)	1 (0.05)	4 (0.18)	1 (0.05)	0 (0.00)	2 (0.09)	0 (0.00)	0 (0.00)	22
Whale Meat	16 (0.73)	2 (0.09)	1 (0.05)	4 (0.18)	0 (0.00)	1 (0.05)	1 (0.05)	0 (0.00)	22
French Fries	21 (0.95)	1 (0.05)	0 (0.00)	1 (0.05)	0 (0.00)	3 (0.14)	0 (0.00)	0 (0.00)	22
Full Cream	22 (1.00)	0 (0.00)	1 (0.05)	1 (0.05)	0 (0.00)	1 (0.05)	0 (0.00)	0 (0.00)	22

Note: Numbers in the brackets indicate the proportion of the participants who used each category.

Table 1.5. The number of the participants by categories in the answers to "Why do you think other people do not eat food A?" (NZ Sample)

Item	Category								Number of Participants
	Personal Preference	Personal Factors	Health or Physiological Factors	Social or Cultural Factors	Factors Based on General Principles	Availability or Economic Factors	Considered /not considered as Food	Others	
Beef	45 (0.40)	22 (0.20)	32 (0.29)	22 (0.20)	96 (0.86)	12 (0.11)	1 (0.01)	0 (0.00)	112
Pork	44 (0.39)	20 (0.18)	24 (0.21)	23 (0.20)	96 (0.85)	14 (0.12)	1 (0.01)	2 (0.02)	113
Horse Meat	15 (0.14)	38 (0.35)	6 (0.06)	35 (0.32)	38 (0.35)	21 (0.19)	46 (0.42)	0 (0.00)	109
Spinach	103 (0.90)	21 (0.18)	4 (0.04)	3 (0.03)	1 (0.01)	18 (0.16)	2 (0.02)	1 (0.01)	114
Dog Meat	10 (0.09)	31 (0.29)	5 (0.05)	35 (0.32)	30 (0.28)	11 (0.10)	57 (0.53)	0 (0.00)	108
Milk	71 (0.63)	4 (0.04)	74 (0.65)	3 (0.03)	39 (0.35)	14 (0.12)	0 (0.00)	0 (0.00)	113
Sweets	39 (0.35)	11 (0.10)	102 (0.90)	3 (0.03)	1 (0.01)	16 (0.14)	0 (0.00)	0 (0.00)	113
Locusts	23 (0.23)	39 (0.38)	3 (0.03)	24 (0.24)	5 (0.05)	28 (0.27)	37 (0.36)	0 (0.00)	102
Butter	48 (0.42)	3 (0.03)	96 (0.84)	5 (0.04)	26 (0.23)	12 (0.11)	0 (0.00)	0 (0.00)	114
Whale Meat	8 (0.07)	17 (0.16)	3 (0.03)	22 (0.20)	70 (0.65)	33 (0.31)	10 (0.09)	0 (0.00)	108
French Fries	34 (0.30)	9 (0.08)	101 (0.89)	6 (0.05)	2 (0.02)	16 (0.14)	1 (0.01)	0 (0.00)	113
Full Cream	49 (0.44)	8 (0.07)	92 (0.83)	3 (0.03)	16 (0.14)	16 (0.14)	0 (0.00)	1 (0.01)	111

Note: Numbers in the brackets indicate the proportion of the participants who used each category.

Table 1.6. The number of the participants by categories in the answers to "Why do you think other people do not eat food A?" (Japan Sample)

Item	Category								Number of Participants
	Personal Preference	Personal Factors	Health or Physiological Factors	Social or Cultural Factors	Factors Based on General Principles	Availability or Economic Factors	Considered /not considered as Food	Others	
Beef	12 (0.52)	3 (0.13)	1 (0.04)	2 (0.09)	19 (0.83)	1 (0.04)	1 (0.04)	0 (0.00)	23
Pork	13 (0.57)	4 (0.17)	1 (0.04)	2 (0.09)	17 (0.74)	1 (0.04)	1 (0.04)	0 (0.00)	23
Horse Meat	8 (0.35)	7 (0.30)	1 (0.04)	3 (0.13)	7 (0.30)	4 (0.17)	8 (0.35)	0 (0.00)	23
Spinach	21 (0.91)	3 (0.13)	1 (0.04)	1 (0.04)	0 (0.00)	0 (0.00)	1 (0.04)	0 (0.00)	23
Dog Meat	3 (0.13)	8 (0.35)	0 (0.00)	8 (0.35)	2 (0.09)	5 (0.22)	13 (0.57)	0 (0.00)	23
Milk	20 (0.87)	0 (0.00)	9 (0.39)	3 (0.13)	2 (0.09)	0 (0.00)	0 (0.00)	1 (0.04)	23
Sweets	19 (0.86)	2 (0.09)	6 (0.27)	1 (0.05)	0 (0.00)	0 (0.00)	0 (0.00)	2 (0.09)	22
Locusts	8 (0.36)	9 (0.41)	0 (0.00)	3 (0.14)	0 (0.00)	0 (0.00)	7 (0.32)	0 (0.00)	22
Butter	13 (0.65)	2 (0.10)	10 (0.50)	3 (0.15)	1 (0.05)	0 (0.00)	0 (0.00)	0 (0.00)	20
Whale Meat	8 (0.35)	4 (0.17)	0 (0.00)	6 (0.26)	11 (0.48)	4 (0.17)	3 (0.13)	0 (0.00)	23
French Fries	19 (0.86)	0 (0.00)	3 (0.14)	2 (0.09)	0 (0.00)	2 (0.09)	0 (0.00)	1 (0.05)	22
Full Cream	18 (0.86)	0 (0.00)	6 (0.29)	1 (0.05)	0 (0.00)	2 (0.10)	0 (0.00)	0 (0.00)	21

Note: Numbers in the brackets indicate the proportion of the participants who used each category.

Table 1.7. The number of the participants by categories in the answers to "Why do you eat food A?" (NZ Sample)

Item	Category								Number of Participants
	Personal Preference	Personal Factors	Health or Physiological Factors	Social or Cultural Factors	Factors Based on General Principles	Availability or Economic Factors	Considered /not considered as Food	Others	
Beef	66 (0.68)	23 (0.24)	42 (0.43)	3 (0.03)	3 (0.03)	29 (0.30)	2 (0.02)	0 (0.00)	97
Pork	76 (0.83)	13 (0.14)	10 (0.11)	3 (0.03)	2 (0.02)	20 (0.22)	0 (0.00)	0 (0.00)	92
Horse Meat	4 (0.67)	0 (0.00)	1 (0.17)	1 (0.17)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	6
Spinach	52 (0.54)	3 (0.03)	75 (0.77)	3 (0.03)	0 (0.00)	17 (0.18)	4 (0.04)	1 (0.01)	97
Dog Meat	1 (0.20)	4 (0.80)	1 (0.20)	0 (0.00)	0 (0.00)	0 (0.00)	1 (0.20)	0 (0.00)	5
Milk	53 (0.55)	8 (0.08)	77 (0.80)	2 (0.02)	1 (0.01)	9 (0.09)	1 (0.01)	0 (0.00)	96
Sweets	84 (0.83)	6 (0.06)	30 (0.30)	2 (0.02)	0 (0.00)	3 (0.03)	0 (0.00)	7 (0.07)	101
Locusts	0 (0.00)	2 (1.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	2
Butter	71 (0.76)	16 (0.17)	4 (0.04)	5 (0.05)	0 (0.00)	11 (0.12)	2 (0.02)	0 (0.00)	94
Whale Meat	0 (0.00)	0 (0.00)	0 (0.00)	1 (1.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1
French Fries	93 (0.88)	2 (0.02)	8 (0.08)	2 (0.02)	1 (0.01)	31 (0.29)	0 (0.00)	2 (0.02)	106
Full Cream	67 (0.82)	3 (0.04)	6 (0.07)	1 (0.01)	0 (0.00)	10 (0.12)	0 (0.00)	2 (0.02)	82

Note: Numbers in the brackets indicate the proportion of the participants who used each category.

Table 1.8. The number of the participants by categories in the answers to "Why do you eat food A?" (Japan Sample)

Item	Category								Number of Participants
	Personal Preference	Personal Factors	Health or Physiological Factors	Social or Cultural Factors	Factors Based on General Principles	Availability or Economic Factors	Considered /not considered as Food	Others	
Beef	18 (0.78)	2 (0.09)	4 (0.17)	0 (0.00)	0 (0.00)	5 (0.22)	1 (0.04)	0 (0.00)	23
Pork	16 (0.70)	2 (0.09)	5 (0.22)	0 (0.00)	0 (0.00)	6 (0.26)	1 (0.04)	0 (0.00)	23
Horse Meat	7 (0.54)	1 (0.08)	1 (0.08)	1 (0.08)	0 (0.00)	6 (0.46)	0 (0.00)	0 (0.00)	13
Spinach	7 (0.30)	1 (0.04)	15 (0.65)	1 (0.04)	0 (0.00)	6 (0.26)	1 (0.04)	0 (0.00)	23
Dog Meat	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0
Milk	13 (0.59)	2 (0.09)	14 (0.64)	0 (0.00)	0 (0.00)	3 (0.14)	0 (0.00)	0 (0.00)	22
Sweets	19 (0.83)	1 (0.04)	4 (0.17)	0 (0.00)	0 (0.00)	2 (0.09)	0 (0.00)	1 (0.04)	23
Locusts	3 (0.33)	2 (0.22)	2 (0.22)	0 (0.00)	0 (0.00)	4 (0.44)	0 (0.00)	0 (0.00)	9
Butter	18 (0.82)	0 (0.00)	1 (0.05)	0 (0.00)	0 (0.00)	3 (0.14)	0 (0.00)	0 (0.00)	22
Whale Meat	5 (0.31)	3 (0.19)	0 (0.00)	0 (0.00)	0 (0.00)	10 (0.63)	0 (0.00)	0 (0.00)	16
French Fries	20 (0.87)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	7 (0.30)	1 (0.04)	0 (0.00)	23
Full Cream	19 (0.90)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	3 (0.14)	0 (0.00)	0 (0.00)	21

Note: Numbers in the brackets indicate the proportion of the participants who used each category.

Table 1.9. The number of the participants by categories in the answers to "Why don't you eat food A?" (NZ Sample)

Item	Category								Number of Participants
	Personal Preference	Personal Factors	Health or Physiological Factors	Social or Cultural Factors	Factors Based on General Principles	Availability or Economic Factors	Considered /not considered as Food	Others	
Beef	0 (0.00)	0 (0.00)	0 (0.00)	1 (0.50)	1 (0.50)	0 (0.00)	0 (0.00)	0 (0.00)	2
Pork	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	2 (1.00)	0 (0.00)	0 (0.00)	0 (0.00)	2
Horse Meat	8 (0.08)	31 (0.32)	1 (0.01)	17 (0.17)	11 (0.11)	30 (0.31)	48 (0.49)	0 (0.00)	98
Spinach	2 (0.40)	3 (0.60)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	5
Dog Meat	2 (0.02)	38 (0.38)	3 (0.03)	17 (0.17)	12 (0.12)	12 (0.12)	64 (0.65)	0 (0.00)	99
Milk	5 (0.63)	1 (0.13)	3 (0.38)	0 (0.00)	1 (0.13)	0 (0.00)	0 (0.00)	0 (0.00)	8
Sweets	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0
Locusts	15 (0.15)	38 (0.39)	3 (0.03)	11 (0.11)	0 (0.00)	38 (0.39)	31 (0.32)	0 (0.00)	97
Butter	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0
Whale Meat	1 (0.01)	19 (0.19)	0 (0.00)	8 (0.08)	63 (0.62)	36 (0.35)	15 (0.15)	0 (0.00)	102
French Fries	0 (0.00)	1 (1.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1
Full Cream	6 (0.50)	1 (0.08)	6 (0.50)	0 (0.00)	0 (0.00)	3 (0.25)	0 (0.00)	0 (0.00)	12

Note: Numbers in the brackets indicate the proportion of the participants who used each category.

Table 1.10. The number of the participants by categories in the answers to "Why don't you eat food A?" (Japan Sample)

Item	Category								Number of Participants
	Personal Preference	Personal Factors	Health or Physiological Factors	Social or Cultural Factors	Factors Based on General Principles	Availability or Economic Factors	Considered /not considered as Food	Others	
Beef	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0
Pork	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0
Horse Meat	0 (0.00)	1 (0.11)	0 (0.00)	0 (0.00)	0 (0.00)	8 (0.89)	0 (0.00)	1 (0.11)	9
Spinach	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0
Dog Meat	2 (0.09)	6 (0.26)	0 (0.00)	3 (0.13)	0 (0.00)	10 (0.43)	12 (0.52)	0 (0.00)	23
Milk	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0
Sweets	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0
Locusts	2 (0.14)	5 (0.36)	0 (0.00)	0 (0.00)	0 (0.00)	7 (0.50)	4 (0.29)	0 (0.00)	14
Butter	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0
Whale Meat	1 (0.17)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	6 (1.00)	0 (0.00)	0 (0.00)	6
French Fries	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0
Full Cream	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0

Note: Numbers in the brackets indicate the proportion of the participants who used each category.

Table 2.1. The recording date and number of commercials

	Recording Date	Number of commercials
TV1 (New Zealand)	01 December 2002	18
TV2 (New Zealand)	30 November 2002	74
TV3 (New Zealand)	02 December 2002	39
NTV (Japan)	22 January 2003	88
TBS (Japan)	23 January 2003	100
CX (Japan)	24 January 2003	82
ANB (Japan)	29 January 2003	67
TX (Japan)	30 January 2003	60

Note: All details of commercials are given in Appendix A and Appendix B.

Table 2.2. The numbers of factual statements in each food type (NZ Sample)

Type of factual statements	Food Type: Alcoholic drink	Confectionery	Fresh food	Nutritional supplements, Functional foods	Preserved food, Ready meals	Restaurants, Shops	Seasoning, Sauce Mix	Soft drink	Total
TA Taste: Food A has good / bad taste, texture, smell, appearance	0	18	1	0	0	2	1	10	32
MD Material for dish: Food A becomes the material of good/bad Dish B	0	1	1	0	0	0	3	0	5
NV Nutritional Value: Food A has good / bad nutritional value	0	3	1	2	0	0	2	4	12
HC Health Consequences: Food A causes good / bad health consequence	0	2	1	1	0	0	0	2	6
PD Production: Food A came from good / bad production processes	0	0	0	0	0	0	0	1	1
MT Materials: Food A is made from good/bad materials	0	0	1	0	0	0	2	0	3
EC Economics: Food A is eaten / not eaten because of economical reasons	0	0	0	1	0	11	0	0	12
QT Quantity: Food A is offered in plenty or adequate in quantity	0	0	0	0	1	0	0	0	1
ES Easy to cook: Food A is easy / difficult to cook	0	0	1	1	0	0	1	0	3
SO Sold well: Food A has sold well	1	0	0	0	0	0	0	0	1
PZ Prize: Buying Food Acould get a prize	1	7	1	0	0	4	1	4	18
OT Other factual statements	1	0	0	0	0	2	1	0	4
NK No factual statements used	4	17	2	0	2	1	0	7	33

Table 2.3. The numbers of factual statements in each food type (Japan Sample)

Type of factual statements	Food Type: Alcoholic drink	Confectionery	Fresh food	Nutritional supplements, Functional foods	Preserved food, Ready meals	Restaurants, Shops	Seasoning, Sauce Mix	Soft drink	Total
TA Taste: Food A has good / bad taste, texture, smell, appearance	12	12	6	2	19	6	12	12	81
MD Material for dish: Food A becomes the material of good/bad Dish B	0	2	1	0	7	0	13	2	25
NV Nutritional Value: Food A has good / bad nutritional value	2	2	0	11	2	1	5	5	28
HC Health Consequences: Food A causes good / bad health consequence	0	4	0	13	0	0	5	5	27
PD Production: Food A came from good / bad production processes	1	0	4	8	6	1	1	3	24
MT Materials: Food A is made from good/bad materials	1	1	4	4	7	6	6	2	31
OF Official: Food A is officially forbidden or authorised	0	1	1	2	0	0	0	2	6
EC Economics: Food A is eaten / not eaten because of economical reasons	1	0	0	0	1	9	0	1	12
QT Quantity: Food A is offered in plenty or adequate in quantity	1	1	2	1	2	0	1	0	8
ES Easy to cook: Food A is easy / difficult to cook	0	0	1	1	2	1	5	1	11
SO Sold well: Food A has sold well	2	0	0	1	0	0	1	0	4
PZ Prize: Buying Food Acould get a prize	4	4	0	0	5	3	2	2	20
OT Other factual statements	1	7	4	4	1	1	6	2	26
NK No factual statements used	6	13	0	2	2	1	3	11	38

Table 2.4. The numbers of commercials in which each rhetorical strategy used in each food type

	Food Type								
	Alcoholic drink	Confectionery	Fresh food	Nutritional supplements, Functional	Preserved food, Ready meals	Restaurants, Shops	Seasoning, Sauce Mix	Soft drink	Total
					New Zealand Sample				
Quantification Use	1 (14.29%)	4 (9.30%)	1 (14.29%)	1 (50.00%)	1 (33.33%)	11 (61.11%)	1 (12.50%)	2 (8.00%)	22
Narrative Use	0 (0.00%)	1 (2.33%)	1 (14.29%)	2 (100.00%)	0 (0.00%)	1 (5.56%)	2 (25.00%)	3 (12.00%)	10
Enumeration Use	0 (0.00%)	2 (4.65%)	1 (14.29%)	2 (100.00%)	0 (0.00%)	6 (33.33%)	0 (0.00%)	2 (8.00%)	13
					Japan Sample				
Quantification Use	6 (25.00%)	3 (7.69%)	4 (28.57%)	10 (38.46%)	8 (20.51%)	9 (45.00%)	8 (20.51%)	3 (7.69%)	51
Narrative Use	1 (4.17%)	2 (5.13%)	0 (0.00%)	8 (30.77%)	1 (2.56%)	1 (5.00%)	3 (7.69%)	1 (2.56%)	17
Enumeration Use	0 (0.00%)	2 (5.13%)	2 (14.29%)	6 (23.08%)	5 (12.82%)	4 (20.00%)	1 (2.56%)	3 (7.69%)	23

Note: Numbers in the brackets indicate the percentage of total number of the commercials in each food type.

Table 2.5. The frequencies of the combination of two factual statements (NZ Samples)

Statement 1	Statement 2	Frequency
TA Taste: Food A has good / bad taste, texture, smell, appearance	NV Nutritional Value: Food A has good / bad nutritional value	3
TA Taste: Food A has good / bad taste, texture, smell, appearance	HC Health Consequences: Food A causes good / bad health consequence	3
NV Nutritional Value: Food A has good / bad nutritional value	HC Health Consequences: Food A causes good / bad health consequence	3
NV Nutritional Value: Food A has good / bad nutritional value	ES Easy to cook: Food A is easy / difficult to cook	2
TA Taste: Food A has good / bad taste, texture, smell, appearance	PD Production: Food A came from good / bad production processes	1
MD Material for dish: Food A becomes the material of good/bad Dish	NV Nutritional Value: Food A has good / bad nutritional value	1
NV Nutritional Value: Food A has good / bad nutritional value	MT Materials: Food A is made from good/bad materials	1
MD Material for dish: Food A becomes the material of good/bad Dish	HC Health Consequences: Food A causes good / bad health consequence	1
MT Materials: Food A is made from good/bad materials	ES Easy to cook: Food A is easy / difficult to cook	1
HC Health Consequences: Food A causes good / bad health consequence	ES Easy to cook: Food A is easy / difficult to cook	1
NV Nutritional Value: Food A has good / bad nutritional value	EC Economics: Food A is eaten / not eaten because of economical reasons	1

Table 2.6. The frequencies of the combination of two factual statements (Japan Samples)

Statement 1	Statement 2	Frequency
NV Nutritional Value: Food A has good / bad nutritional value	HC Health Consequences: Food A causes good / bad health consequence	13
TA Taste: Food A has good / bad taste, texture, smell, appearance	MT Materials: Food A is made from good/bad materials	9
TA Taste: Food A has good / bad taste, texture, smell, appearance	ES Easy to cook: Food A is easy / difficult to cook	6
TA Taste: Food A has good / bad taste, texture, smell, appearance	NV Nutritional Value: Food A has good / bad nutritional value	5
PD Production: Food A came from good / bad production processes	MT Materials: Food A is made from good/bad materials	5
TA Taste: Food A has good / bad taste, texture, smell, appearance	PD Production: Food A came from good / bad production processes	4
NV Nutritional Value: Food A has good / bad nutritional value	PD Production: Food A came from good / bad production processes	4
NV Nutritional Value: Food A has good / bad nutritional value	OF Official: Food A is officially forbidden or authorised	4
MT Materials: Food A is made from good/bad materials	QT Quantity: Food A is offered in plenty or adequate in quantity	3
HC Health Consequences: Food A causes good / bad health consequence becomes the material of good/bad Dish B	OF Official: Food A is officially forbidden or authorised	3
	ES Easy to cook: Food A is easy / difficult to cook	3
TA Taste: Food A has good / bad taste, texture, smell, appearance	EC Economics: Food A is eaten / not eaten because of economical reasons	3
TA Taste: Food A has good / bad taste, texture, smell, appearance	QT Quantity: Food A is offered in plenty or adequate in quantity	2
HC Health Consequences: Food A causes good / bad health consequence	PD Production: Food A came from good / bad production processes	2
NV Nutritional Value: Food A has good / bad nutritional value	MT Materials: Food A is made from good/bad materials	2
MD Material for dish: Food A becomes the material of good/bad Dish	MT Materials: Food A is made from good/bad materials	2
HC Health Consequences: Food A causes good / bad health consequence	MT Materials: Food A is made from good/bad materials	2
TA Taste: Food A has good / bad taste, texture, smell, appearance	MD Material for dish: Food A becomes the material of good/bad Dish	2
TA Taste: Food A has good / bad taste, texture, smell, appearance	HC Health Consequences: Food A causes good / bad health consequence	2
HC Health Consequences: Food A causes good / bad health consequence	ES Easy to cook: Food A is easy / difficult to cook	2
MT Materials: Food A is made from good/bad materials	EC Economics: Food A is eaten / not eaten because of economical reasons	2
OF Official: Food A is officially forbidden or authorised	QT Quantity: Food A is offered in plenty or adequate in quantity	1
NV Nutritional Value: Food A has good / bad nutritional value	QT Quantity: Food A is offered in plenty or adequate in quantity	1

(table continues)

Table 2.6. (continued)

Statement 1	Statement 2	Frequency
EC Economics: Food A is eaten / not eaten because of economical reasons	QT Quantity: Food A is offered in plenty or adequate in quantity	1
MD Material for dish: Food A becomes the material of good/bad Dish	OF Official: Food A is officially forbidden or authorised	1
MD Material for dish: Food A becomes the material of good/bad Dish	HC Health Consequences: Food A causes good / bad health consequence	1
QT Quantity: Food A is offered in plenty or adequate in quantity	ES Easy to cook: Food A is easy / difficult to cook	1
MT Materials: Food A is made from good/bad materials	ES Easy to cook: Food A is easy / difficult to cook	1
NV Nutritional Value: Food A has good / bad nutritional value	EC Economics: Food A is eaten / not eaten because of economical reasons	1

Table 3.1. Categorisation of collaborative talks according to their conversational properties

Who is the Listener?	Conversational properties: Has the listener previously got the information?	Has the 2nd speaker previously got the information?	Is there disagreement between the 2nd speaker and the listener?	Hayashi (2003)'s category
3rd person	Yes	Yes	No	(1) Interactive achievement of shared perspective
	Yes	Yes	Yes	(1) Interactive achievement of shared perspective
	No	Yes	No	(1) Interactive achievement of shared perspective (4) Assisted explaining
	No	Yes	Yes	(1) Interactive achievement of shared perspective
1st speaker	Yes	Yes	No	(1) Interactive achievement of shared perspective (5) Delivering a response in the form of co-participant completion
	Yes	Yes	Yes	(5) Delivering a response in the form of co-participant completion (6) Converting a dispreferred action to preferred action
	Yes	No	No	(2) Differential displays of empathetic understanding of another's experience (3) Demonstrating shared yet independent knowledge (5) Delivering a response in the form of co-participant completion
	Yes	No	Yes	(5) Delivering a response in the form of co-participant completion
	No	Yes	No	(5) Delivering a response in the form of co-participant completion
	No	Yes	Yes	(5) Delivering a response in the form of co-participant completion

Table 3.2. The number of sentence completions

Group	The number of sentence completions	The number of sentence completion sequences	The length of the conversations (minutes)	The number of sentence completions per minute	The number of sentence completion sequences per minute
Group 1	21	9	27	0.78	0.33
Group 2	12	8	30	0.40	0.27
Group 3	13	10	44	0.30	0.23
Group 4	18	14	44	0.41	0.32
Total	64	41	145	0.44	0.28

Table 3.3. The number of sentence completion sequences according to their conversational properties

Who was the Listener?	Conversational properties: Had the listener previously got the information?	Had the 2nd speaker previously got the information?	Was there disagreement between the 2nd speaker and the listener?	The number of sentence completion sequences
3rd person	No	Yes	No	8
	No	Yes	Yes	1
	Yes	Yes	Yes	2
1st speaker	Yes	Yes	No	8
	Yes	Yes	Yes	1
	Yes	No	No	10
	Yes	No	Yes	1
Unidentified	Unidentified	Yes		9
	Unidentified	No		1

Table 3.4. The number of sentence completion sequences according to who was the listener and whether the listener had previously got the information

Who was the Listener?	Number	Whether the listener had previously got the information	The context employed to identify	Number
The 3rd person	11	Had not got	Followed the question by the 3rd person	6
		Had not got	Collaborative refutation to the 3rd person	1
		Had got	Collaborative refutation to the 3rd person	2
		Had not got	Other context	2
The 1st speaker	20	Had got	Affirmation or negation by the 1st speaker	17
		Had got	Other context	3
Unidentified	10			

Table 3.5. The number of sentence completion sequences according to whether the second speaker had previously got the information or not

Whether the second speaker had previously got the information	Number	The context employed to identify	Number
Had got	30	Shared experience of 1st and 2nd speaker	2
		Followed the question by the 3rd person	6
		Collaborative refutation to the 3rd person	3
		Other context	19
Had not got	11	Private experience of 1st speaker	8
		Other context	3

Table 4.1. Categorisation of sentence completion according to the results of Study 3

Category	The Listener	Inferred function
The case when the first speaker is a listener	1st speaker	Activating conversations
Collaborative refutation to the third person	3rd person	Establishg 'facts'
Assisted explaining	3rd person	Establishg 'facts' /Working as 'gifts'
Collaborative construction of factual statements (with the agreement showing grammatical unit)	Unidentified	Unknown
Collaborative construction of attitude (with the agreement showing grammatical unit)	Unidentified	Unknown
Collaborative construction of factual statements (without the agreement showing grammatical unit)	Unidentified	Unknown
Collaborative construction of attitude (without the agreement showing grammatical unit)	Unidentified	Unknown

Table 4.2. The participants of Study 4

Group	Participant	Gender	Age
Group 1 (Members of science fiction fan club 1)	Participant 1	M	29
	Participant 2	M	45
	Participant 3	M	39
	Participant 4	M	31
Group 2 (Members of science fiction fan club 2)	Participant 5	M	25
	Participant 6	F	31
	Participant 7	M	33
	Participant 8	M	40
Group 3 (Members of a balalaika ensemble)	Participant 9	F	53
	Participant 10	M	72
	Participant 11	F	80
	Participant 12	F	57
Group 4 (Members of a balalaika ensemble)	Participant 13	F	52
	Participant 14	F	49
	Participant 15	F	51
	Participant 16	F	52
Group 5 (A family and their friend)	Participant 17	F	75
	Participant 18	F	44
	Participant 19	F	39
	Participant 20	F	59

Table 4.3. Topics of Study 4

Group	Session	Condition	Topic
Group 1	Session 1	All agree	Europeans who oppose eating whale meat are ethnocentric
	Session 2	Some agree	To eat sweet things after drinking is unhealthy
	Session 3	Some agree	Milk is the best calcium source
	Session 4	All agree	Spinach is bad for your health because of oxalic acid
	Session 5	Some agree	An intravenous drip is a kind of meals
	Session 6	All agree	American beef is safe from Mad Cow Disease
	Session 7	All agree	Horse meat isn't eaten in any Western countries
	Session 8	Some agree	Japanese Sake is less healthy than wine
Group 2	Session 1	Some agree	Salty soup is good for a hangover
	Session 2	All agree	People are too nervous about Genetically modified foods
	Session 3	All agree	The expression of '100% juice from concentrate' is odd
	Session 4	Some agree	The proper recipe for Dojo-nabe (loach cooked in hot pot) is boiling living loaches
	Session 5	All agree	People who oppose eating dog meat are ethnocentric
	Session 6	Some agree	Green spring onion must not be called 'spring onion'
	Session 7	Some agree	The blanket testing of Mad Cow Disease should be conducted
	Session 8	All agree	Pepsi Blue' cola is acceptable as a beverage

(table continues)

Table 4.3. (continued)

Group	Session	Condition	Topic
Group 3	Session 1	All agree	Europeans who oppose eating whale meat are ethnocentric
	Session 2	Some agree	Spinach is bad for your health because of oxalic acid
	Session 3	Some agree	Salamander is 'Getemono' (bizarre food)
	Session 4	All agree	Miso soup is the best for a hangover
	Session 5	Some agree	Living on plain diet is good for the health
	Session 6	All agree	Green soybeans suit for beer
	Session 7	All agree	The best salmon dish is salted salmon
	Session 8	Some agree	In some area, there are spring onions which have an intermediate form between green spring onions and long spring onions
Group 4	Session 1	Some agree	Musen-mai (rice that doesn't require washing)' is convenience
	Session 2	All agree	Nabe (a hot pot cooked at the table) is healthy and convenience Japanese cuisine
	Session 3	All agree	Living on plain diet is good for the health
	Session 4	Some agree	Nutritional supplements are good for the health
	Session 5	All agree	Eating bread gain weight more than eating rice
	Session 6	Some agree	Imported vegetables are not safe
	Session 7	Some agree	Caspian Sea yoghurt is good for the health
	Session 8	All agree	Blue-fish is good for the health

(table continues)

Table 4.3. (continued)

Group	Session	Condition	Topic
Group 5	Session 1	All agree	The principal food for the Japanese is rice
	Session 2	Some agree	We should eat fish rather than meats
	Session 3	Some agree	Unpolished rice is not always good for the health
	Session 4	All agree	Brightly coloured vegetables are good for the health
	Session 5	Some agree	We must have a breakfast
	Session 6	All agree	Foods in season are good for the health
	Session 7	All agree	Japanese beef is not always safe
	Session 8	Some agree	Nutritional supplements are good for the health

Table 4.4. The number of sentence completion turns in each group

Group	The number of sentence completion turns	The length of the conversations (minutes)	The number of sentence completions per minute
Group 1	5	62	0.08
Group 2	52	78	0.67
Group 3	51	79	0.65
Group 4	74	74	1.00
Group 5	76	78	0.97
Total	258	371	0.70

Table 4.5. The numbers of sentence completion turns

Participant	Gender	Number of turns	The proportion in all turns
Participant 1	M	1	0.018
Participant 2	M	0	0.000
Participant 3	M	3	0.012
Participant 4	M	1	0.007
Participant 5	M	17	0.045
Participant 6	F	25	0.058
Participant 7	M	4	0.014
Participant 8	M	6	0.022
Participant 9	F	15	0.021
Participant 10	M	3	0.004
Participant 11	F	22	0.045
Participant 12	F	11	0.028
Participant 13	F	26	0.050
Participant 14	F	16	0.041
Participant 15	F	20	0.035
Participant 16	F	12	0.047
Participant 17	F	10	0.032
Participant 18	F	10	0.022
Participant 19	F	29	0.071
Participant 20	F	27	0.048

Table 4.6. The numbers of sentence completion turns according to the categories

Category	Group					
	Group 1	Group 2	Group 3	Group 4	Group 5	Total
The sentence completions when the first speaker is a listener	2	23	21	30	35	111
Collaborative refutation to the third person	1	2	5	0	2	10
Assisted explaining	1	3	3	2	0	9
Collaborative construction of factual statements (with grammatical unit)	0	0	8	14	4	26
Collaborative construction of attitude (with grammatical unit)	0	0	1	0	0	1
Collaborative construction of factual statements (without grammatical unit)	1	20	13	27	31	92
Collaborative construction of attitude (without grammatical unit)	0	4	0	1	4	9
Total	5	52	51	74	76	258

Table 4.7. The number of collaborative construction of factual statements according to the categories

Category	Condition	
	Some agree	All agree
With grammatical unit		
Factual statements that just paraphrase of the topic	0	2
Factual statements warranting or negating the topic	4	6
Factual statements relevant to the topic	4	6
Other factual statements	1	3
Total	9	17
Without grammatical unit		
Factual statements that just paraphrase of the topic	0	4
Factual statements warranting or negating the topic	7	13
Factual statements relevant to the topic	15	31
Other factual statements	3	3
Total	25	51

Table 4.8. The list of co-constructed statements warranting or negating the topic in the 'Some agree' condition

Co-constructed statement	The Topic
With Grammatical Unit	
The amount of oxalic acid in vegetables is little	Spinach is bad for your health because of oxalic acid
There is not sticky and soft yoghurt on the market	Caspian Sea yoghurt is good for the health
As to unpolished rice we eat the part which is most affected by chemicals	Unpolished rice is not always good for the health
There is a sceptical feeling how much vitamins we can take from what we cook	Nutritional supplements are good for the health
Without Grammatical Unit	
There is not much effect with eating prion	The blanket testing of Mad Cow Disease should be conducted
Living long is not limited that they all eat plain diet	Living on plain diet is good for the health
For elder people, it is impossible to taking all minerals from	Nutritional supplements are good for the health
We got a news about agricultural chemicals in Chinese	Imported vegetables are not safe
When we think of the pollution of the seas, inshore fish cannot be said to be good indiscriminately	We should eat fish rather than meats
Vitamin B2 or vitamin B16 or something is in unpolished rice	Unpolished rice is not always good for the health
They say often that it is a diet to eat punctually three times a	We must have a breakfast

Table 4.9. The list of co-constructed statements warranting or negating the topic in the 'All agree' condition

Co-constructed statement	The Topic
With Grammatical Unit	
People of many countries such as Norway do not oppose to	Europeans who oppose eating whale meat are ethnocentric
It is wonderful that there is a taste of 'nabe' in each family We can eat quite a lot of vegetables with 'nabe' There isn't thing that doesn't suit 'nabe'	Nabe' is healthy and convenience Japanese cuisine
Bread is high in calories We spread something on toast	Eating bread gain weight more than eating rice
Without Grammatical Unit	
To say it’s 100 percent juice after reducing with water is	The expression of '100% juice from concentrate' is odd
Pepsi Blue is bluer than the blue rose	Pepsi Blue' cola is acceptable as a beverage
Green soybeans are a little tough	Green soybeans suit for beer
In ‘nabe’ the vegetables and meat all go in, so the balance of nutrition is good If the housewife leaves vegetables for 'nabe', everyone can eat at once so it is a very good way of cooking If it’s ‘nabe’, the father can eat it as a relish while he drinks	Nabe' is healthy and convenience Japanese cuisine
DHA is good for the prevention of aging and it bring down high blood pressure and cholesterol The fat of fish is better than the fat of the meat The other day, they were talking about something of blue-fish on the television	Blue-fish is good for the health

(table continues)

Table 4.9. (continued)

Co-constructed statement	The Topic
Without Grammatical Unit	
When we make simmered Japanese radish and yellowtail in summer, it is not tasty any longer The vegetables are most vigorous at the best time, so the power that they possess is enormous	Foods in season are good for the health
Not only in America, but in Japan, they do suspicious things on meats There is not any ground to say that the products of certain countries are safe	Japanese beef is not always safe

Table 4.10. The list of co-constructed statements relevant to the topic in the 'Some agree' condition

Co-constructed statement	The Topic
With Grammatical Unit	
In Japan, the people of Tohoku region die young because they take too much salt	Living on plain diet is good for the health
Eels from China are different Eels from China are cheap We doubt whether Japanese products are safe	Imported vegetables are not safe
Without Grammatical Unit	
In the pot, there are white spring onions cut obliquely or I cut into cylinder shaped In the story of ”Meguro no Sanma", when they eat ‘Negima-nabe, the soup comes out powerfully from the inner part of	Green spring onion must not be called 'spring onion'
Spinach of long ago also contained a lot of oxalic acid	Spinach is bad for your health because of oxalic acid
In Japan, the people of Tohoku region die young because they take too much salt	Living on plain diet is good for the health
In Kyoto where the court nobles resided people did not labour Simonita spring onions are all white The green part Simonita spring onion cannot be eaten	In some area, there are spring onions which have an intermediate form between green spring onions and long
There is a ‘Musen-mai’ course in the rice cookers	Musen-mai' is convenience

(table continues)

Table 4.10. (continued)

Co-constructed statement	The Topic
Without Grammatical Unit	
We need not eat imported bad tasting things because we are old and we need not buy a lot The regulations of agricultural chemicals are strict in Japan The price of California lemons is different to Japanese lemons If lemons with agricultural chemicals pass the custom, after that stage they can't identify	Imported vegetables are not safe
If we know correctly the trader or the place from where they were laid in, we would know whether they would be all right	We should eat fish rather than meats
Vitamin B2 and so on will remain in the body	Unpolished rice is not always good for the health
If we eat before we go to sleep, we do not do any exercise as digestion, so we will become 'cows'	We must have a breakfast

Table 4.11. The list of co-constructed statements relevant to the topic in the 'All agree' condition

Co-constructed statement	The Topic
With Grammatical Unit	
The bitter experience lasts long When we are drunk the water for sobering up is tasty	Miso soup is the best for a hangover
For young people, the balanced diet is hard when they are living alone It takes time to make plain diet	Living on plain diet is good for the health
People of long ago ate healthy foods without knowing much	Blue-fish is good for the health
The component named peptic something in cucumber destroys beta carotene	Brightly coloured vegetables are good for the health
Without Grammatical Unit	
If they investigate, They will decipher that they are the DNA fragments of genetically modified soy beans	People are too nervous about Genetically modified foods
When they enclose natural fruit juice 100 percent in cans, they add the pressure The idea to say the juice 120 percent is astonishing If we squeeze an orange whose taste is strong it would become 120 percent If something like Fanta with fruit juice 100 percent will be produced, it is the same as fruit juice 120 percent	The expression of '100% juice from concentrate' is odd
There was a story named “Moby-Dick” Many blue whales can’t be caught	Europeans who oppose eating whale meat are ethnocentric

(table continues)

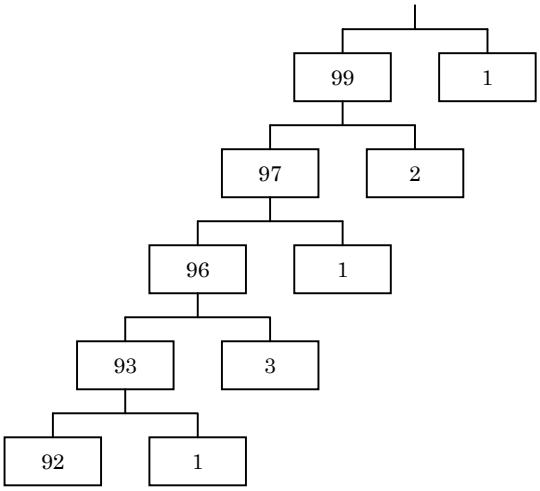
Table 4.11. (continued)

Co-constructed statement	The Topic
Without Grammatical Unit	
We rub green soybeans in salt lightly and just boil	Green soybeans suit for beer
There isn't any nutrition in the salmon that have come up the In former days, when we opened the belly of salmon, there was a lot of salt	The best salmon dish is salted salmon
Years, ago, there were not Italian foods and such things so they ate Japanese foods Balanced diet is difficult for young people living alone	Living on plain diet is good for the health
Girls like bread more than boys We can buy a few breads for ourselves though they are	Eating bread gain weight more than eating rice
Sardines were also cheap long ago	Blue-fish is good for the health
There is time when we don't bother to cook rice If we buy cooked foods, we can get away from an anxiety whether we have turned off the gas	The principal food for the Japanese is rice

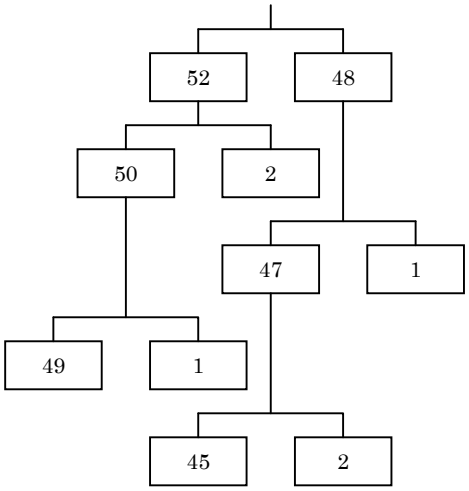
(table continues)

Table 4.11. (continued)

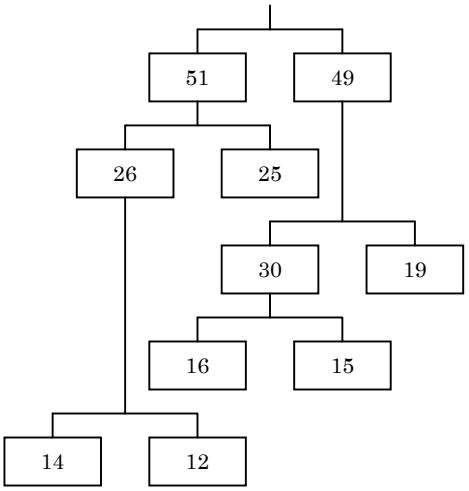
Co-constructed statement	The Topic
Without Grammatical Unit	
If we eat only carrots all the time, it is not good Brightly coloured vegetables are ones whose colour is deep Tomato is brightly coloured vegetable If we eat tomato as juice, you can absorb lycopene perfectly than to eat it fresh It's better to boil carrots than to drink them as juice Butter sauté of spinach and so on is better than boiled spinach The manure of those days was organic human faeces, so the worms increased rapidly Cooked pumpkin with sake, sweet sake, sugar, and soy sauce is the most standard The seeds of pumpkin are a little hard	Brightly coloured vegetables are good for the health
While broccoli has become popular recently, cauliflower has When there are some Brussels sprouts, they give us a gorgeous feeling	Foods in season are good for the health
The beef bowls of 'Yoshinoya' used beef produced in For the present, they had tested beef and said it became all There may be a vague impression that in Australia, the technology is not developed as in America	Japanese beef is not always safe



(a) social knowledge is found to be shared by most of the members



(b) two groups with different social knowledges are found



(c) social knowledge is not found to be shared by members

Figure 1.1. Idealized cluster analysis results showing the number of members in each cluster (from a 2 cluster solutions to a 6 cluster solution)

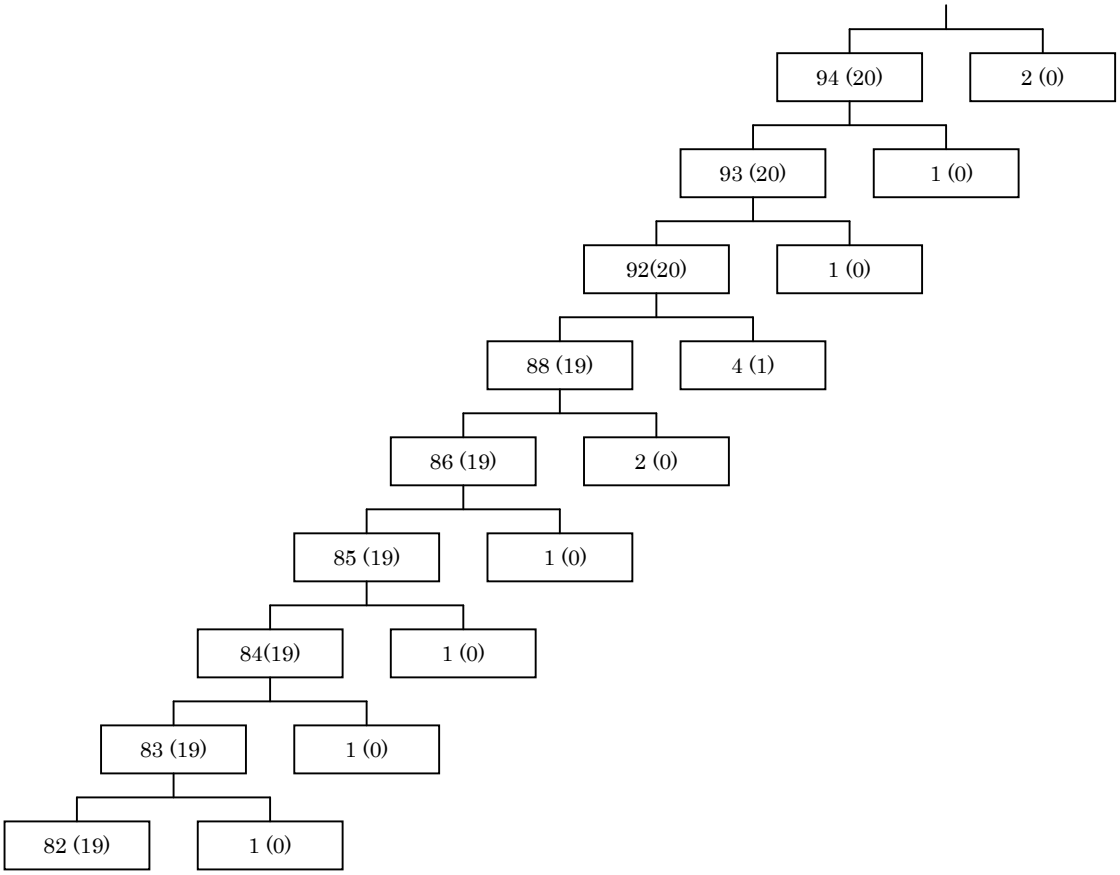


Figure 1.2. The number of participants in each cluster in the results of cluster analysis (from 2 cluster solution to 10 cluster solution) of the answers to "Why do you think some people eat food A?" (NZ + Japan samples). Note: Numbers in the brackets indicate the number of Japanese participants included in the total shown

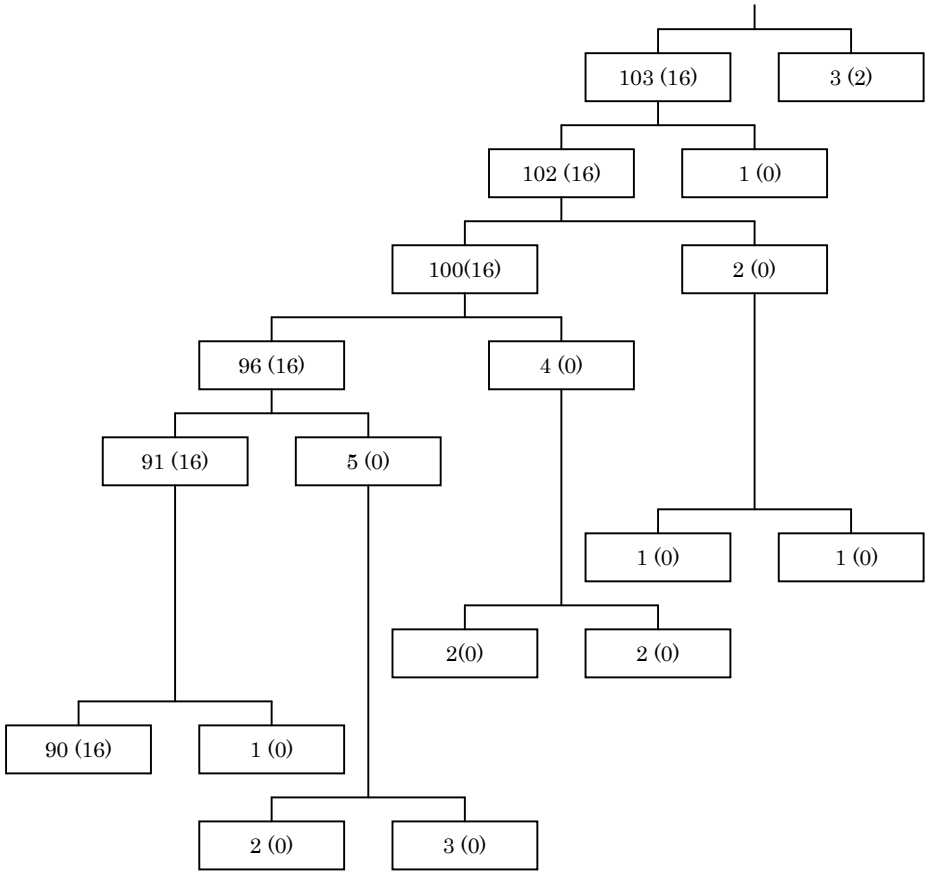


Figure 1.3. The number of participants in each cluster in the results of cluster analysis (from 2 cluster solution to 10 cluster solution) of the answers to "Why do you think other people do not eat food A?" (NZ + Japan samples). Note: Numbers in the brackets indicate the number of Japanese participants included in the total shown

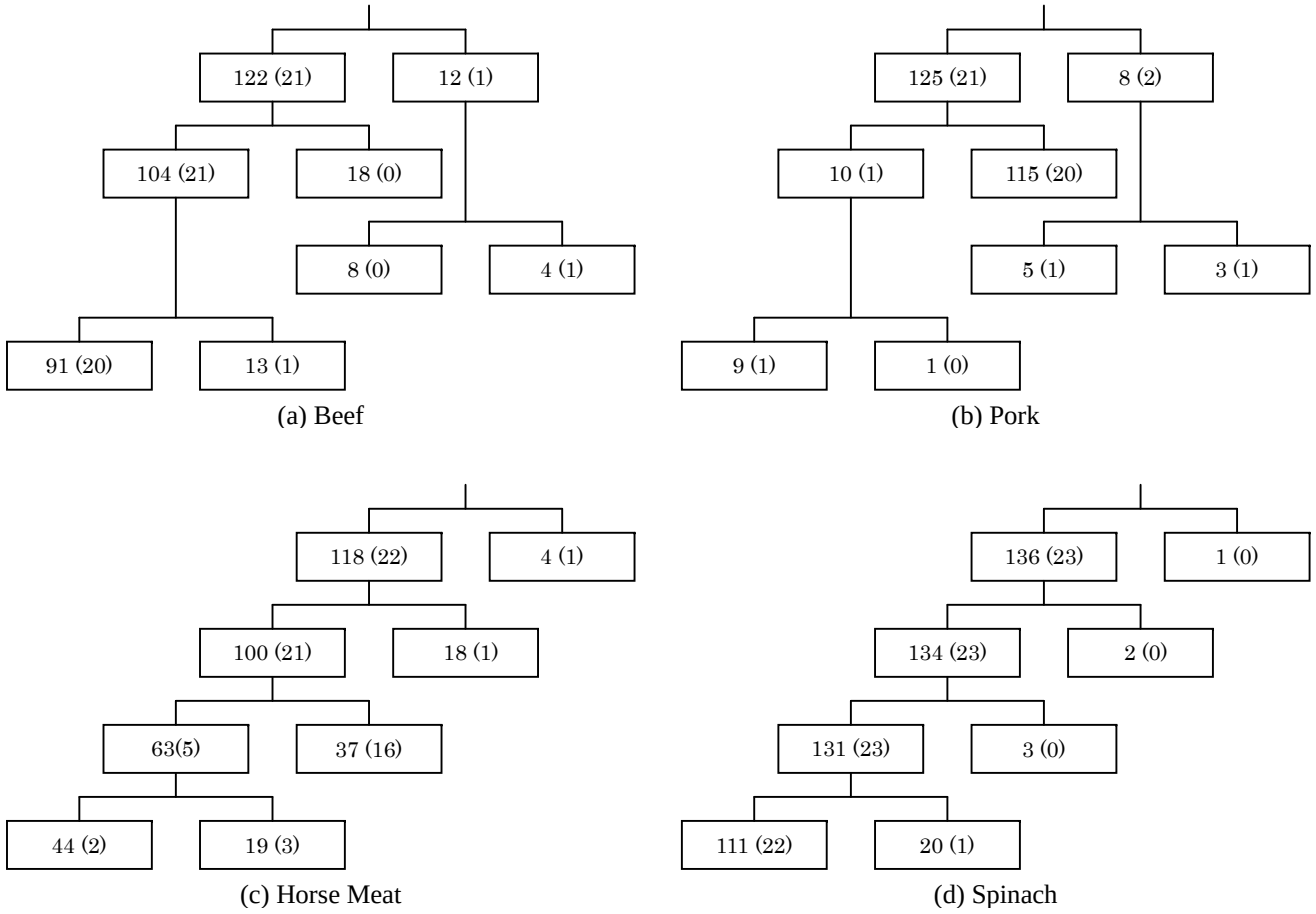
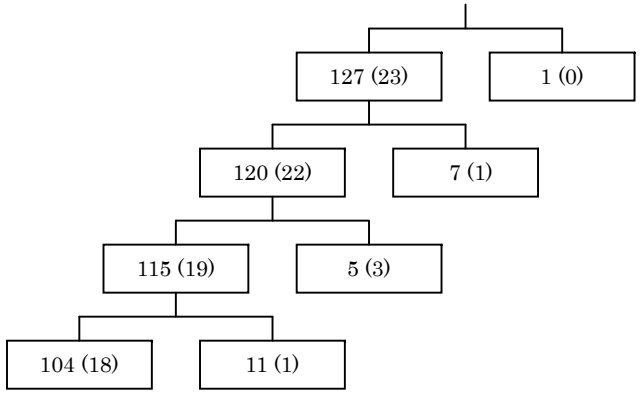
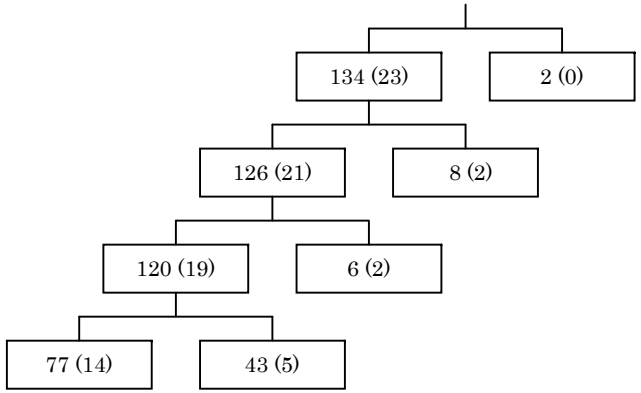


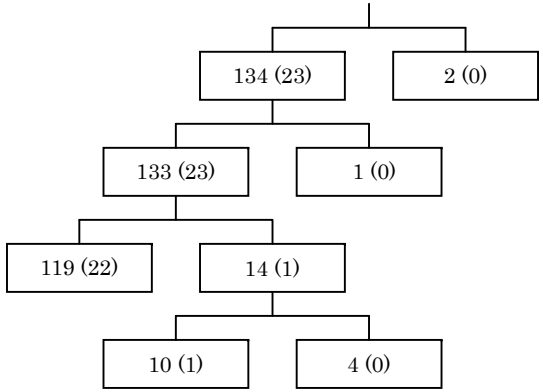
Figure 1.4. The number of participants in each cluster in the results of cluster analysis (from 2 cluster solution to 5 cluster solution) of the answers to " Why do you think some people eat food A?" (NZ + Japan: each item). Note: Numbers in the brackets indicate the number of Japanese participants included in the total shown



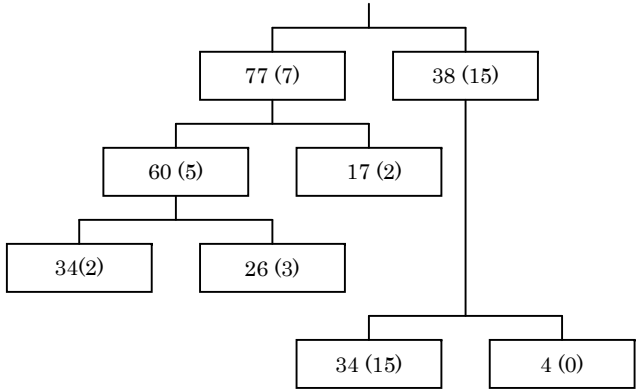
(e) Dog Meat



(f) Milk

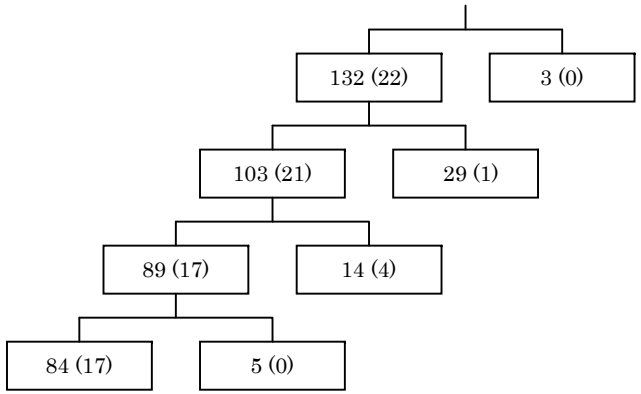


(g) Sweets

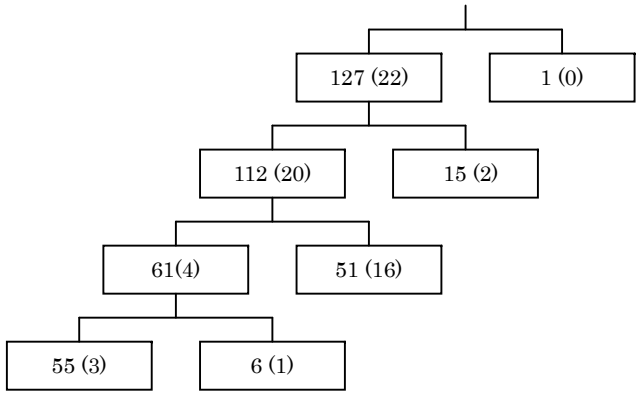


(h) Locusts

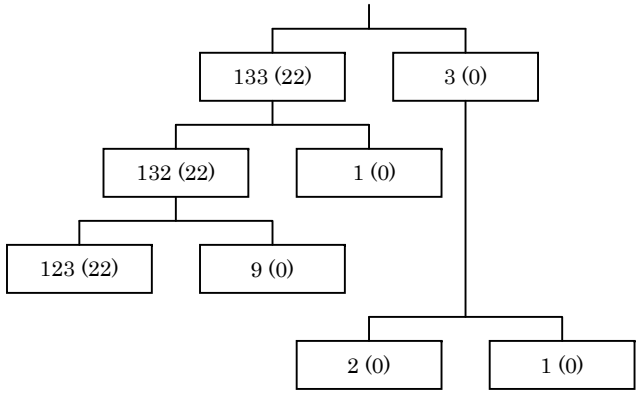
Figure 1.4. (continued)



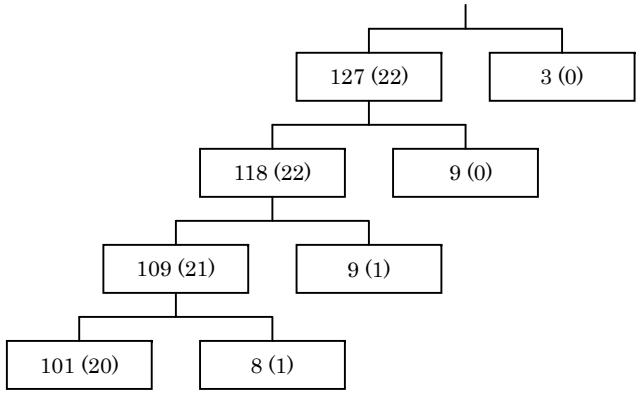
(i) Butter



(j) Whale Meat



(k) French Fries



(l) Full Cream

Figure 1.4. (continued)

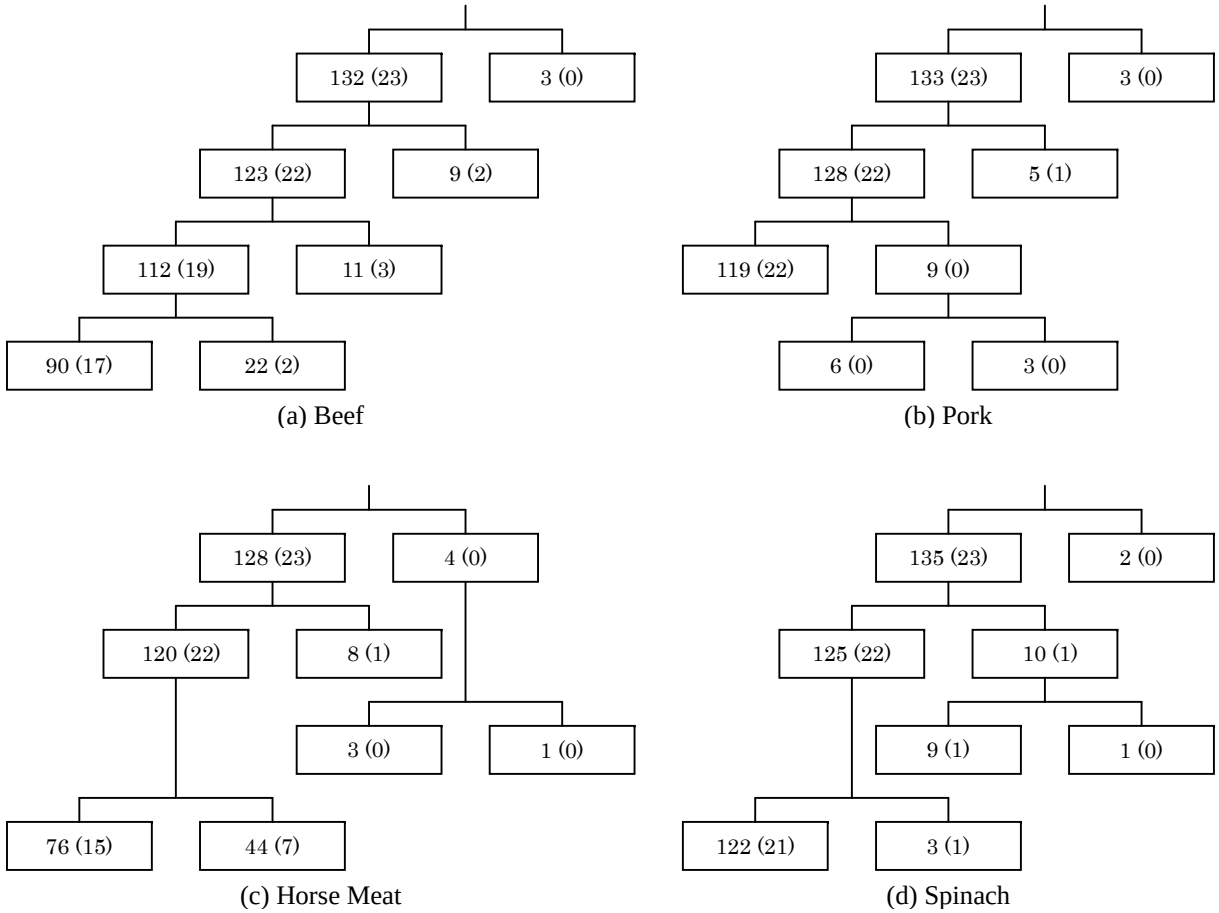
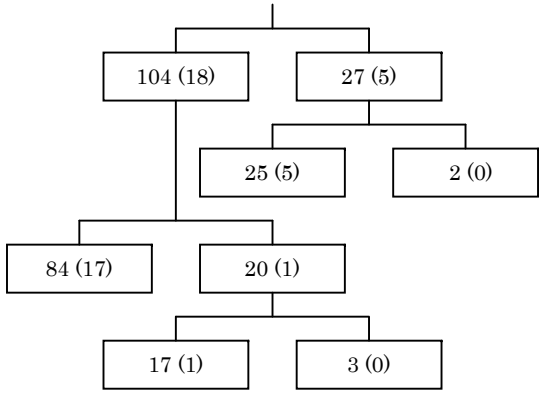
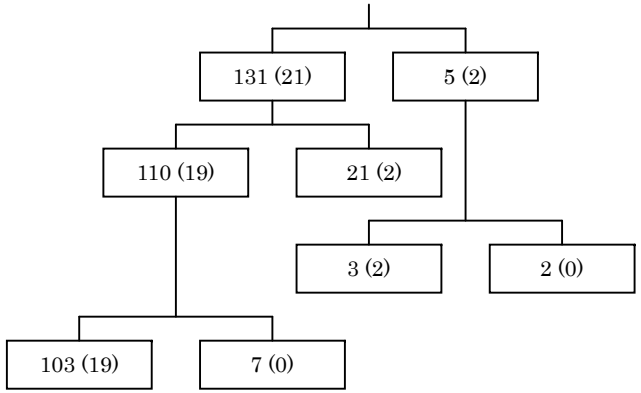


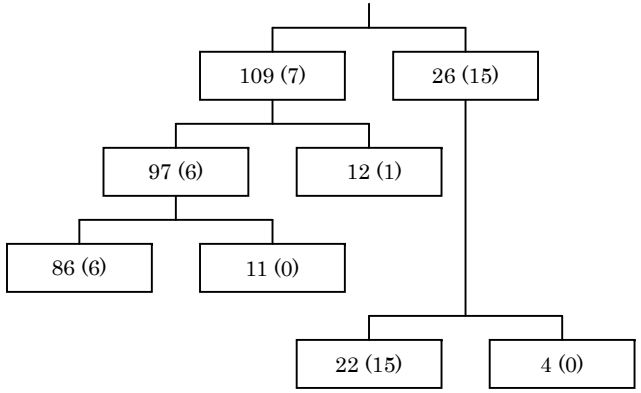
Figure 1.5. The number of participants in each cluster in the results of cluster analysis (from 2 cluster solution to 5 cluster solution) of the answers to " Why do you think other people do not eat food A?" (NZ + Japan: each item). Note: Numbers in the brackets indicate the number of Japanese participants included in the total shown



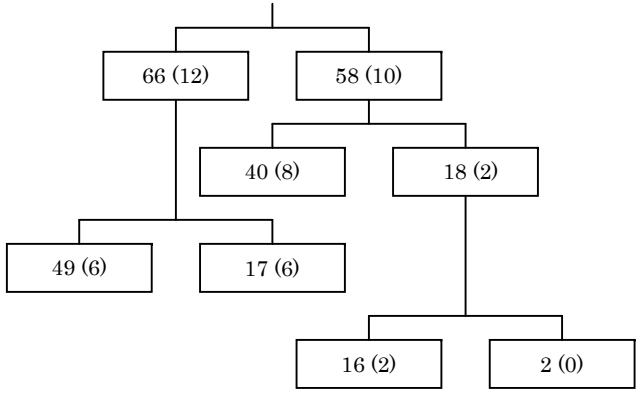
(e) Dog Meat



(f) Milk

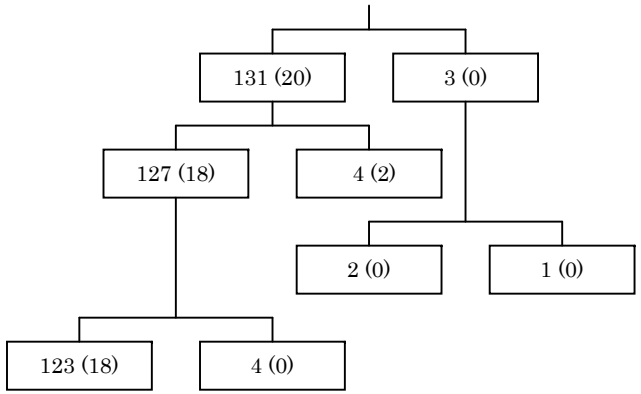


(g) Sweets

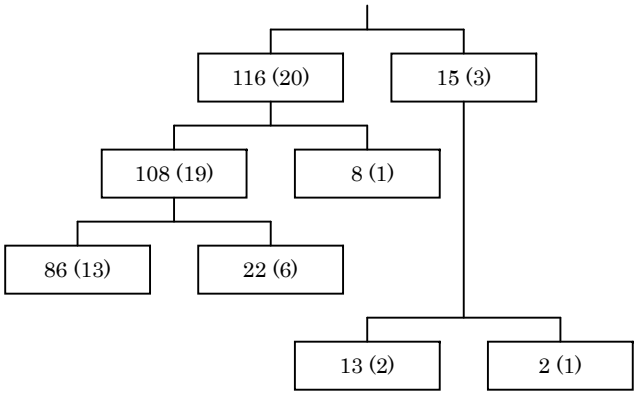


(h) Locusts

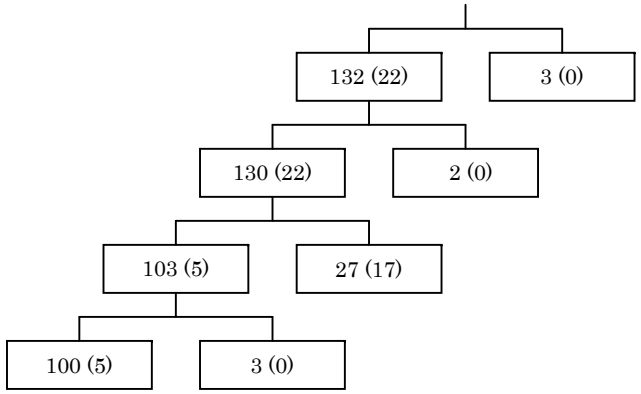
Figure 1.5. (continued)



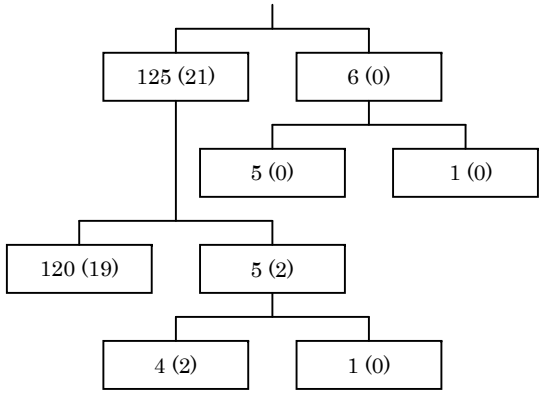
(i) Butter



(j) Whale Meat

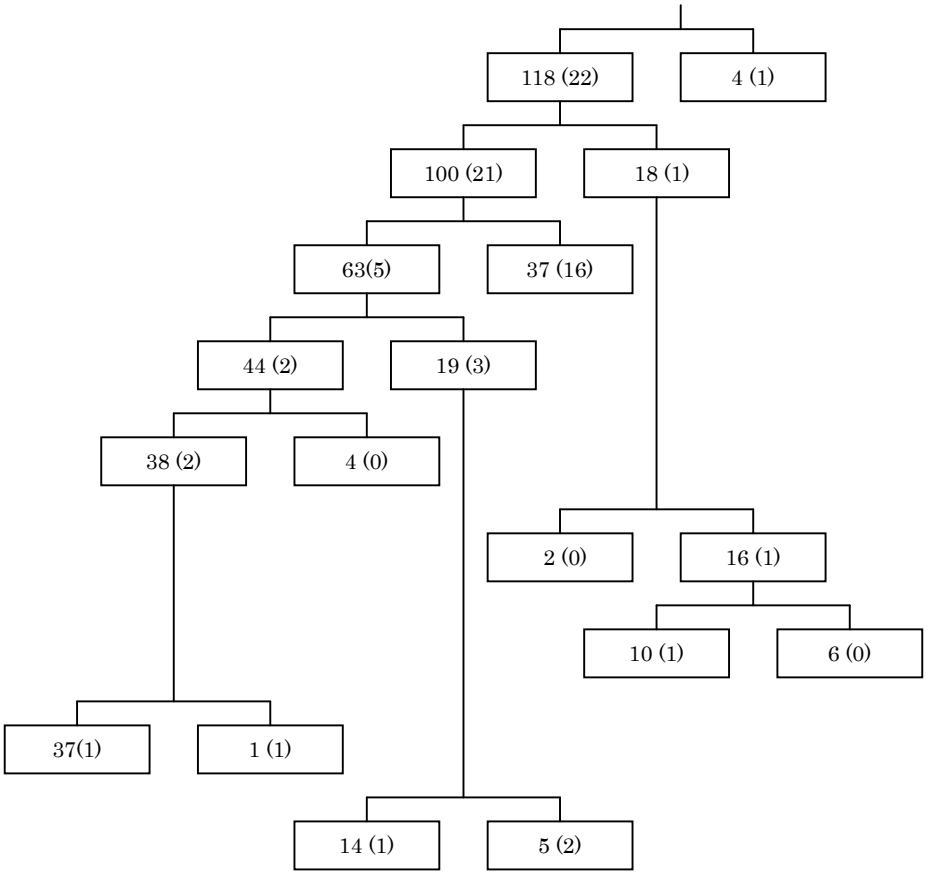


(k) French Fries



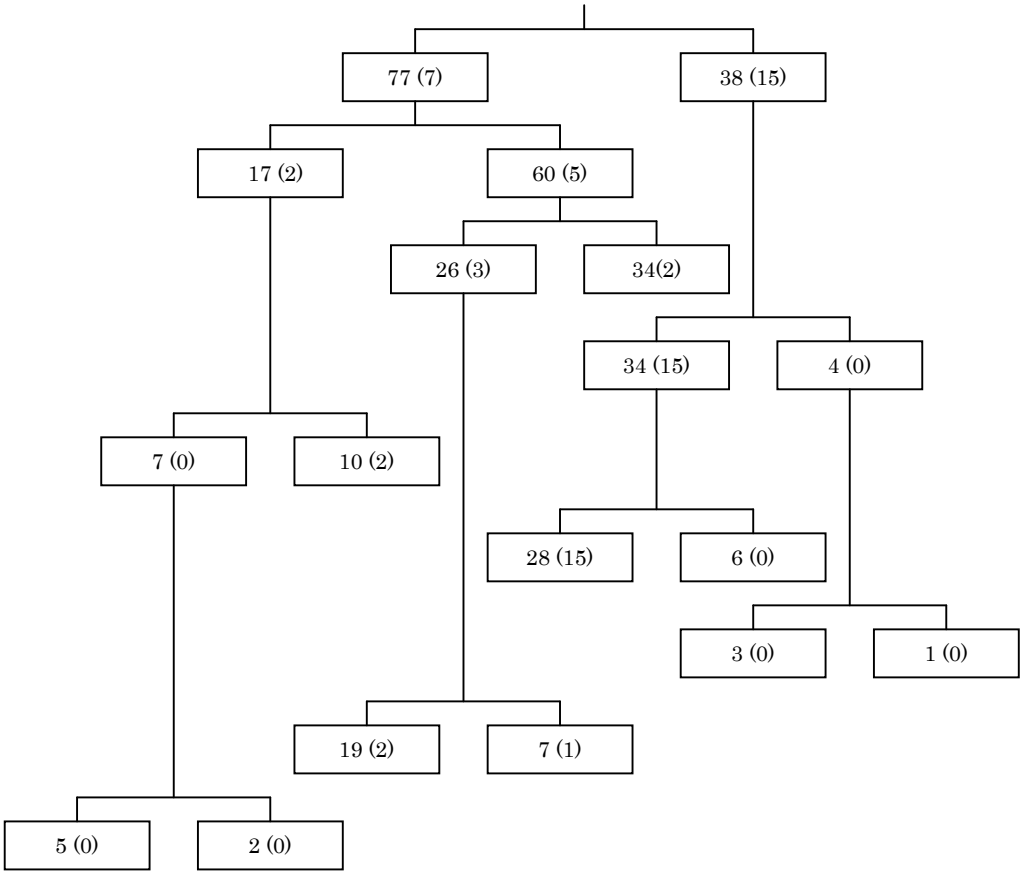
(l) Full Cream

Figure 1.5. (continued)



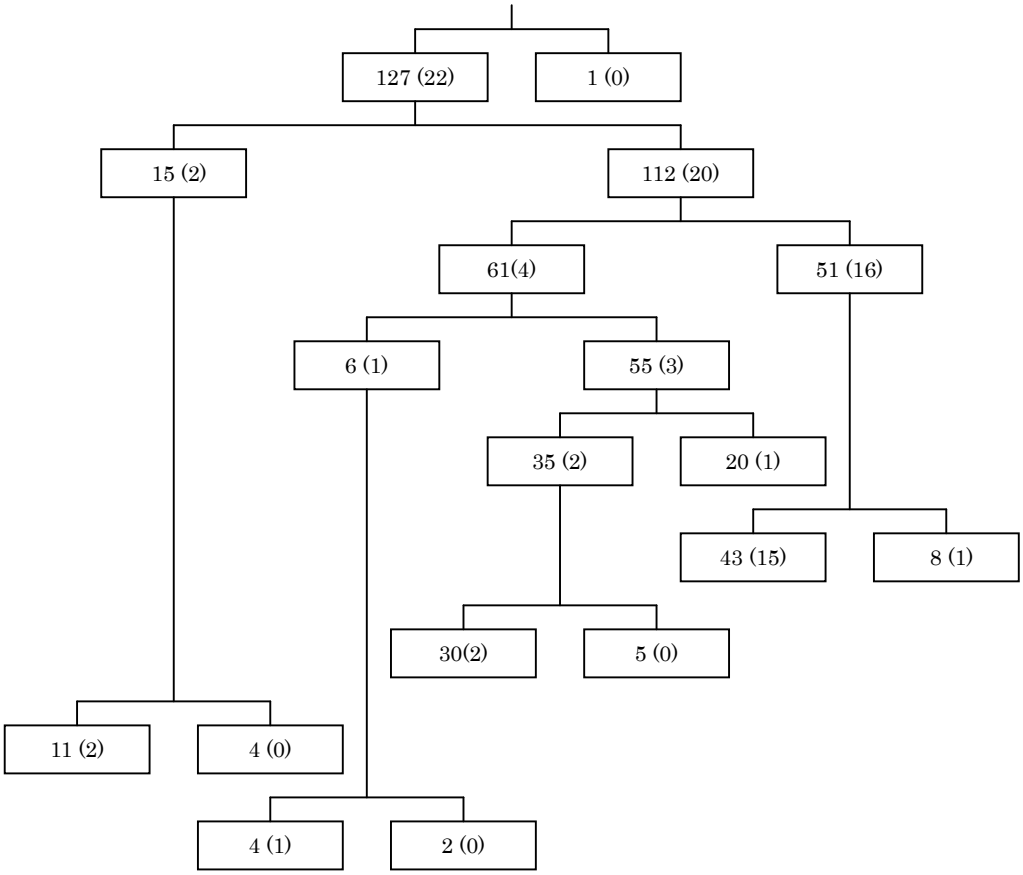
(a) Horse Meat

Figure 1.6. The number of participants in each cluster in the results of cluster analysis (from 2 cluster solution to 10 cluster solution) of the answers to "Why do you think some people eat food A?" (NZ + Japan samples). Note: Numbers in the brackets indicate the number of Japanese participants included in the total shown



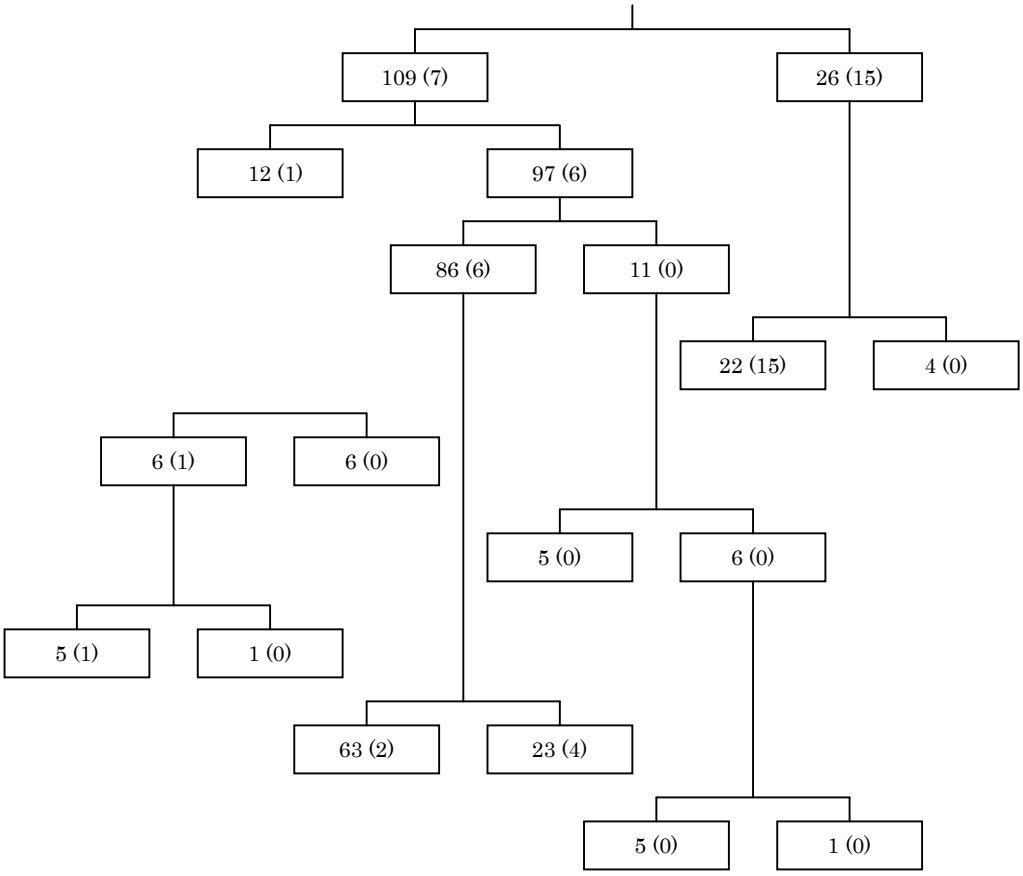
(b) Locusts

Figure 1.6. (continued)



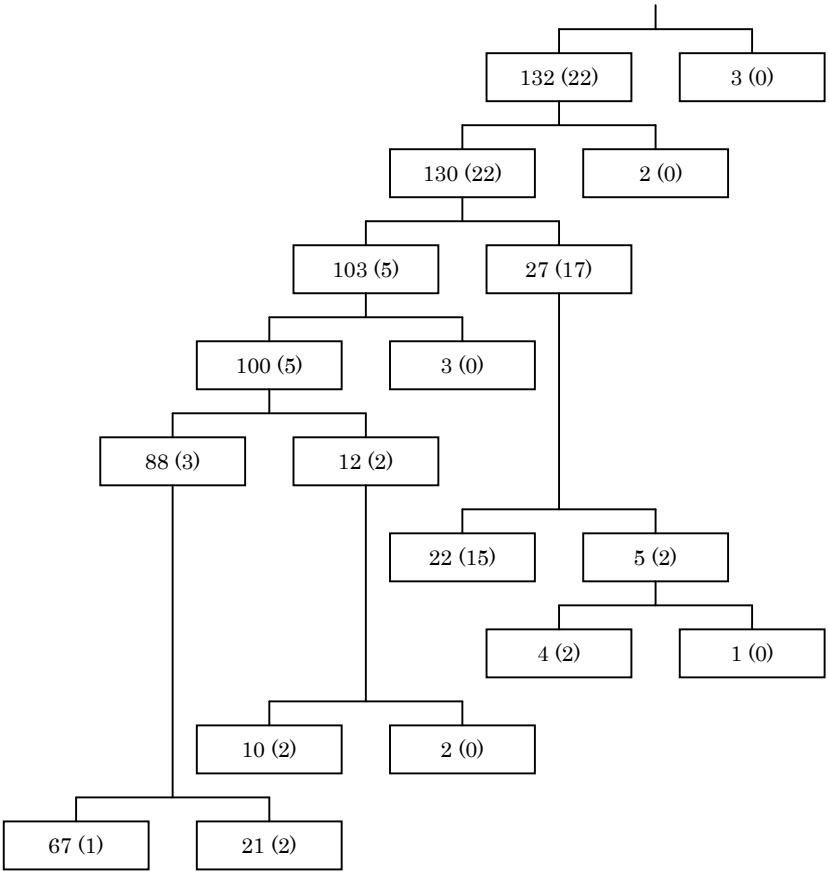
(c) Whale Meat

Figure 1.6. (continued)



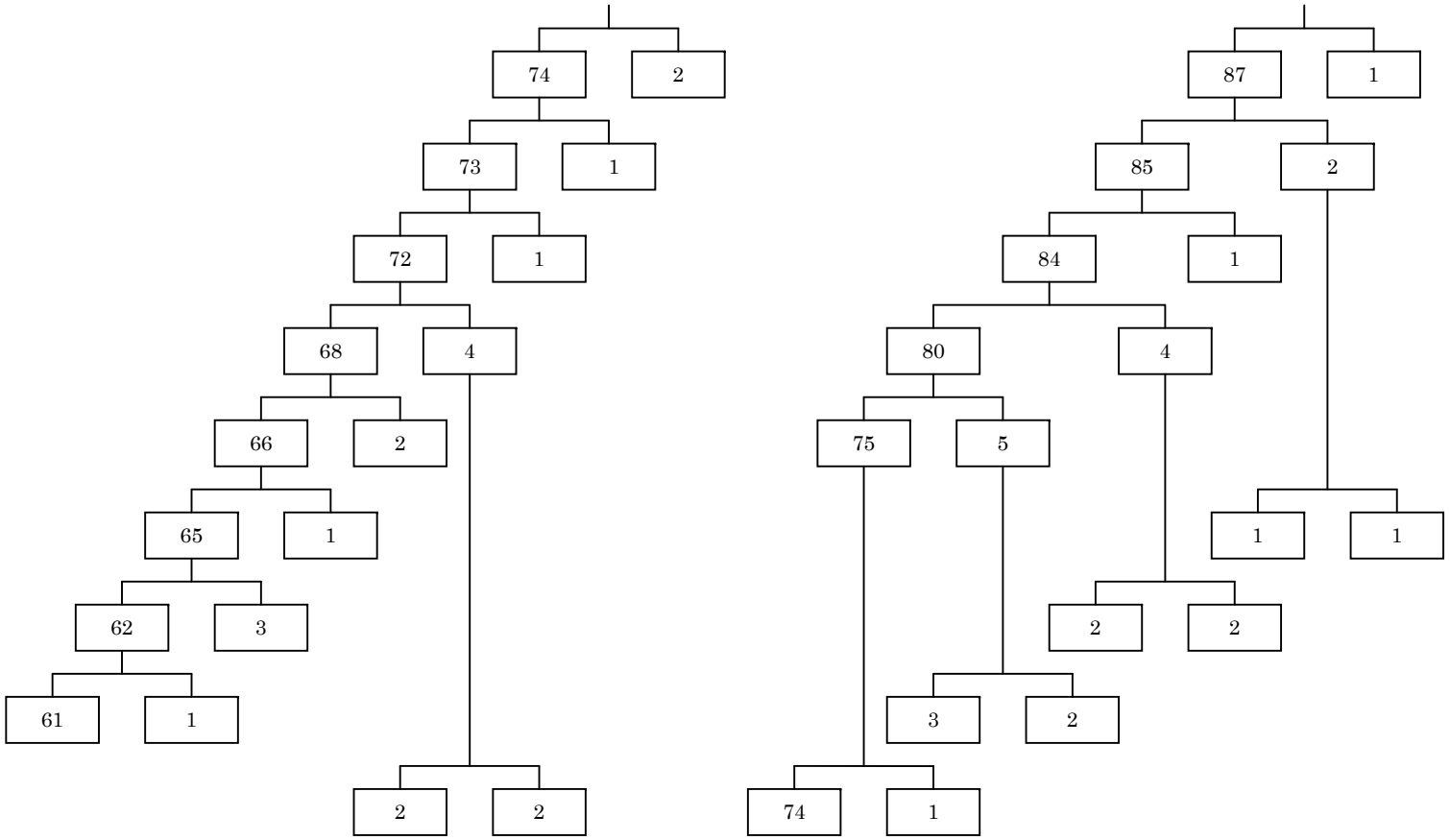
(a) Sweets

Figure 1.7. The number of participants in each cluster in the results of cluster analysis (from 2 cluster solution to 10 cluster solution) of the answers to " Why do you think other people do not eat food A?" (NZ + Japan samples). Note: Numbers in the brackets indicate the number of Japanese participants included in the total shown



(b) French Fries

Figure 1.7. (continued)



(a) Answers to “Why people eat food X”

(b) Answers to “Why people do not eat food X”

Figure 1.8. The number of participants in each cluster in the results of cluster analysis (from 2 cluster solution to 10 cluster solution) of the answers to " Why do you think some people eat food A?" and " Why do you think other people do not eat food A?" (NZ sample only)

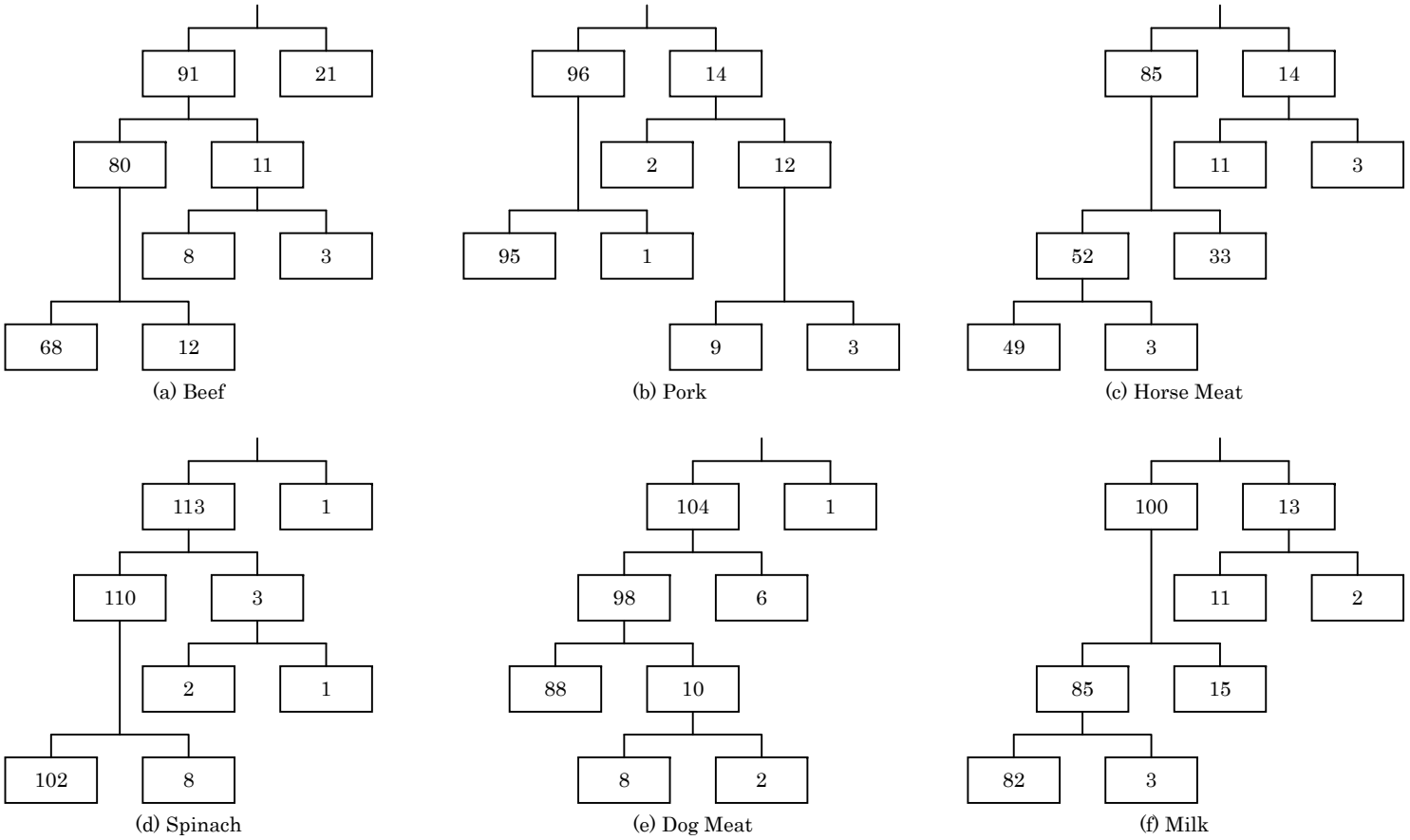
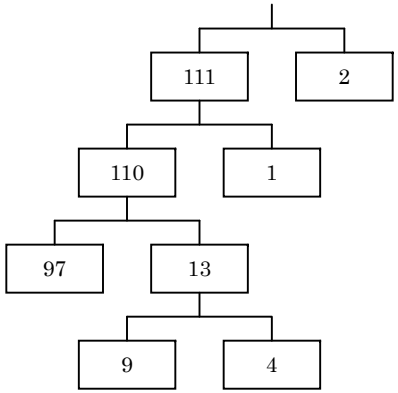
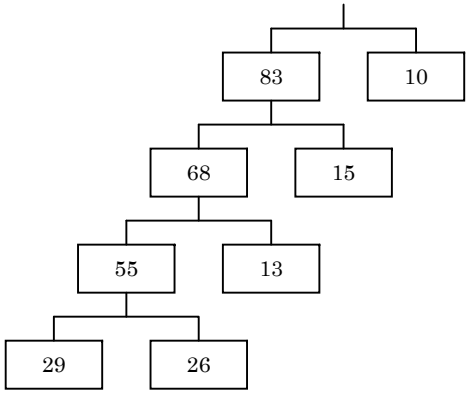


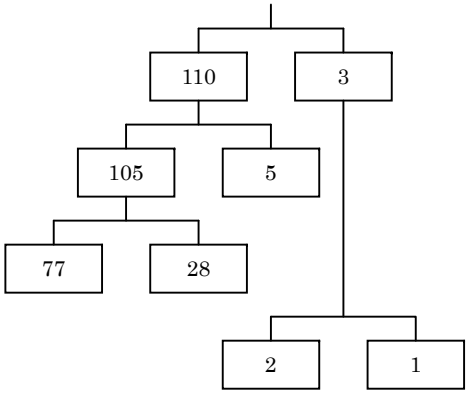
Figure 1.9. The number of participants in each cluster in the results of cluster analysis (from 2 cluster solution to 5 cluster solution) of the answers to " Why do you think some people eat food A?" (NZ sample only: each item)



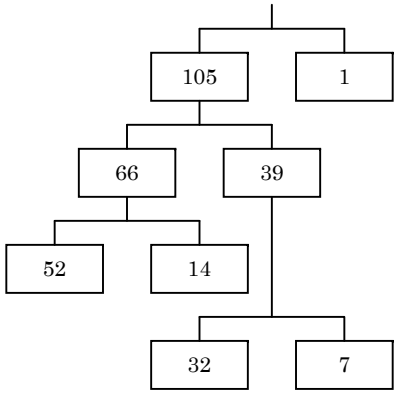
(g) Sweets



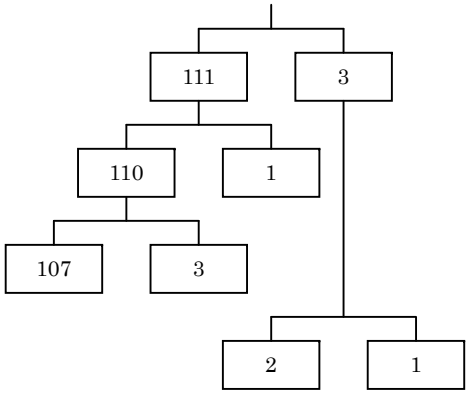
(h) Locusts



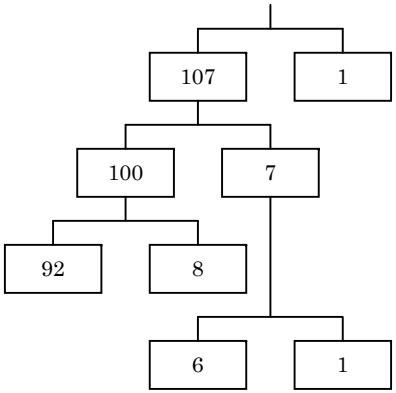
(i) Butter



(j) Whale Meat



(k) French Fries



(l) Full Cream

Figure 1.9. (continued)

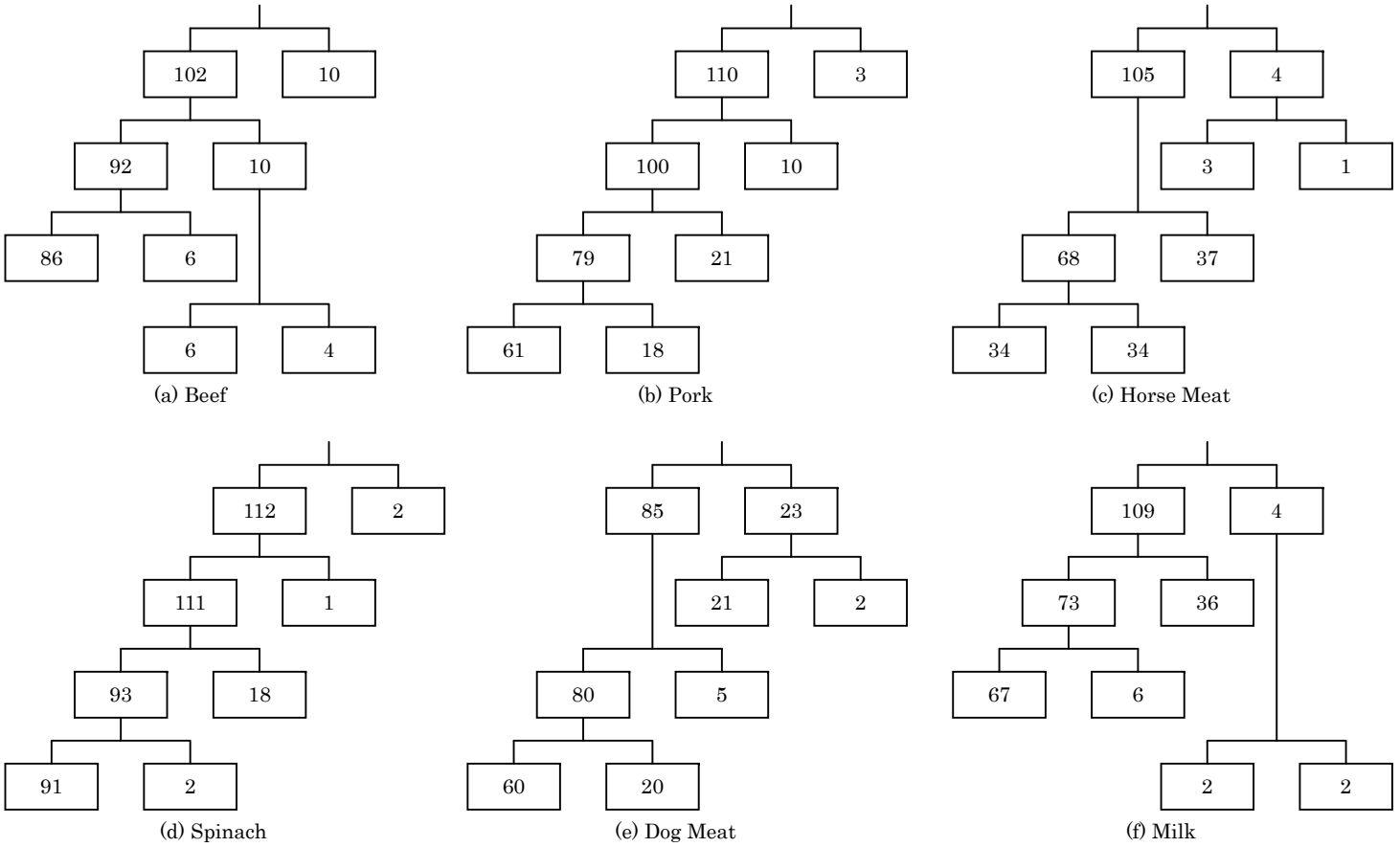


Figure 1.10. The number of participants in each cluster in the results of cluster analysis (from 2 cluster solution to 5 cluster solution) of the answers to " Why do you think other people do not eat food A?" (NZ sample only: each item)

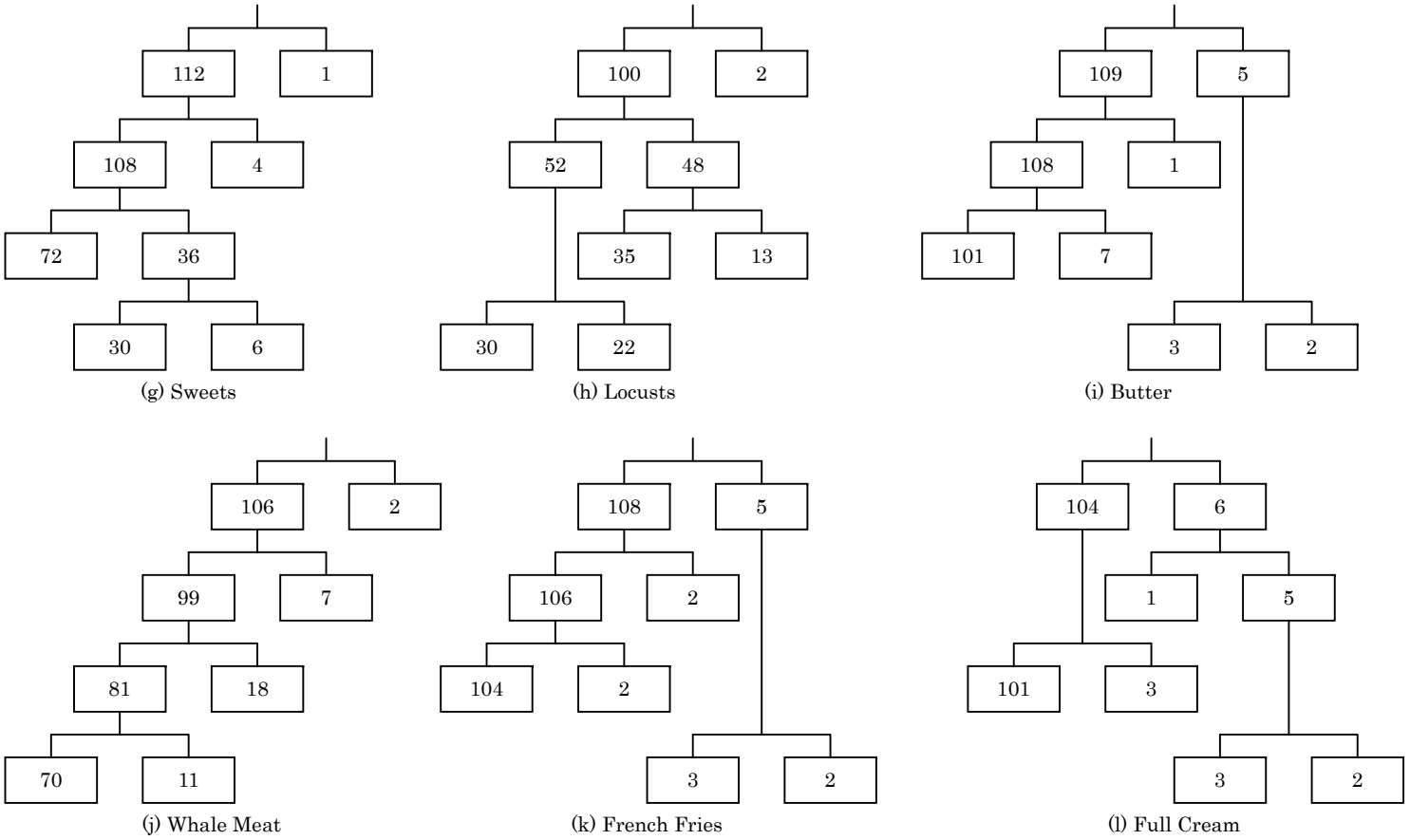
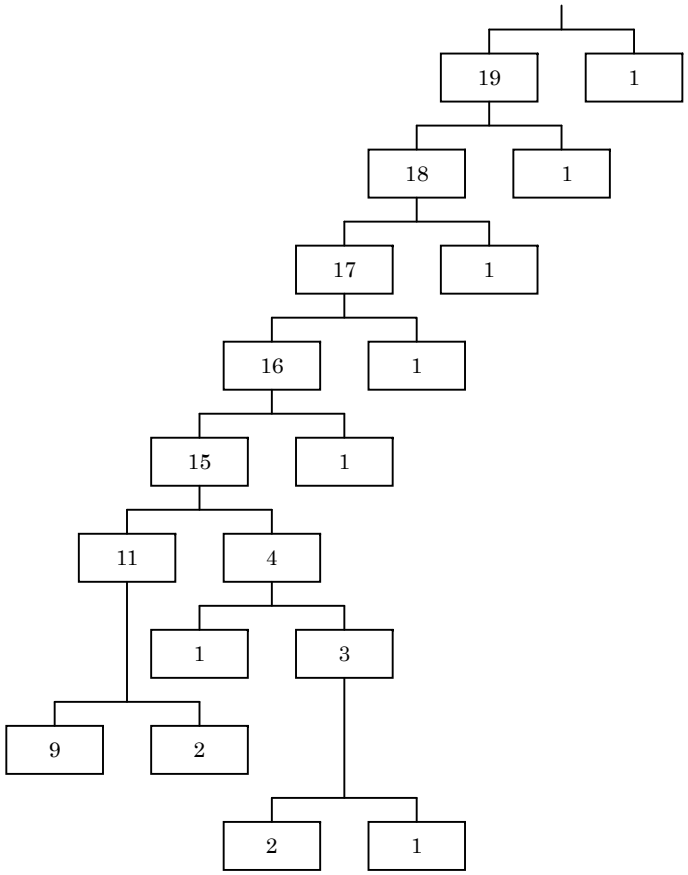
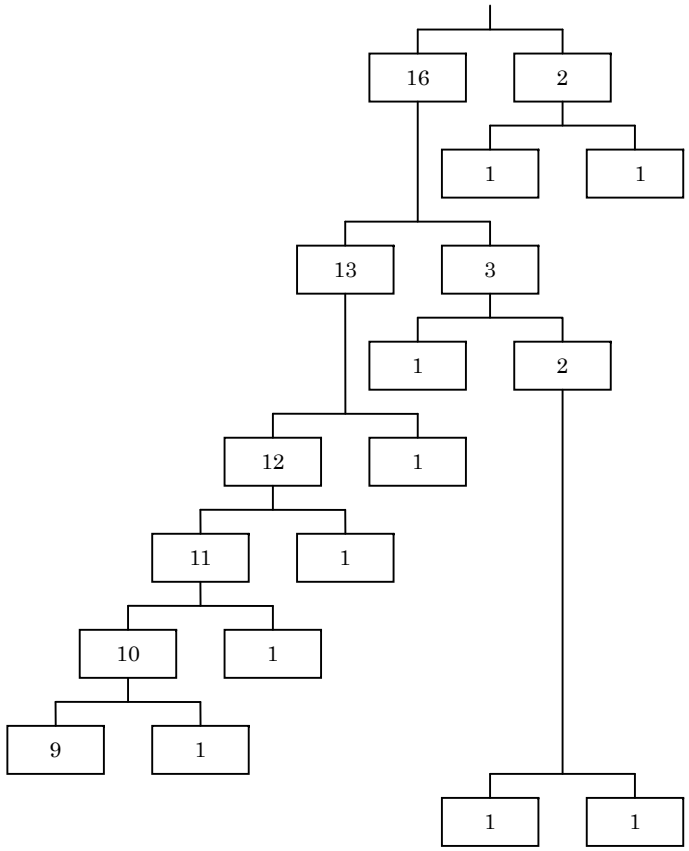


Figure 1.10. (continued)



(a) Answers to “Why people eat food X”



(b) Answers to “Why people do not eat food X”

Figure 1.11. The number of participants in each cluster in the results of cluster analysis (from 2 cluster solution to 10 cluster solution) of the answers to " Why do you think some people eat food A?" and " Why do you think other people do not eat food A?" (Japan sample only)

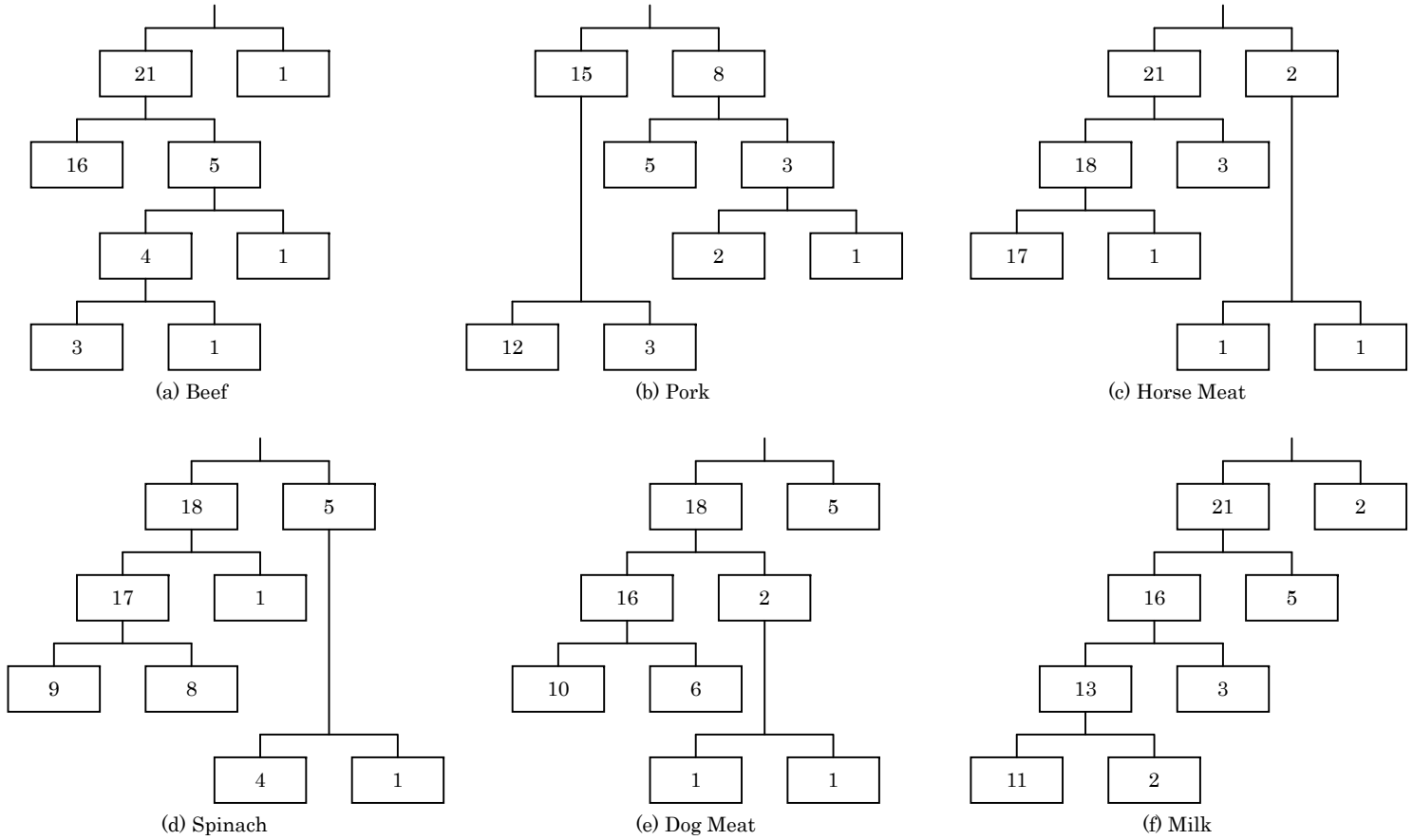
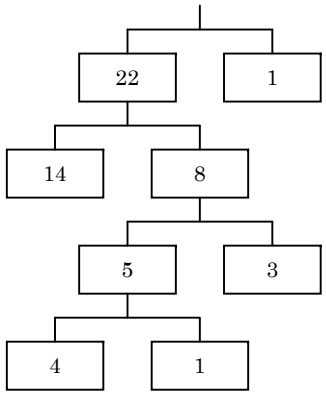
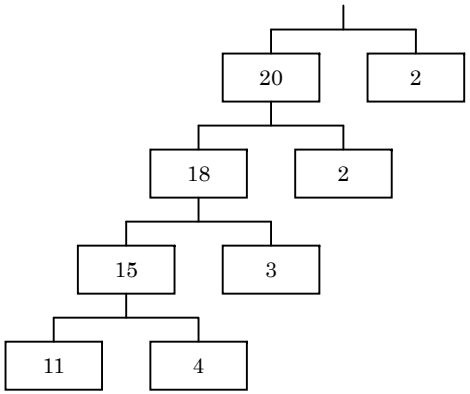


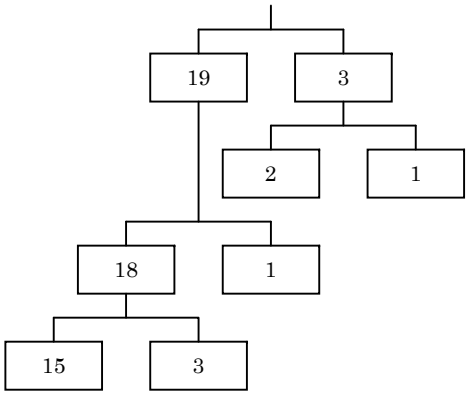
Figure 1.12. The number of participants in each cluster in the results of cluster analysis (from 2 cluster solution to 5 cluster solution) of the answers to " Why do you think some people eat food A?" (Japan sample only: each item)



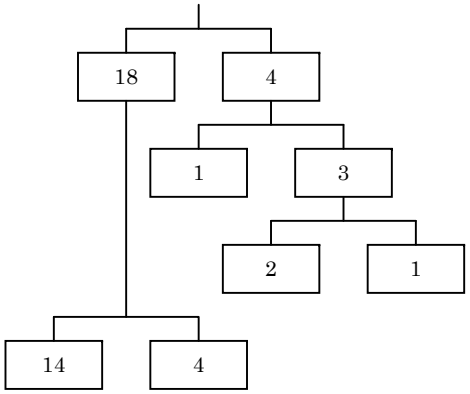
(g) Sweets



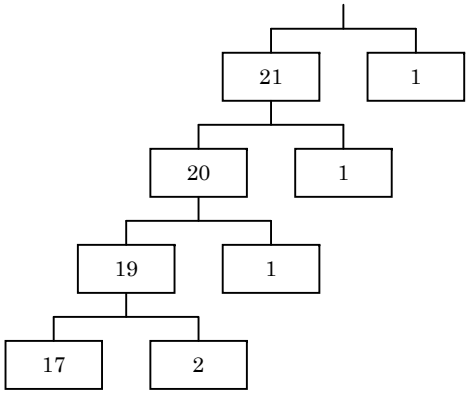
(h) Locusts



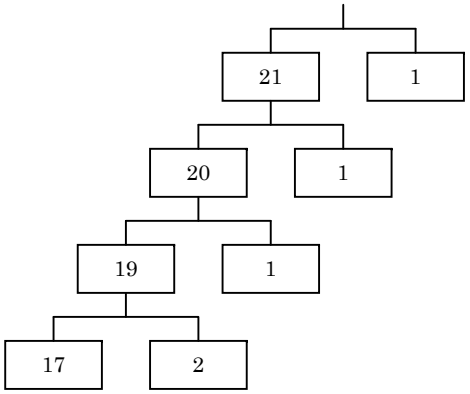
(i) Butter



(j) Whale Meat



(k) French Fries



(l) Full Cream

Figure 1.12. (continued)

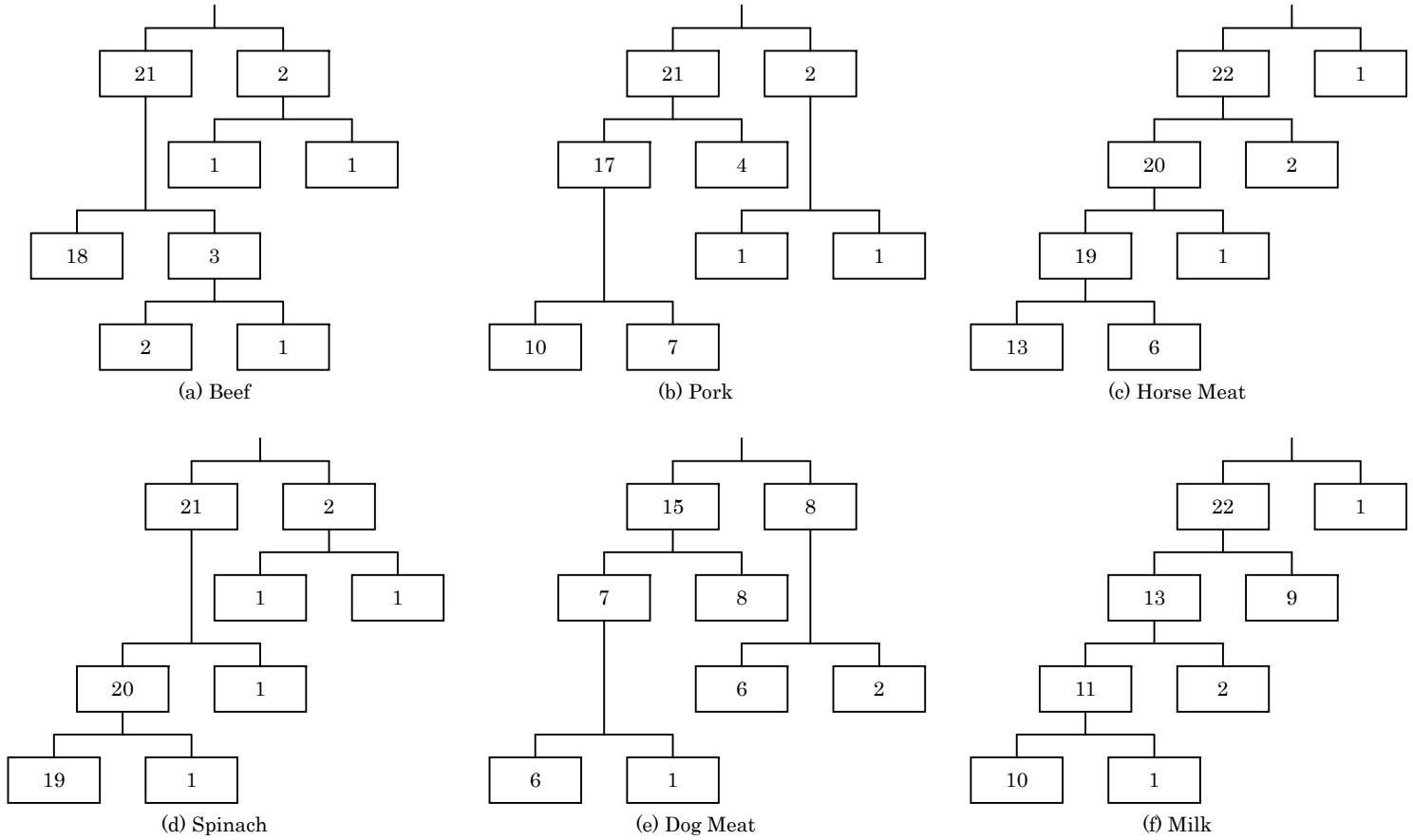


Figure 1.13. The number of participants in each cluster in the results of cluster analysis (from 2 cluster solution to 5 cluster solution) of the answers to " Why do you think other people do not eat food A?" (Japan sample only: each item)

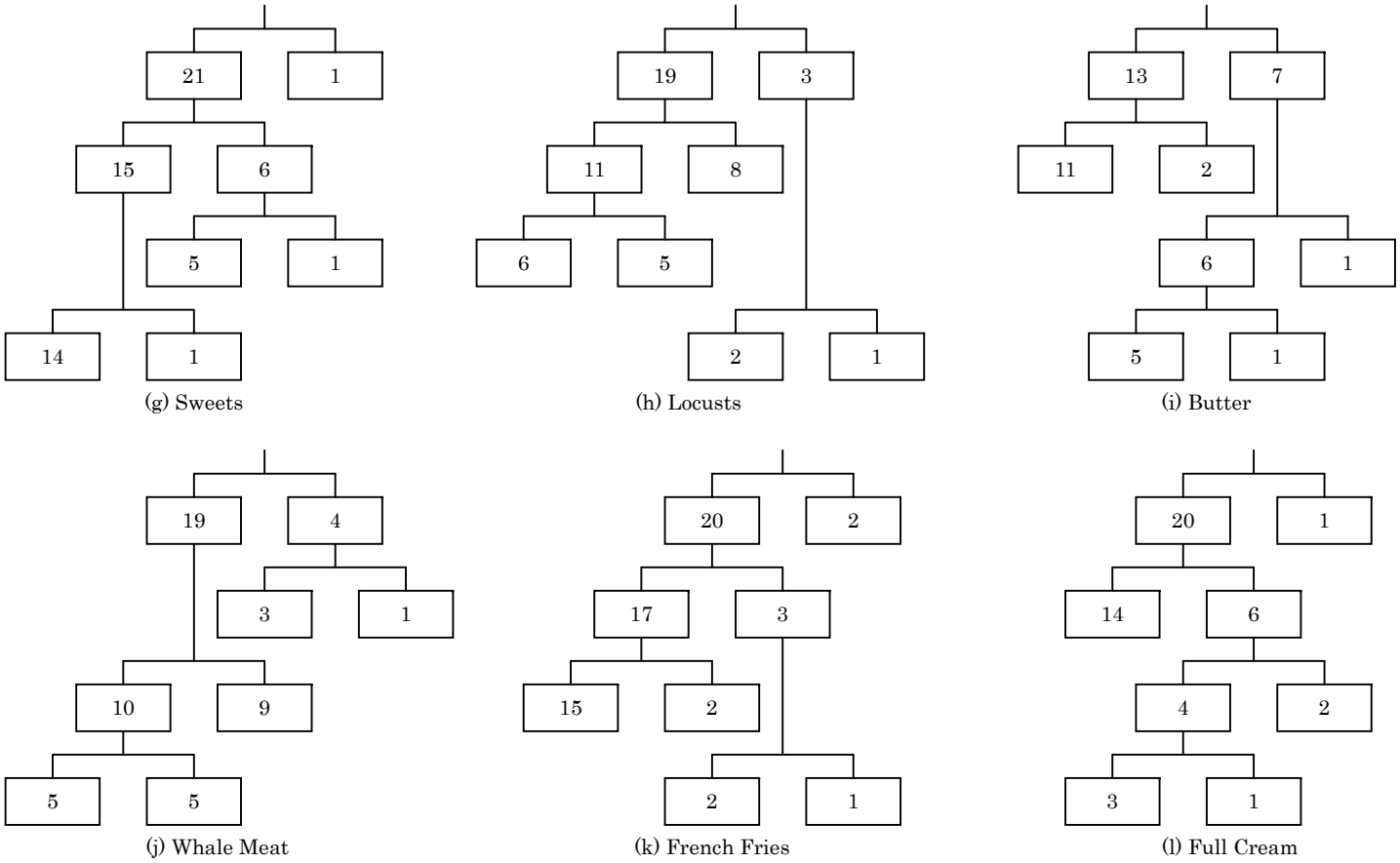


Figure 1.13. (continued)

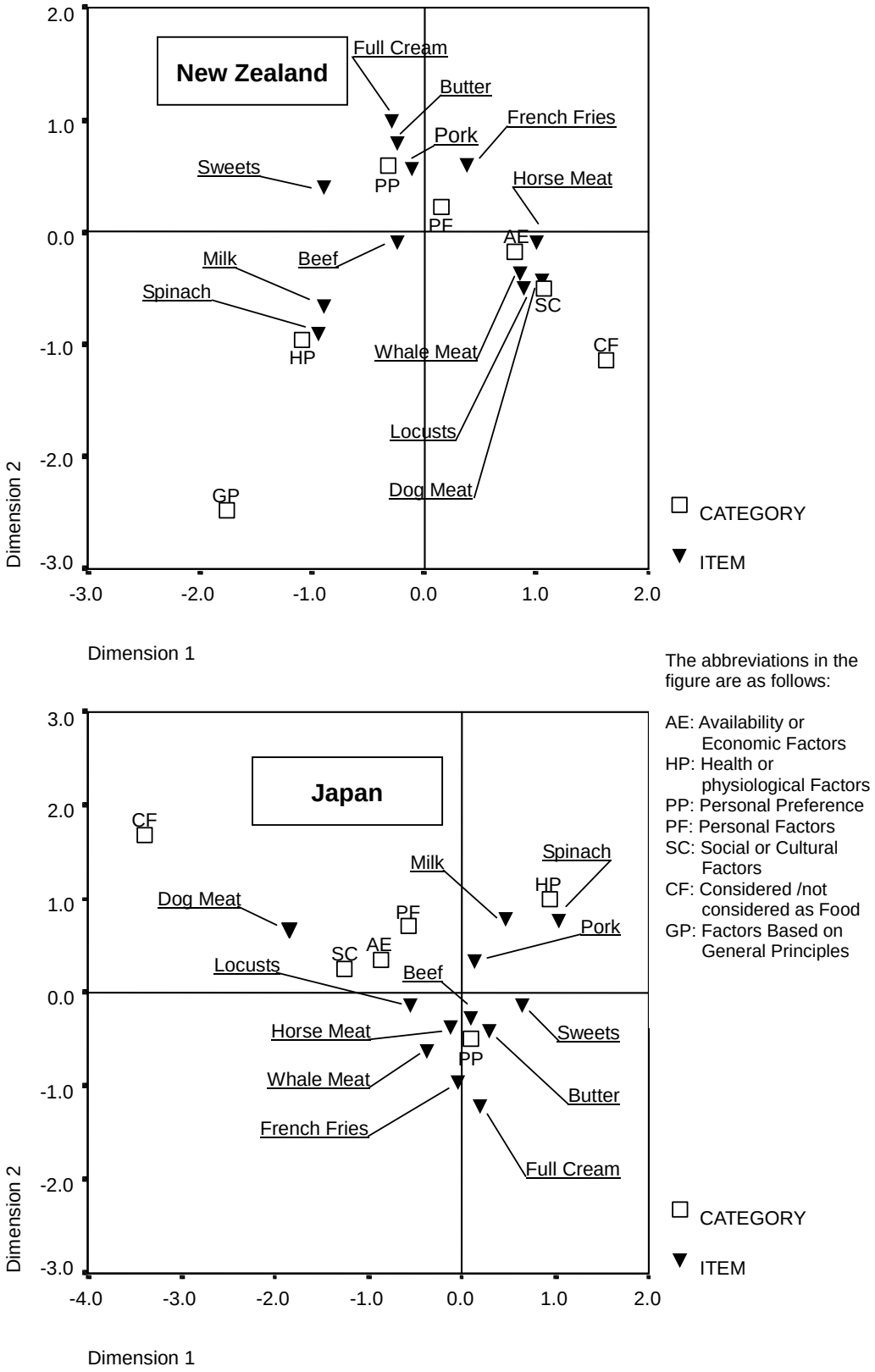


Figure 1.14. Graphic representation by correspondence analysis of the answers to " Why do you think some people eat food A?"

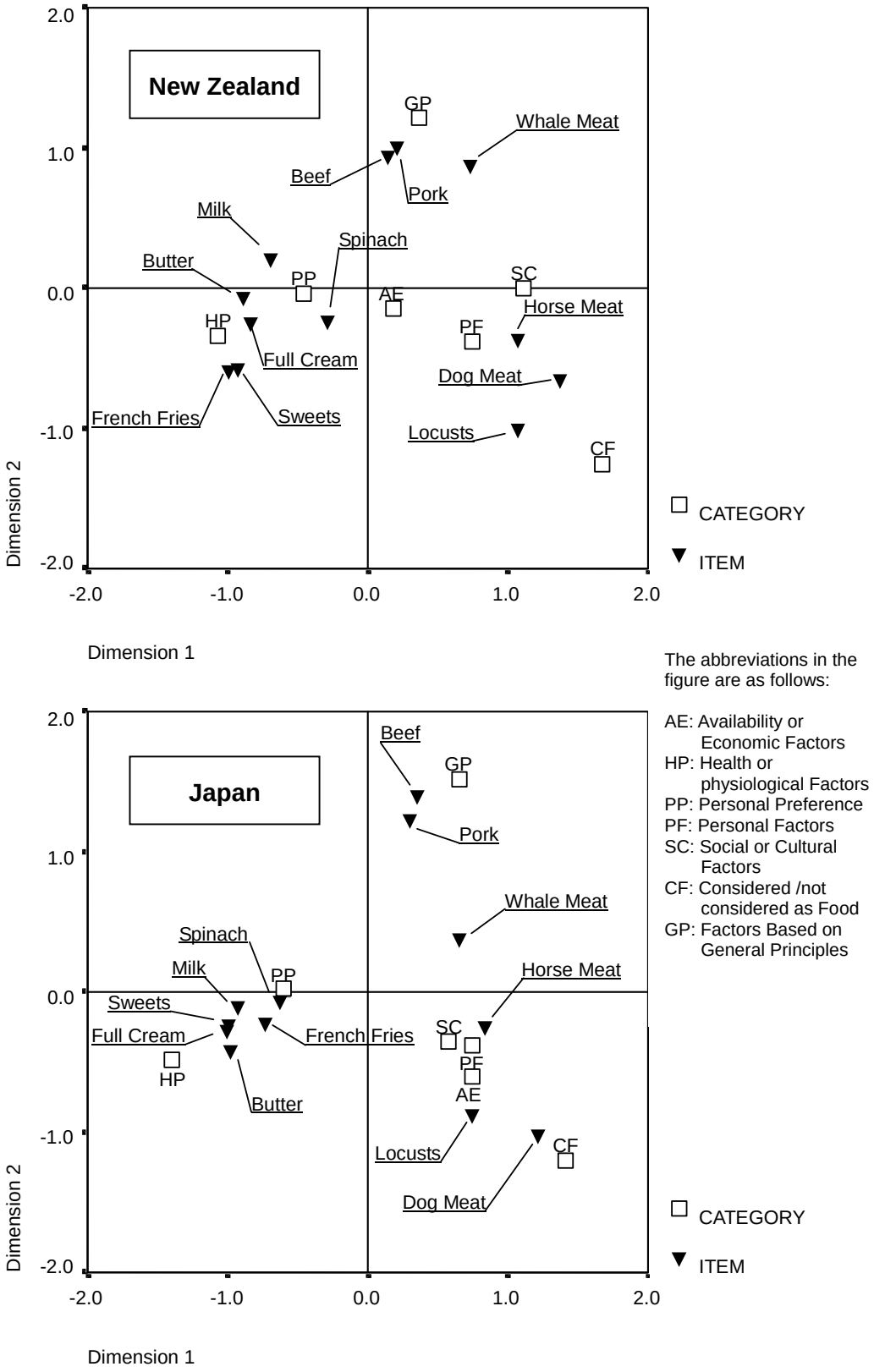


Figure 1.15. Graphic representation by correspondence analysis of the answers to " Why do you think other people do not eat food A?"

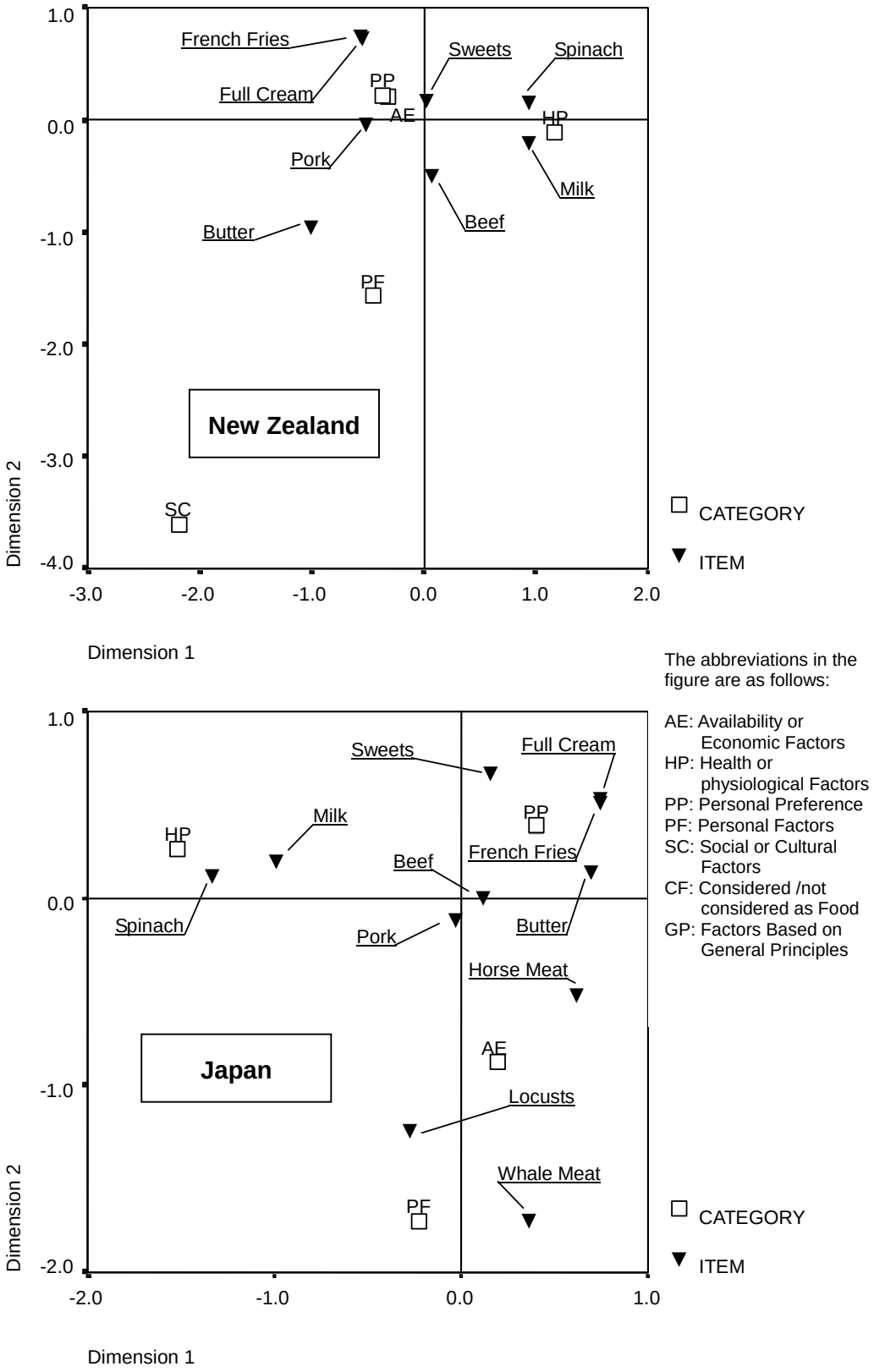


Figure 1.16. Graphic representation by correspondence analysis of the answers to " Why do you eat food A?"

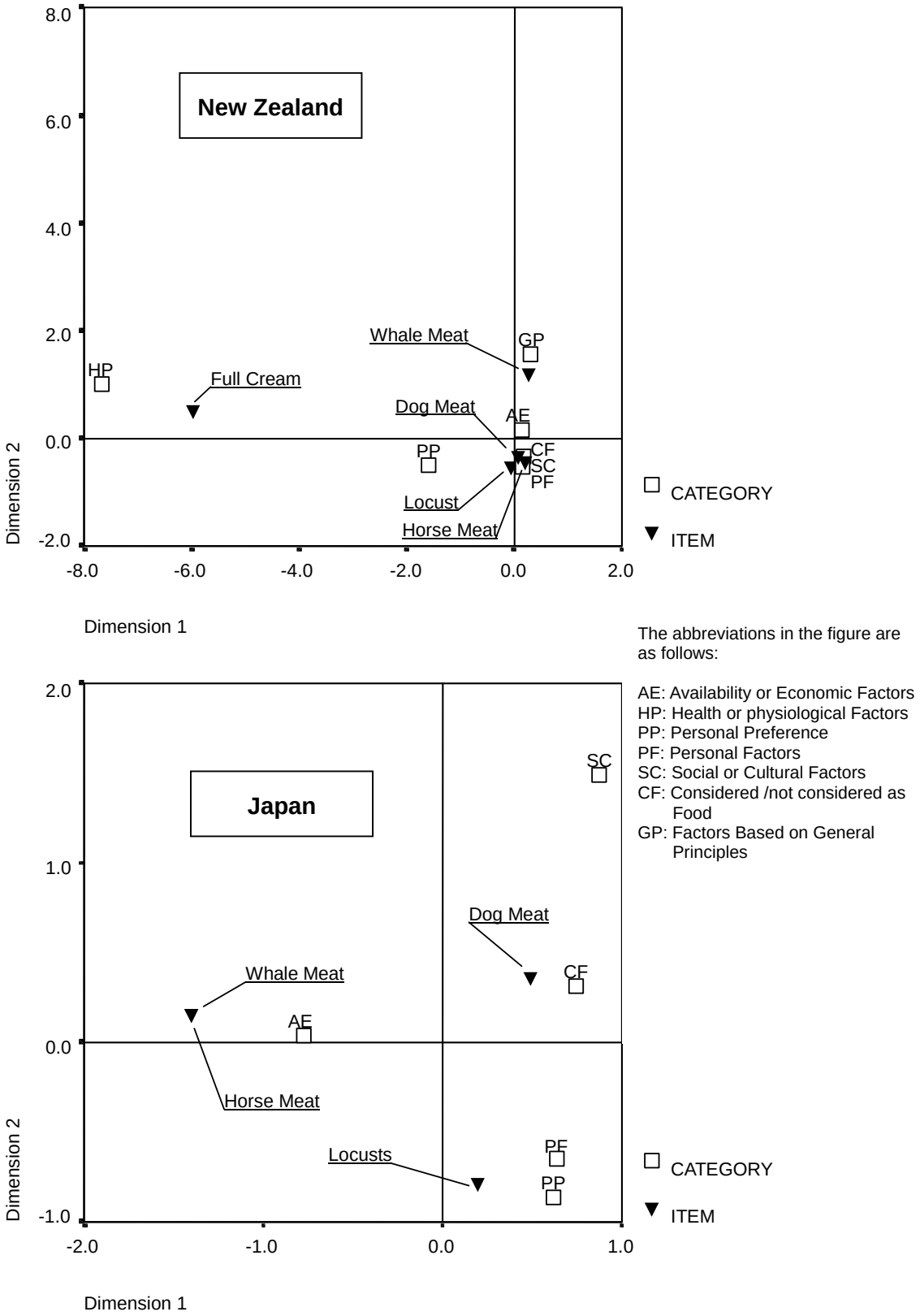


Figure 1.17. Graphic representation by correspondence analysis of the answers to " Why don't you eat food A?"

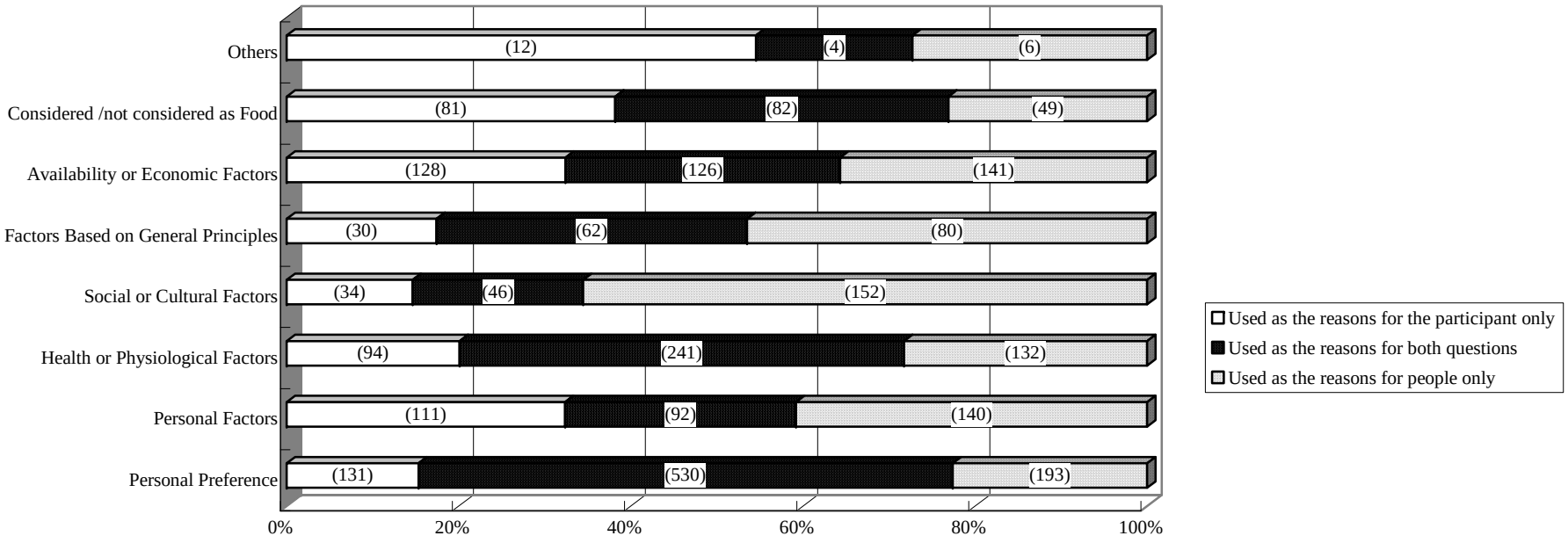


Figure 1.18. Proportion of participants who used each category as a reason for the participant only, as the reasons for people only, and as the reasons for both (NZ sample only). Note: Numbers in the brackets indicate the number of participants.

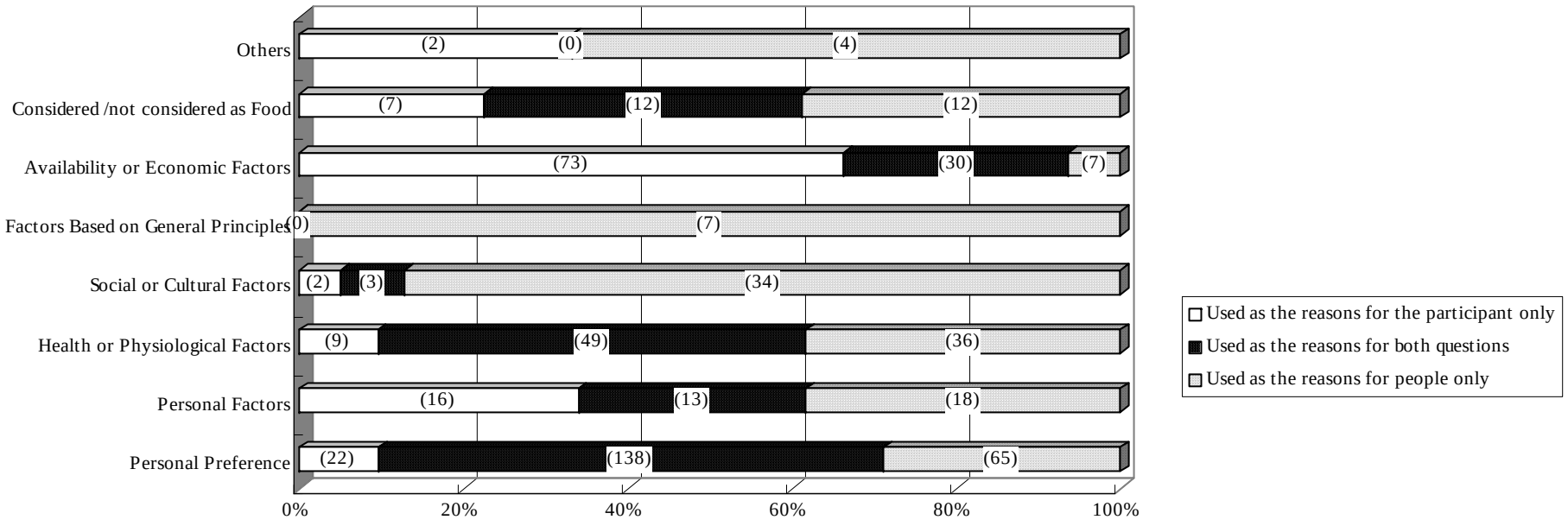


Figure 1.19. Proportion of participants who used each category as the reasons for the participant only, as the reasons for people only, and as the reasons for both (Japan sample only). Note: Numbers in the brackets indicate the number of participants.

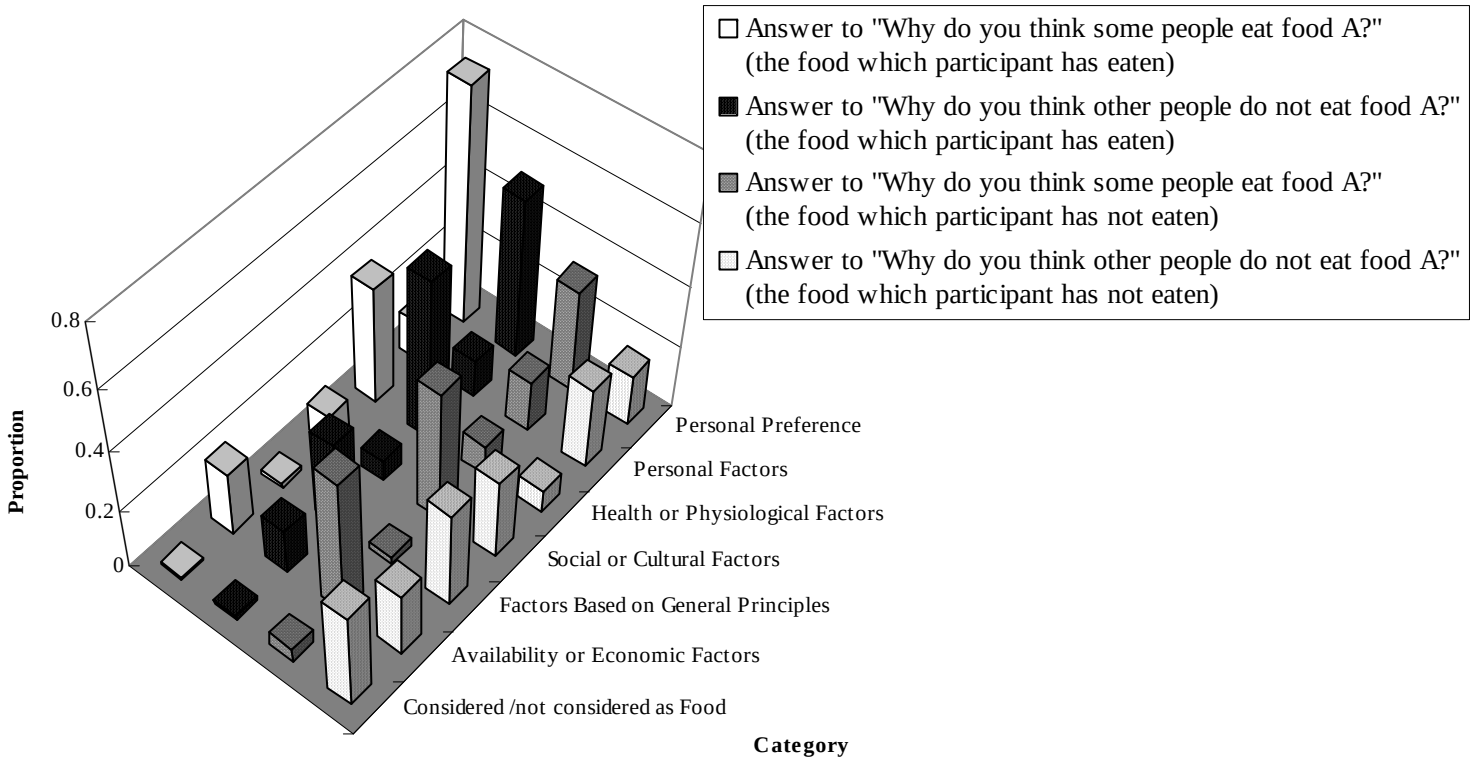


Figure 1.20. The proportions of participants who used each category according to the experiences in the answers to "Why do you think some people eat food A?" and "Why do you think other people do not eat food A?" (NZ sample only)

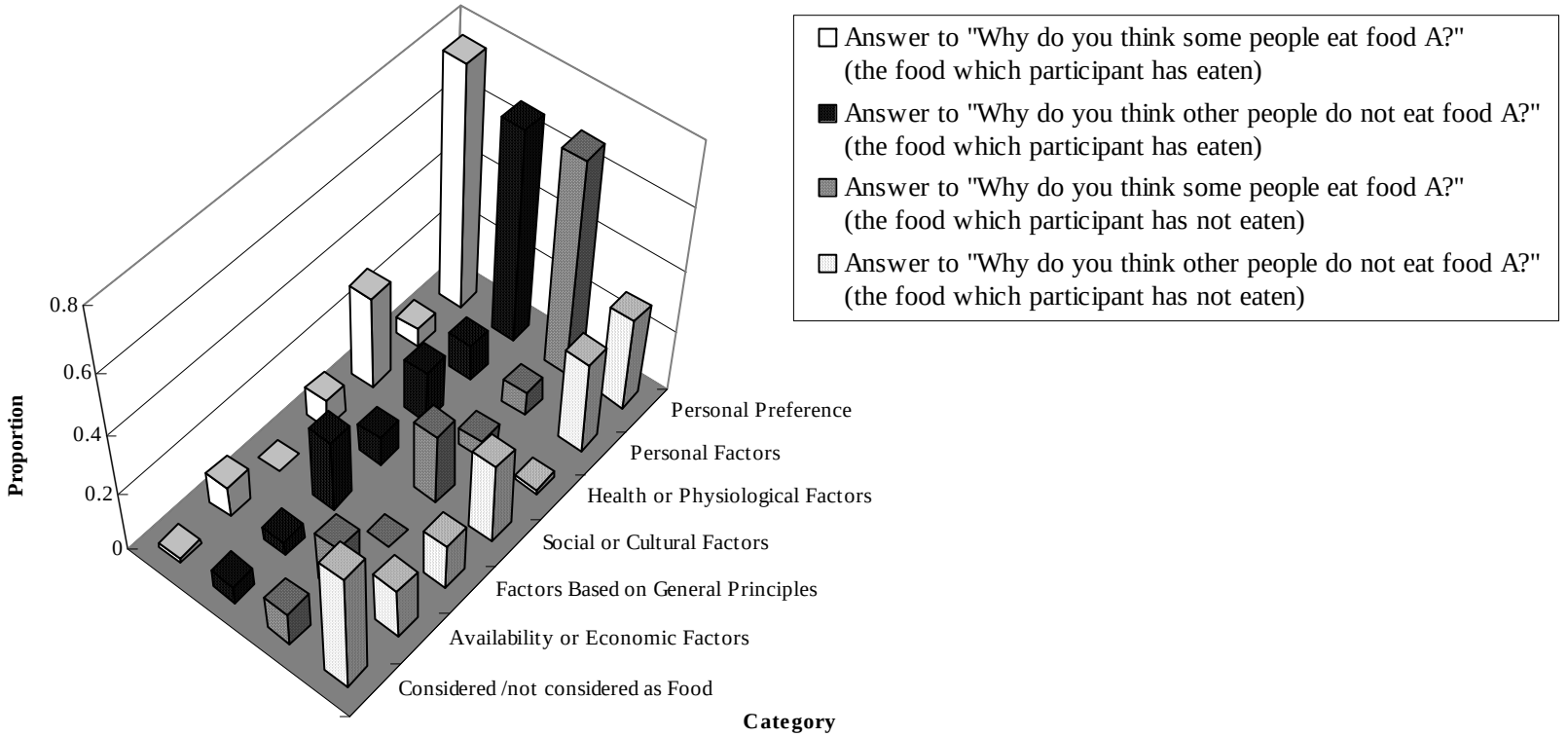


Figure 1.21. The proportions of participants who used each category according to the experiences in the answers to "Why do you think some people eat food A?" and "Why do you think other people do not eat food A?" (Japan sample only)

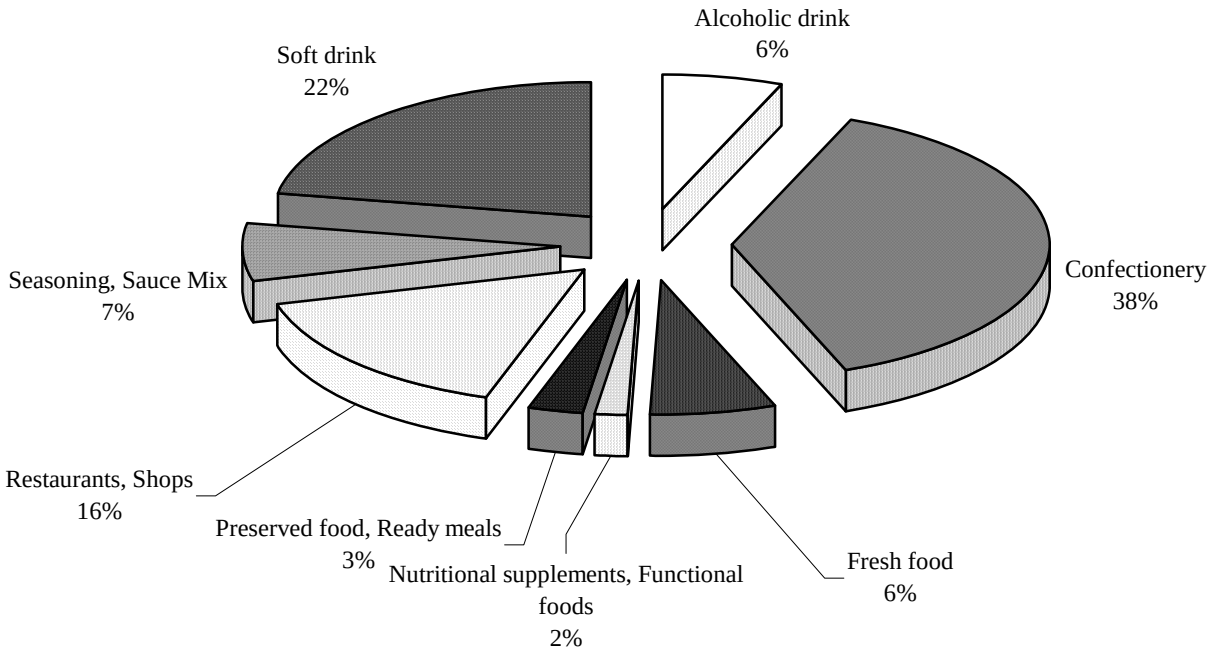


Figure 2.1. Percentages of each food type (NZ sample only)

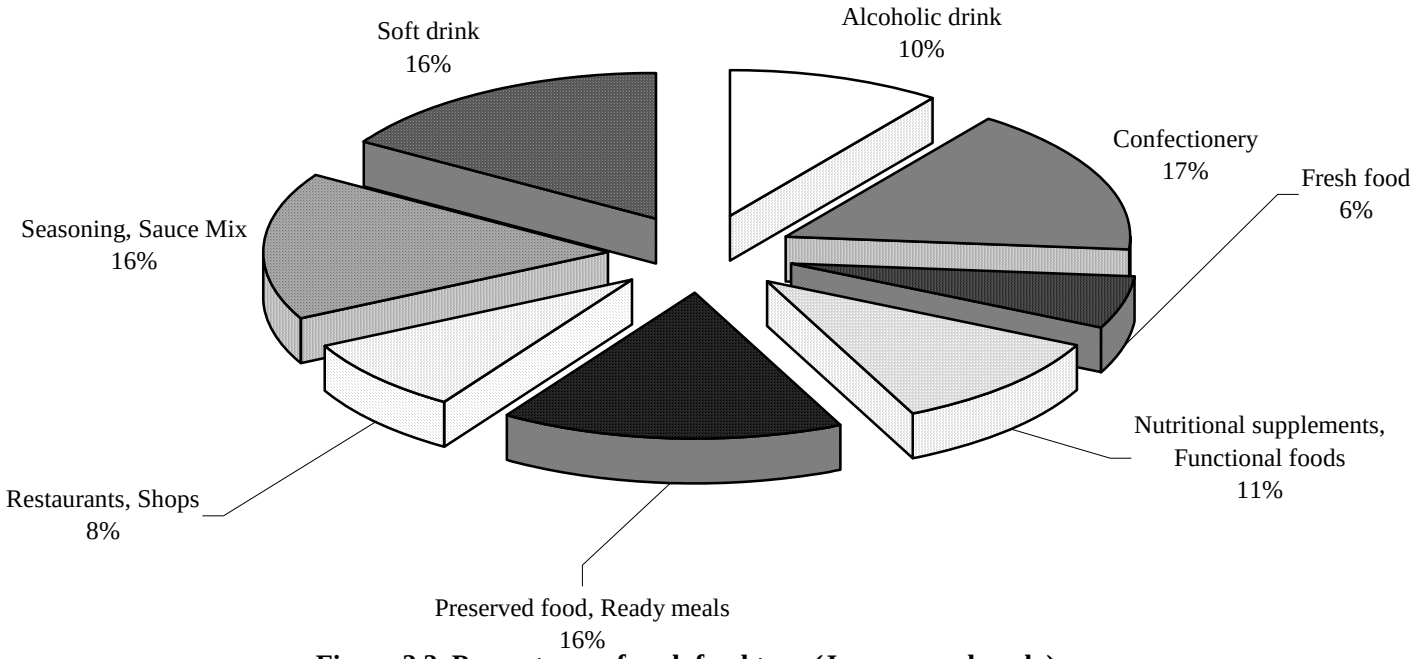


Figure 2.2. Percentages of each food type (Japan sample only)

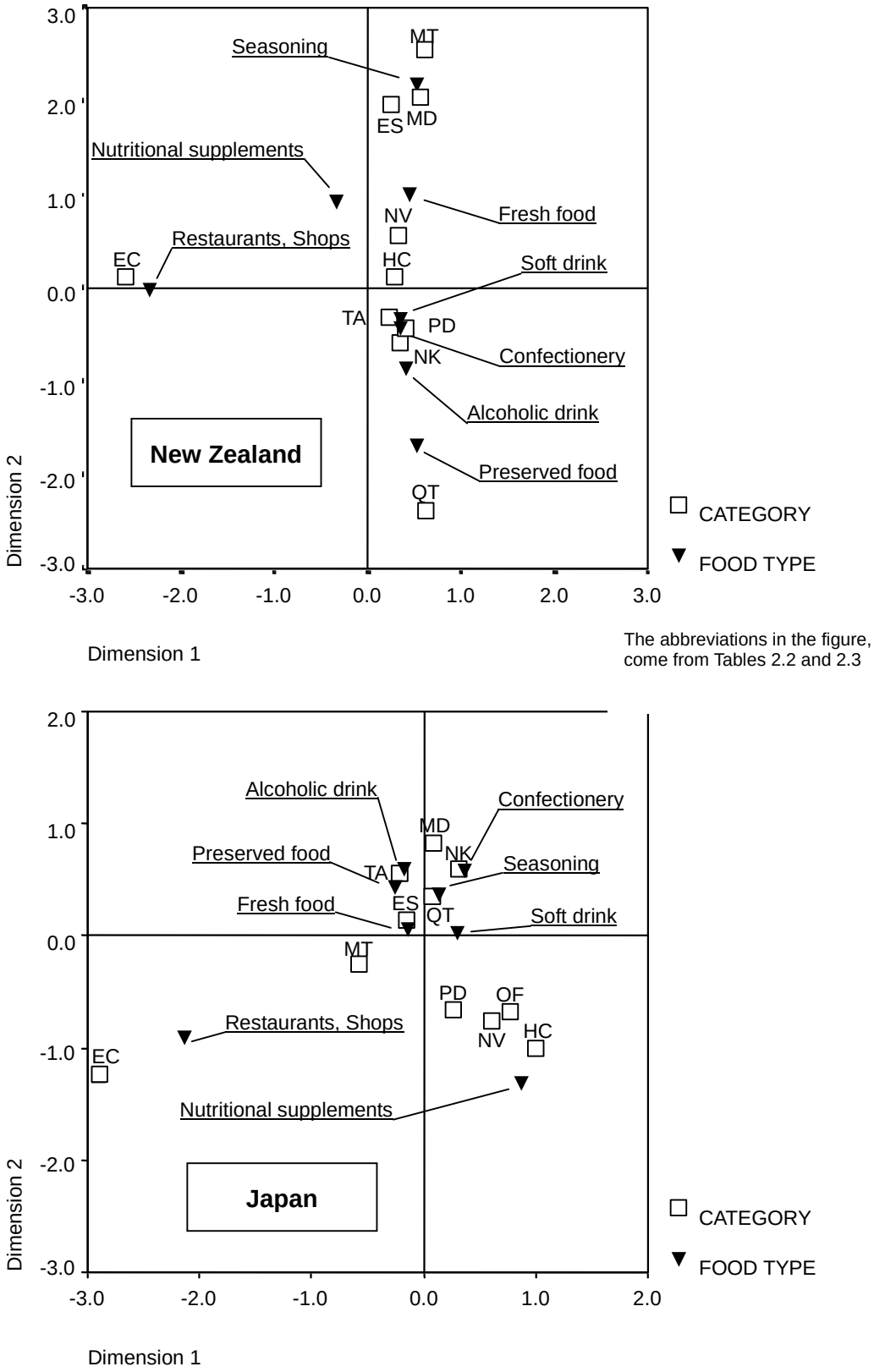


Figure 2.3. Graphic representation by correspondence analysis of categories of factual statement and food type.

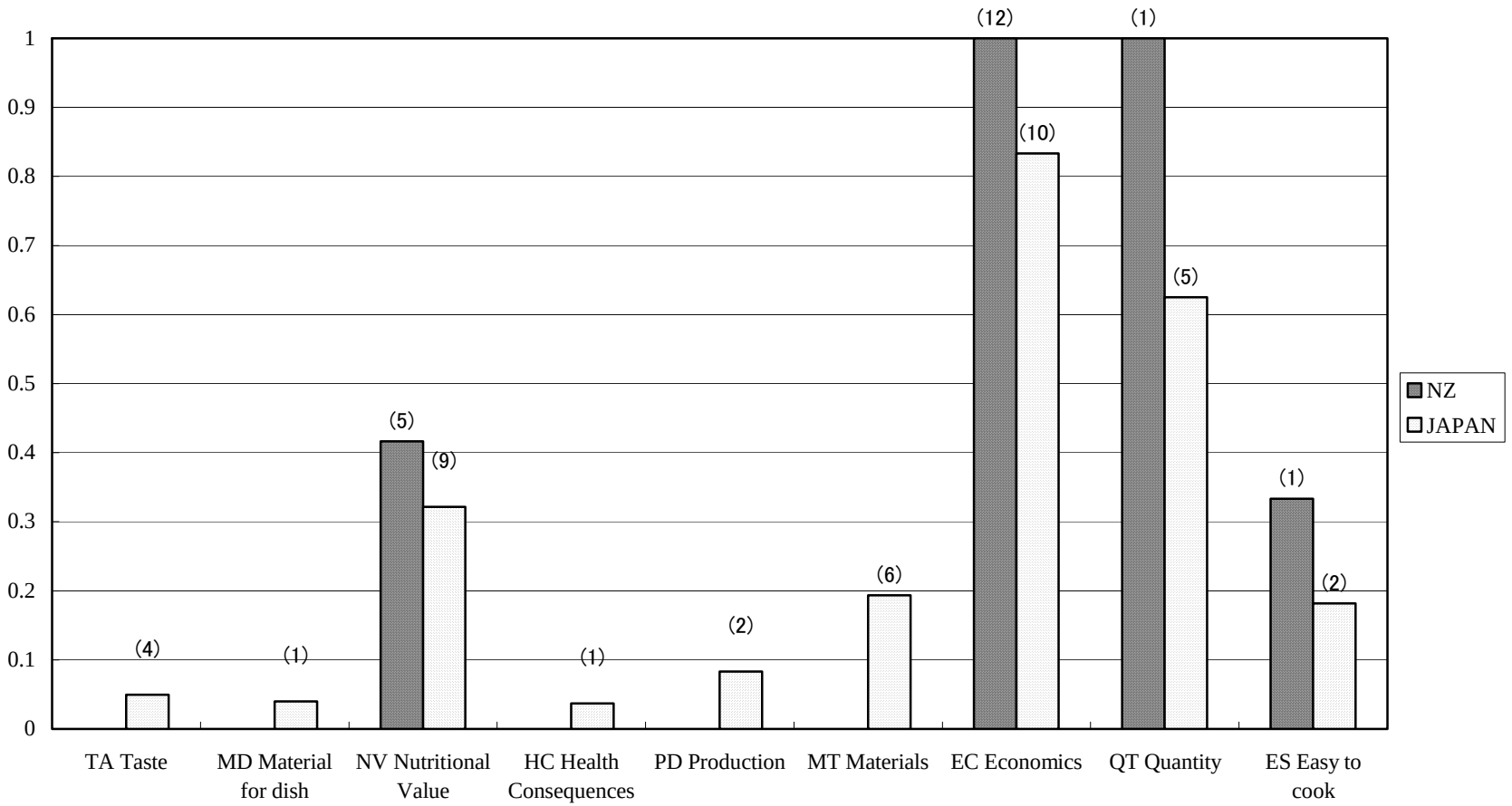


Figure 2.4. Proportions of use of the use of numerical quantification rhetoric on each factual statements.
Note: Numbers in the brackets indicate the number of commercials.

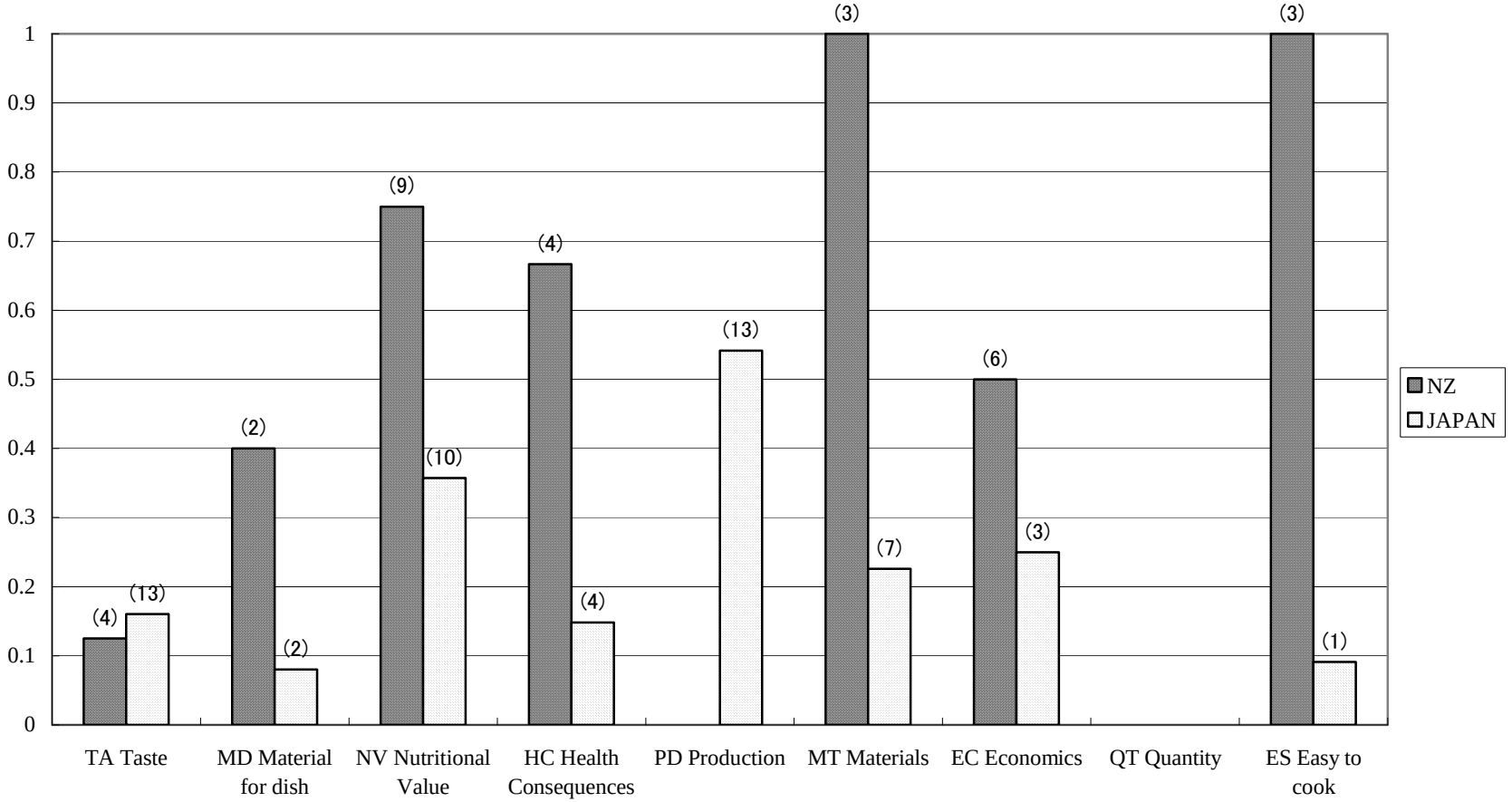


Figure 2.5. Proportions of use of the use of narrative use rhetoric on each factual statements.
Note: Numbers in the brackets indicate the number of commercials.

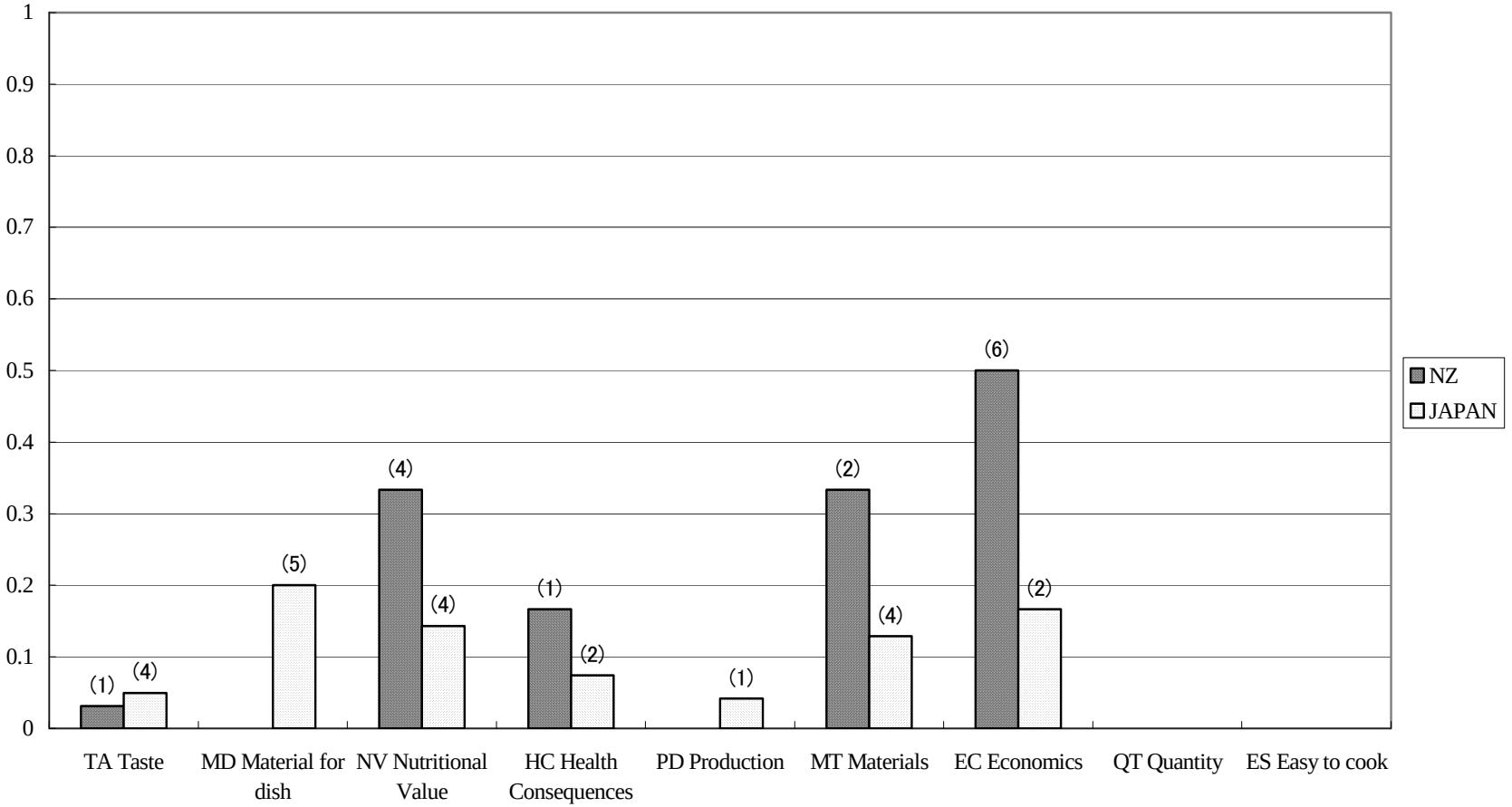


Figure 2.6. Proportions of use of the use of enumeration rhetoric on each factual statements.
Note: Numbers in the brackets indicate the number of commercials.

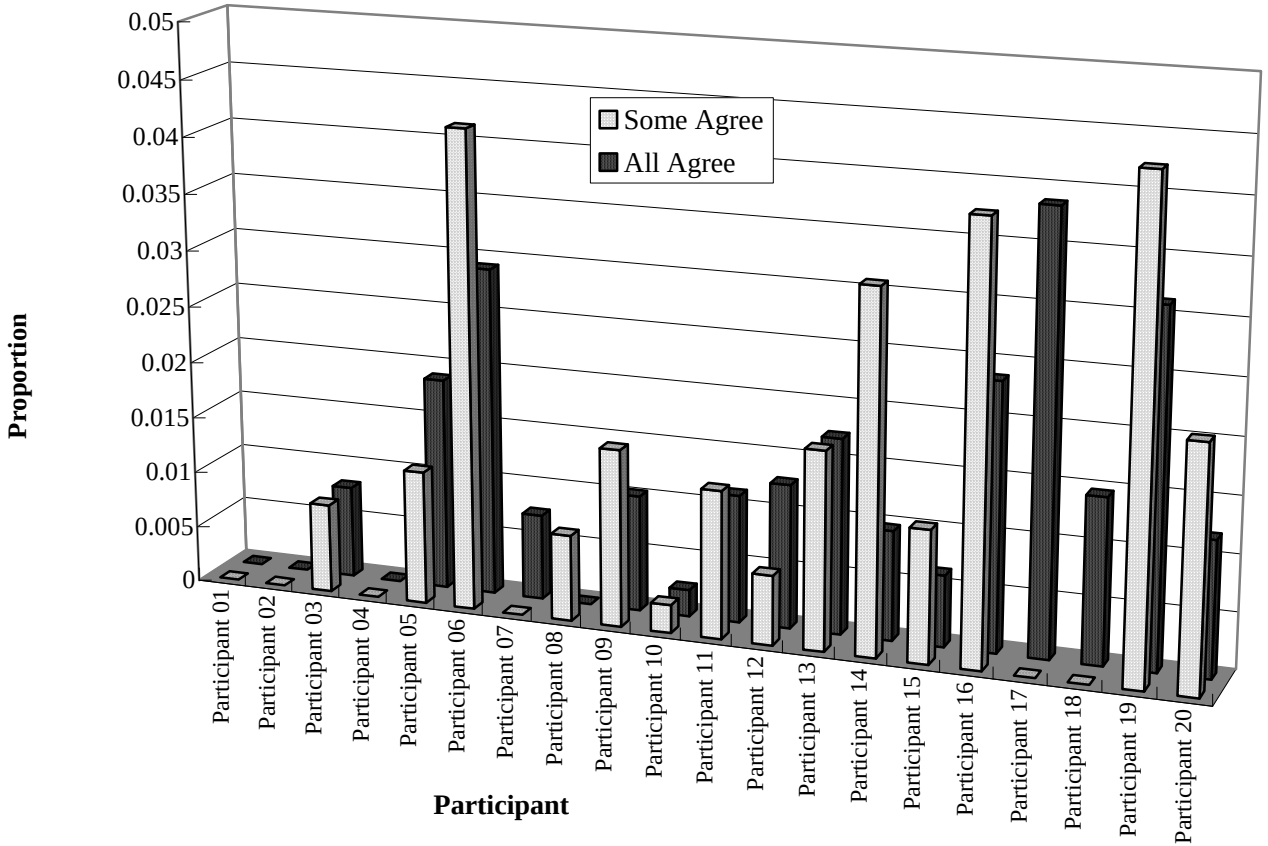


Figure 4.1. The proportions of the number of turns in which " The sentence completions when the first speaker is a listener " appeared per total number of turns in the 'Some agree' condition and the 'All agree' condition

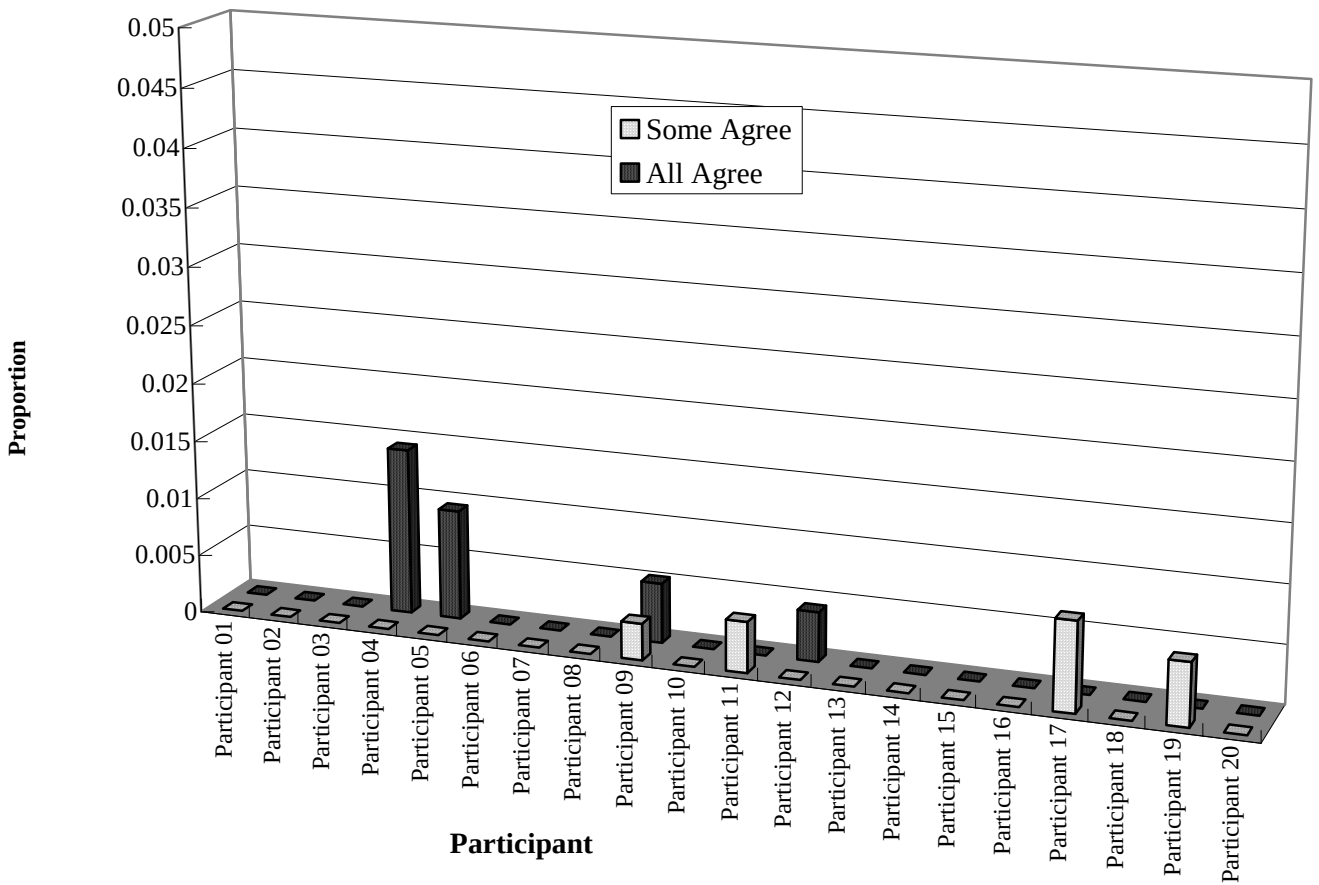


Figure 4.2. The proportions of the number of turns in which "Assisted explaining" appeared per total number of turns in the 'Some agree' condition and the 'All agree' condition

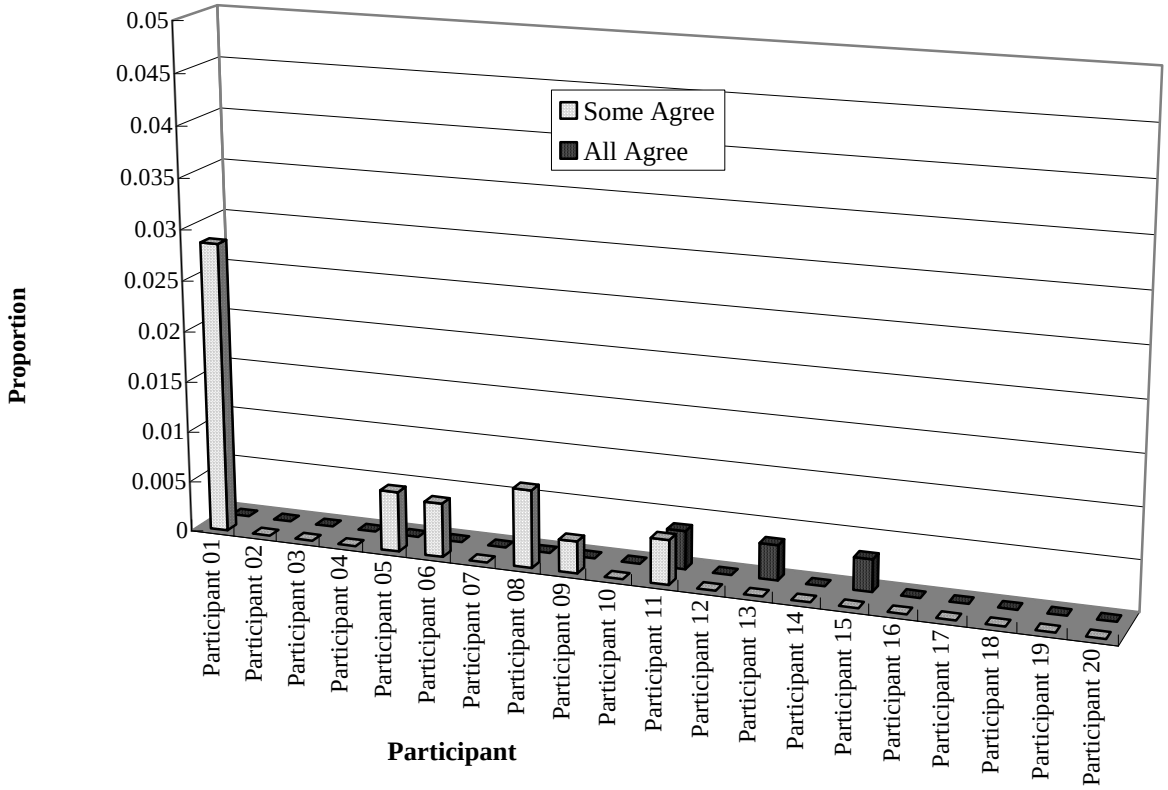


Figure 4.3. The proportions of the number of turns in which "Collaborative refutation to the third person" appeared per total number of turns in the 'Some agree' condition and the 'All agree' condition

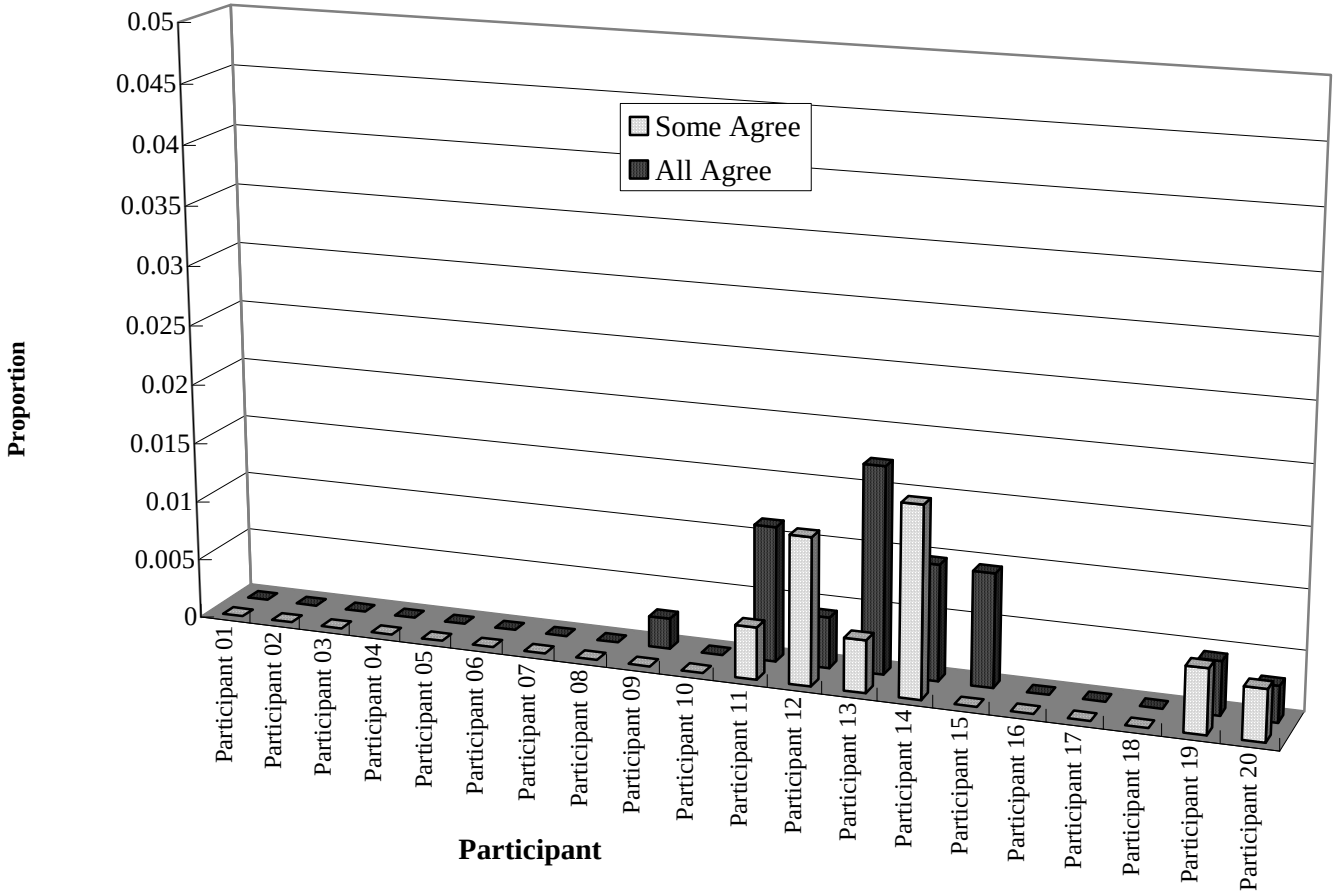


Figure 4.4. The proportions of the number of turns in which "Collaborative construction of factual statements with the grammatical unit" appeared per total number of turns in the 'Some agree' condition and the 'All agree' condition

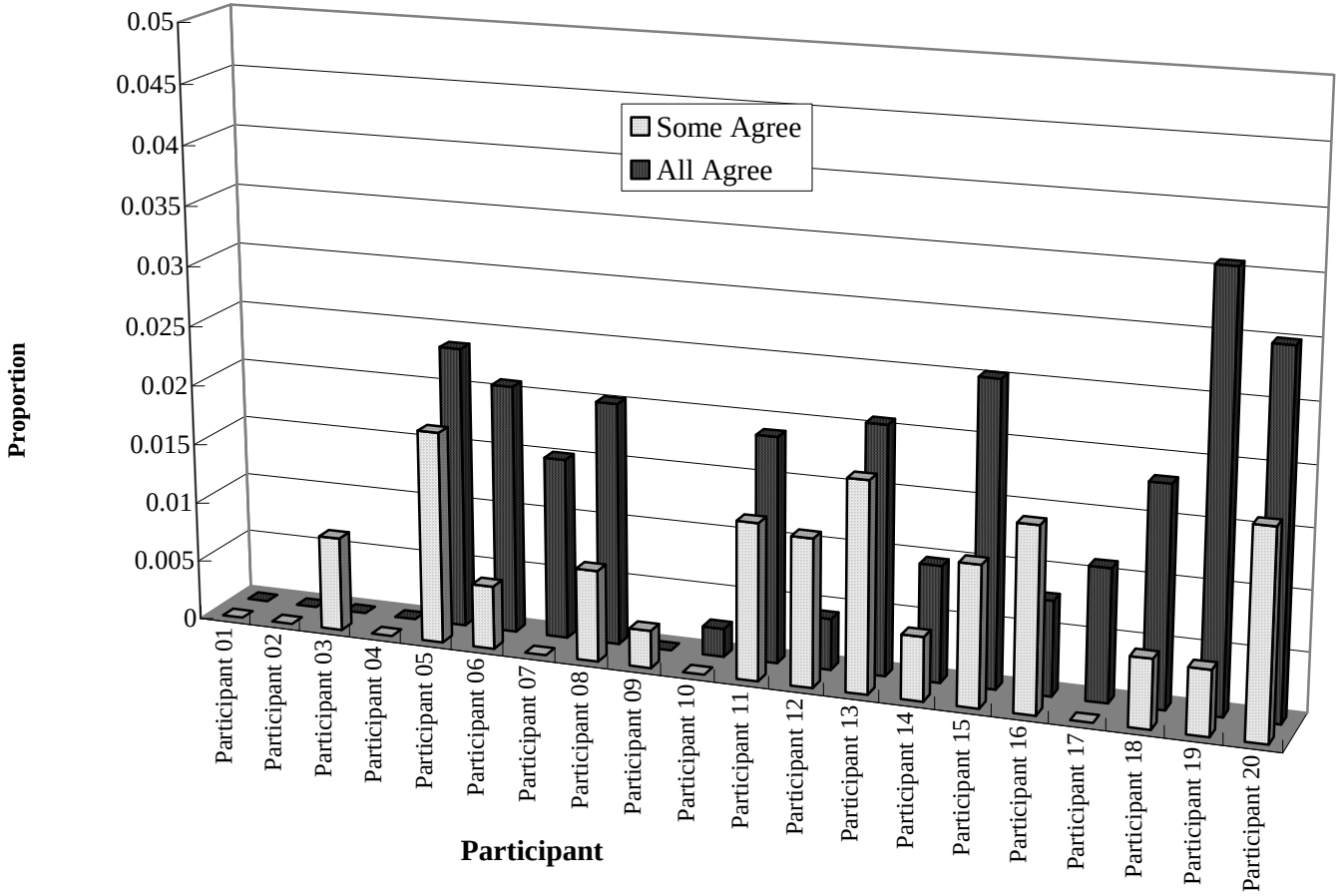


Figure 4.5. The proportions of the number of turns in which "Collaborative construction of factual statements without the grammatical unit" appeared per total number of turns in the 'Some agree' condition and the 'All agree' condition

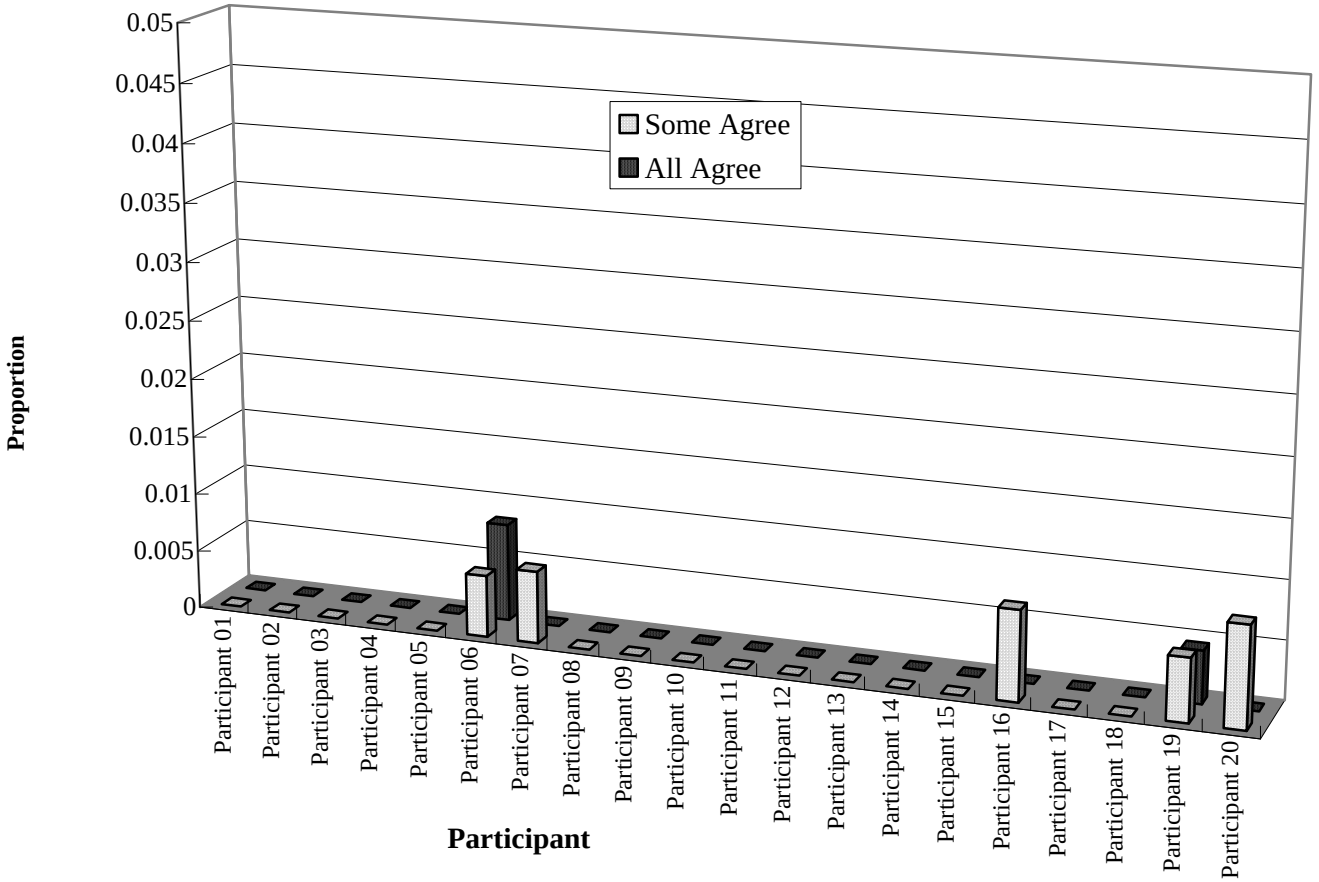


Figure 4.6. The proportions of the number of turns in which "Collaborative construction of attitude without the grammatical unit" appeared per total number of turns in the 'Some agree' condition and the 'All agree' condition