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INVESTIGATING SEMANTIC PROTOTYPES OF FOOD IN BAHDINI KURDISH

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ABSTRACT:

Prototype theory is a vital categorization theory in cognitive semantics that Rosch introduced in the 1970s. It serves as a fundamental framework in cognitive semantics for comprehending the formation and organization of categories in the human mind. The current study aims to identify the prototypes of various food categories in Bahdini Kurdish, thereby, it addresses a gap in contemporary research regarding this issue. It examines food semantics by emphasizing categorization, the most typical example in the selected category, and the impact of gender on their perception and categorization. The study investigates the prototypes of a total of nine semantic categories, including Homemade food, Fast Food, Dairy Food, Fruits, Vegetables, etc. The study has adopted descriptive and quantitative approaches by administering a questionnaire consisting of nine food categories to 100 students who speak Bahdini Kurdish based on Rosch's model (1973, 1975). The participants are selected from English and non-English departments at the University of Zakho and comprised of an even number of 50 males and 50 females. The findings identified nine food categories in Bahdini Kurdish, which feature representative or the best examples such as rice and dolma for Homemade food, pizza for fast food, baklava for sweets, etc. Gender-based disparities arose, as males and females had distinct preferences within these categories.

KEYWORDS: Prototype Theory, Cognitive Semantics, Category, Food, Bahdini Kurdish.

1. Introduction

The study of semantic prototypes in the field of semantics in general and cognitive semantics in particular has recently been of great interest to many scholars and semanticists. By defining cognitive semantics, identifying some semantic categories as examples (including food), and shedding light on the prototype theory presented by Rosch (1973, 1975), the semantic prototypes of food in Bahdini Kurdish (henceforth BK) are investigated.

There have been few studies and research papers investigating the semantic prototypes of food that are used by BK speakers in the Duhok governorate. That is why different types of food used in the BK context are categorized for the purpose of finding their prototypes. Simply, the current study is an attempt to answer the following questions:

1. What are the semantic categories of food in BK?
2. What are the most frequently used semantic prototypes of food in BK?
3. What is the influence of gender on the perception and use of prototypes of food in BK?

Some studies have been conducted to show the frequencies and percentages of different semantic categories (e.g., food, cars, machines, animals, birds, insects, flowers, etc.). However, studies and research on such categories especially the food categories and their prototypes within the BK context are still open to investigation. Therefore, it is very important to manifest the food prototypes that are used by the BK speakers, showing the statistical differences between males and females. Further, the findings of our study will be important for the BK speakers to know about the prototypical examples of all the different food categories understudy.

This study is limited to investigating the use of semantic prototypes of food by the BK speakers. These speakers have been chosen from different departments at the University of Zakho. Also, and on the basis of results obtained from a previously prepared questionnaire and data collection, this study is especially devoted to statistically calculating frequencies and percentages of food prototypes regarding gender.

2. Literature Review

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Food is a daily necessary need for all living things, especially human beings. Without food, no one can live. Hence, the study of semantic categories of food is very important in the field of semantics in general and cognitive semantics in particular. In this section, the term semantics and cognitive semantics are defined and explained. Semantic categories, including food categories, are tackled. Also, Rosch's prototype theory (1973, 1975) is discussed to present the theoretical viewpoint of semantic categories. Finally, some previous studies that are related to the present study are explained.

2.1. Semantics

Semantics, derived from the Greek term Semantikos, is a branch of linguistics that systematically examines the meanings of words, phrases, and sentences (Palmer, 1981; Parker, 1986). The term semantics is a relatively new English language term that has been added in late history. Although academics, linguists, and philosophers have been arguing about "What is meaning?" none has offered a convincing response. That is why; the study of meaning has been a challenging aspect of language. This is due to the following reasons (Lyons, 1981; Fromkin and Rodman, 1988: 205):

1. What we refer to with the word "meaning" has some kind of reality.
2. Meaning is changeable. That is, new words and lexical items are invented and added to language while others disappear.
3. The word "meaning" itself has many meanings. For instance, the meanings of the word "mean" in sentences such as *I mean to help you*., *He means the mall*., and *I mean the other story* are explained as *want to*, *go to* and *talk about* respectively.
4. There are different types of meaning including the conceptual, associative, stylistic, social, thematic, prosodic meanings, among others.

Along with all the mentioned views on the concept of meaning, this latter term has also been viewed differently. In other words, it has been explained cognitively and conceptually.

2.2. Cognitive Semantics

One of the most important branches of general linguistics and semantics is cognitive semantics. According to Croft and Cruse (2004), Cognitive semantics relates the meaning of concepts with human perception. This means that the significance of words is cognitively perceived by speakers. This general conceptual view of cognitive semantics has been explained by Talmy (2000: p. 4) before stating that cognitive semantics is "the study of the way conceptual content is organized in language". Also, the same idea has been later confirmed by Evans and Green (2006: p. 170) claiming that "cognitive semantics is primarily concerned with investigating conceptual structure" of lexical items. Figure 2.1 shows the relation between meaning and concepts in the mind:

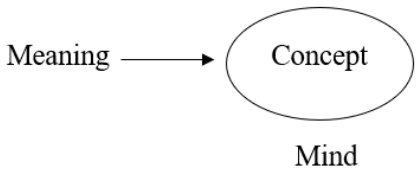

Figure 2.1: Representation of meaning as a concept in the mind

Contributed writings on cognitive semantics have been developed by many linguists and semanticists such as Jackendoff (1983), Fauconnier (1985), Lakoff (1987), Langacker (1987), Talmy (1988), Sweetser (1990), Gärdenfors (1999) among others. Almost all of them have shared similar views about cognitive semantics. Their beliefs can be summarized below:

1. Meanings are conceptualizations in the mind. In other words, the meaning of words and expressions is related to some mental entities in the mind.
2. Meanings depend on perception. That is, meanings derive from physical and social experiments in the world.
3. Meanings are considered concepts that in turn show prototype effects. This means that the best conceptual example among a semantic category can be perceptualized.

It can be said that cognitive semantics basically relates the construction of meanings to cognitive representations in the mind.

2.3. Semantic Categories

In the field of semantics, certain entities may have the same semantic features. They are categorized into one semantic class. For instance, the homonymous class of animals includes all lion, tiger, elephant, fox, horse, cat, rhino, donkey, etc. All of them can make one semantic category of ANIMAL. The entities such as rose, sunflower, daffodil, tulip, etc., can make the semantic category of FLOWER. The same is true with INSECT, BIRD, CAR, FURNITURE, among others. (In this study, the general item for a semantic category is written in uppercase letters). This means that in lexical semantics, lexical items are interpreted in terms of sense (or semantic) relations. Here, the meaning of lexical items is analyzed as linguistic units via lexical relations such as synonymy, antonymy, hyponymy, metonymy, and taxonomy, among others (Geeraerts, 2010; Palmer, 1981; Yule, 2006). For example, all the words *cat*, *dog*, *horse*, and *snake* are co-hyponyms (subordinate items) included in a more general item (hypernym) which is ANIMAL (Figure 2.2):

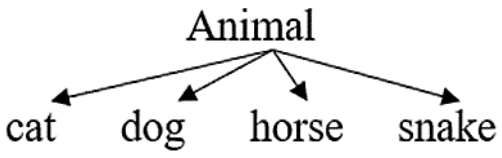

Figure 2.2: ANIMAL category

There are systemic interrelations between words and their respective underlying concepts. In other words, the lexical knowledge of any word might reveal some meaning postulates, which are a part of the lexicon (Yule, 2006).

However, in cognitive semantics, such knowledge is grounded in human interaction with one another and with the world.

Radden and Dirven (2007: p. 3) defined the term "semantic category" as "A category is the conceptualization of a collection of similar experiences that are meaningful and relevant to us, i.e., categories are formed for things that 'matter' in a community."

Thus, certain physical and social experiences may share similar semantic features, depending on somehow similar perceptualizing of these experiences by the speakers in a community. For example, when asking any English speaker which of the below objects is better used and perceptualized to represent the category CUP, they most likely tend to use image 2.2. (a) among the others. This is due to the fact that this entity is most commonly perceptualized and experienced by the speakers in their physical and social occasions.

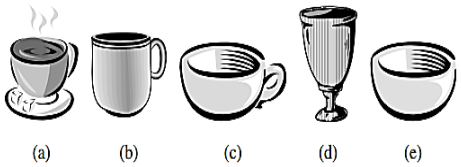

Figure 2.3: Semantic category of CUP (adapted from Evans and Green , 2006: p. 29)

All the above entities represented by a-e images shown in Figure 2.3 can make the semantic category of CUP; however, one of them (i.e., a) is the best conceptual example. Here, the idea of prototyping is presented. It is explained in the following subsection.

2.4. Food Categories

All living things must eat food to sustain life, develop normally, and carry out essential bodily functions, which emphasizes the universal truth highlighted by Khollam and Mane (2019) that "Food is a necessary part of human lives" (p. 107). A food category denotes the grouping of food items according to common attributes such as nutritional value, flavor, origin, preparation technique, etc. Given its importance for life and its intrinsically pleasurable and hedonic qualities, food is an exceptionally prominent biological category. (LaBar et al., 2001). According to the USDA, which is an official website of the United States government, and the University of Nebraska-Lincoln (UNL), food is classified into certain groups, namely, Fruits, Vegetables, Grains, Protein Foods, and Dairy. (United States Department of Agriculture, 2017; University of Nebraska-Lincoln, 2022). These are not the only categories, but these are considered the major ones. That is, there are other categories such as the Fast-Food category, Homemade category, Nuts and Seeds category, etc. A great deal of variety exists within the realm of food, and this variety may impact how we perceive and classify foods. Foods are not only taxonomically classified into different groups (e.g., fruits, vegetables, meat, fish, etc.), but they also vary in terms of enticing qualities like flavor and energy density (Foroni & Rumiati, 2017).

2.5. Prototypes

A prototype is perceived as the cultural context that shapes the definition as well as the understanding of a word. For example, to understand the meaning of the word breakfast, it is necessary to understand the practices of the culture in which the category exists. Prototypes are relatively abstract mental representations that assemble the key attributes or features that best represent instances of a given category (Evans & Green, 2006 ,Coleman & Kay, 1981).

For most people, a saloon car is the best type of car, and an estate car is a better type of car than a jeep. Thus, a saloon car would be considered a prototypical member, or prototype, of the car category, while other types of cars such as a jeep would be considered to be less prototypical members of this category. In most languages, a van or a lorry would be seen as peripheral members of the category car. A motorcycle or a bicycle would be outside the category of car altogether because they only have two wheels. This can be illustrated in the following figure:

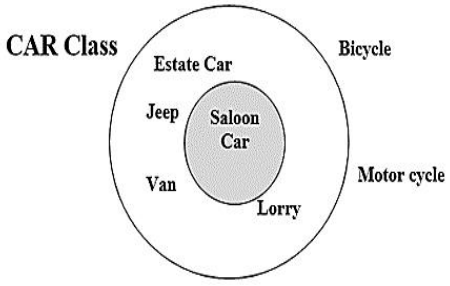

Figure 2.4: CAR prototype

As shown in Figure 2.4, the saloon car occupies the central circle and it is a prototype while others are not.

2.6. Rosch Prototype Theory

Rosch (1973, 1975) proposed the "prototype" hypothesis of categorization. Based on this theory, individuals build categories based on an archetypal example or representative member; other members relate to the extent that they possess characteristics in common with that prototype. The degrees vary among members, resulting in an internally graded category. Rosch (1975) stated that a prototype exemplifies the quintessential representation of a category. Category members can be conceptualized as organized by their degree of 'goodness', where items closely like the prototype are regarded as highly typical or exemplary members, while those that deviate significantly are considered less typical or inferior members.

Rosch (1973) and Rosch et al. (1976) argued that in Prototype Theory in semantics, categories in natural language are not defined by a set of necessary and sufficient conditions but rather by typical examples, or "prototypes". According to this theory, some members of a category are more central than others. For instance, a robin might be a prototypical bird, while a penguin is less so. This contrasts with classical theories of categorization, which assume that categories are defined by fixed boundaries. Rosch and Lloyd (1978) pointed out that prototypes of categories refer to the most definitive instances of category membership, determined operationally by individuals' assessments of membership quality inside the category. In her investigation, Rosch

(1973) found that some category members serve as cognitive reference points in human thinking. Also, some category members (called prototypes) are thought to be more typical of a category than others. Lakoff (1987: p. 12) elaborated further that "the properties of certain categories are a consequence of human biological capacities and of the experience and functioning in a physical and social environment". Moreover, Yule (2014) said that the robin is the most typical example, or prototype, of a bird. The prototype concept explains word meanings by resemblance to the best example, rather than by listing features. For instance, while ostriches and penguins are technically birds, people might hesitate to classify them as such, unlike sparrows or pigeons, which closely match the bird prototype.

Jumaniyozovna (2023) mentioned that, according to the prototype hypothesis, people prefer to group objects into categories based on how similar they are to an idealized version of that group. People tend to give higher ratings to things that they perceive as more normal; for instance, a robin is seen as more typical of the "bird" category than a penguin. Moreover, Jumaniyozovna (2023) claimed that the Prototype Theory has had a profound influence on cognitive psychology and it provides illustrations for various phenomena such as concept creation, language, and reasoning. According to this theory, individuals demonstrate superior categorization abilities by employing prototypes compared to other methods. To expedite and streamline the process, they only need to consider the degree of resemblance between the object and the archetypal example.

According to the experiments of Rosch, the Prototype Theory consists of certain characteristics which are summarized as follows (Giannakopoulou, 2003):

1. All categories have a prototype structure. For instance, within the category of 'birds', a robin is regarded as a prototype due to its fundamental bird attributes, such as flight capability, a beak, and feathers.

2. A collection of features cannot be used to realize prototype categories because different members may not have the same amount of these features. For instance, Within the 'furniture' category, members such as chairs and sofas exhibit distinct characteristics; nonetheless, both are classified as furniture despite these differences.

3. Prototype categories may be blurred at the edges. For example, certain members serve as clear prototypes, whilst others, such as puzzles or playing catch within the 'games' category, may not conform as clearly. Chess and soccer exemplify robust prototypes due to their explicit rules and competitive nature, while puzzles lack direct competition, and playing catch seems more informal, and this leads to less defined category boundaries.

4. Category membership can be understood in terms of gradation. For example, within the 'carpenter's tool' category, a saw is the most prototypical instance followed by a hammer, ruler, screwdriver, drill, nails, etc.

5. The semantic structures of these categories tend to overlap and cluster. For example, in the category of 'vehicles', cars, trucks, and motorbikes exhibit overlapping characteristics such as transportation and wheels, however, they are categorized into various subgroups according to their respective functions.

2.7. Previous Studies

Attempting to provide empirical support for the Prototype Theory, Rosch (1975) initiated a study that included several experiments. Experiment 1 aimed to identify the most representative (prototypical) example of certain semantic categories including fruit, bird, vehicle, vegetable, etc. 209 Participants, who were psychology students, were given a 7-point scale to indicate how well each example matched their mental picture of the category word. A rating of 1 signifies an excellent match with the category, 7 denotes a weak match or non-membership, and 4 represents a moderate match. The results of the study indicated that, within the Fruit category, orange obtained the greatest prototypicality rating, whereas squash received the lowest. In the Vegetable category, pea was regarded as the most archetypal, whilst rice obtained the lowest grade.

Schwanenflugel and Rey (1986) carried out a similar experiment to that of Rosch. They aimed to investigate the potential correlation between instance familiarity and variations of prototypicality that was cognitively manifested by 100 Spanish and English native speakers. The study selected 12 semantic categories, namely, bird, cloth, clothing, color, fruit, furniture, etc. By administering a questionnaire (in Spanish and English), and following the Rosch model (1973, 1975), the results indicated that the best example (prototypical) to represent the Fruit category for both groups (English and Spanish speakers) was Apple.

Jamalifar (2014) studied the prototype of the Fruit category in American and Iranian communities, involving 28 American native speakers from Houston and 28 Farsi speakers from Esfahan. Noteworthy, the researcher had direct access to the participants living in Esfahan and no direct access to the participants living in Houston who were contacted via E-mail. By distributing a questionnaire (in English and Farsi), the findings reported that the American native speakers regarded Apple as the prototypical example of the Fruit category, whereas Banana is considered the least. However, the case was different for the Farsi native speakers. That is, Banana is considered the prototypical example of the Fruit category, while Watermelon is the least. Therefore, the study concluded that the prototypes differ between the studied two groups.

To test how the Prototype Theory applies to the Kurdish language, Abdullah and Salih (2017) conducted an experiment. The objective of this investigation is to ascertain the impact of various factors, including economic conditions, geographic regions, age, gender, watching TV, and multilingualism, on selecting the prototypes in the Fruit semantic category. The participants of the experiment were selected from certain departments at the University of Zakho, as well as high school pupils from Balqos village and Shinwar School in Duhok. A questionnaire was employed by the researchers to gather pertinent data for the investigation and the category of Fruit was selected in order to identify its prototypical example. The outcomes indicated that male participants

selected Greengages while females chose Pomegranates as the prototypical example of the Fruit category.

3. Method

For the purpose of investigating the use of prototypes of the food semantic categories among the BK speakers (university students in our study), the current study used a descriptive and quantitative method. Further, research design, participants, sampling procedures, and tools are tackled in the following sub-sections.

3.1. Research Design

In an attempt to investigate the semantic categories of food in the BK and show the food prototypes in these categories, the present study utilized descriptive and quantitative approaches for collecting information and data. To show the main semantic categories of food and the perceptual prototypes in the BK, and following the prototype theory by Rosch (1973, 1975), a questionnaire of nine items (semantic categories of food in the BK) was designed and distributed to 100 BK speakers (50 males and 50 females) from English and non-English departments, University of Zakho. All of the responses (i.e., 100 copies) returned. Finally, interpreting and analyzing the obtained data by Excel sheets made finding the statistical results easier.

3.2. Participants and Sampling Procedure

In this paper, and for receiving the questionnaire responses, the researchers did their best to return every single copy of the questionnaire. The participants of the study were 50 males and 50 females from different departments at the University of Zakho. The data was gathered from the university for several reasons. Initially, university students were more accessible to the researcher, facilitating a more easy and efficient data gathering method. Second, university students can be considered a representative sample of the BK population, as they reflect diverse social, cultural, and linguistic characteristics present in the community. This ensures the findings are relevant and applicable beyond the university setting. In our opinion, 100 hundred copies of the questionnaire may be considered reliable for authenticating the data from a university. In other words, the results obtained from the questionnaire can represent a larger population of BK speakers. The age variable is excluded from our study. However, only the gender variable has been chosen for our study to show the difference between males and females using prototypes in the semantic categories of food.

3.3. Tools and Data Collection Procedures

The tool that was used to gather and measure the data was the following:

1. A questionnaire of nine items about the semantic categories of food was used to collect the participants' understanding and perception of food prototypes in the BK. A total of 100 copies of the questionnaire were distributed to 100 BK speakers from English and non-English departments, at the University of Zakho. All of the questionnaire responses were returned.

2. For the sake of obtaining all responses, the questionnaire, which was originally written in English, was translated into the BK. So, every item and sub-item in the questionnaire was in both English and Kurdish. The translated version of the questionnaire was helpful for understanding the idea of semantic categories by participants who did not know English. This was because the questionnaire was also sent to students from other departments, not English, in the target university.

3. The participants were asked to circle the prototypical example from each semantic category of food. Also, the participants were told that they could choose more than one item.

4. Statistical descriptions (frequencies and percentages) of responses were calculated by using Excel sheets. Finally, the obtained results have been presented on bar charts.

4. Data Analysis, Results and Discussion

On the basis of the literature review and aims of the study, the obtained data were analyzed and interpreted in order to determine an answer to the three research questions, namely: (1) determining the semantic categories of food in BK, (2) identifying the most frequently used semantic prototypes, and (3) examining the influence of gender on the perception and use of these prototypes.

The semantic categories of food in the BK presented in our study are shown in the following table:

Table 4.1: The Semantic Categories of Food in the BK

1. Homemade Food (خوارنا مالان):	Rice & Soup (نافک ، برنج), Dolma (ئیپراخ), Bulgur (ساقار), Maqluba (مەقلوب), Soup (شوربە), Pilaf (بریانی), Mahshi (مەحشی)
2. Fast Food (خوارنا سەرپێ):	Sandwich (لەفە), Hamburger (هامبورگەر), Fries (پناتێن قەلاندی), Fried Chicken (مریشکا قەلاندی), Pizza (پیتزا), Kebab (کەباب), Noodles (مەعکەرون)
3. Dairy Food (سپیاتی):	Eggs (هێك), Yogurt (ماست), Cheese (پەنیر), Milk (شیر), Butter (نیڤشك), Herbal Cheese (ژاژی), Kaymak (قەیماخ)
4. Meat, Poultry & Fish (گوشت و ماسی):	Chicken مریشك, Beef گوشتێ چێلی, Venison گوشتێ خەزالی, Lamb گوشتێ بەرخی, Fish ماسی, Turkey گوشتێ عەلوکێ, Sparrow Meat گوشتێ چیچکێ
5. Grains (بەرهەمێ هشک):	Rice برنج, Bulgur ساقار, Corns شامیك, Mung beans ماش, Chickpeas نوك, Beans باقلك, Lentils نیسك
6. Nuts & Seeds (چەرەز):	Walnuts گیز, Almonds قستەق, Pistachio باهیڤ, Hazelnuts بندەق, Sunflower seeds توفکێن گولبەروژا, Resins مێویژ, Pumpkin seeds توفکێن کولندا

7. Fruits (فیقی):	Watermelon شتی/زەبەش, Fig هژیر, Grapes تری, Apple سێف, Orange پرتەقال, Pomegranate هنار, Melon گوندور
8. Vegetables (زەرزەوات):	Onion پیڤاز, Potato پتات, Tomato باجان, Garlic سیر, Beetroot تفر, Cabbage کەلەمی, Cucumber خیار
9. Sweets (شرینـاهی):	Custard کاستەر, Jelebi زەلابی, Chocolate چکلێت, Baklava بەقلاوە, Home-made cookies کادە , Candy شەکروك, Sweetness لوقمك/داتلی

Probably the above semantic categories can be found in almost all languages in the world. However, the items in these categories may differ from one culture to another. For example, Dolma, Maqluba, Mahshi, etc., are restricted to the Kurdish culture.

According to the perception of prototypes of food by the BK speakers (males and females), these prototypes are statistically presented separately in the following subsections.

4.1. Homemade Food (خوارنا مالان):

The results showed that the BK speakers perceived RICE & SOUP as the prototype of the Homemade food category. It calculated the highest percentage, 50% (32% males, 18% females). Here, males prefer having rice and soup as a casual meal for them. Also, DOLMA was considered a prototype with a percentage of 32%, where females (20%) prefer DOLMA more than males (12%). Other items including BULGUR, MAQLUBA, etc., were not seen as important. The frequencies and percentages of food prototypes in the semantic category of Homemade food are shown in the following figure:

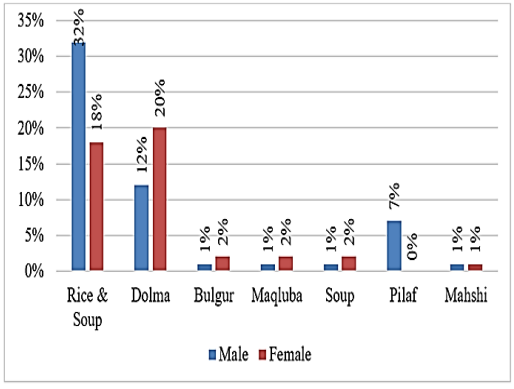

Figure 4.1: Percentages of Homemade Food Prototypes

4.2. Fast Food (خوارنا سەرپێ):

According to the fast-food category, the results presented that the highest percentage was recorded for SANDWICH to be the best example referred to by the BK speakers. The percentage was 36% (21% males, 15 females). Different types of sandwiches are usually prepared and served at almost all restaurants in the BK-speaking areas. Also, the females perceived PIZZA (15%) to be prototypical for the fast-food category. Other items such as HAMBURGER and KEBAB calculated equal percentages and they were 13% (7% males, 6% females). The obtained percentages of this category are shown in the following figure:

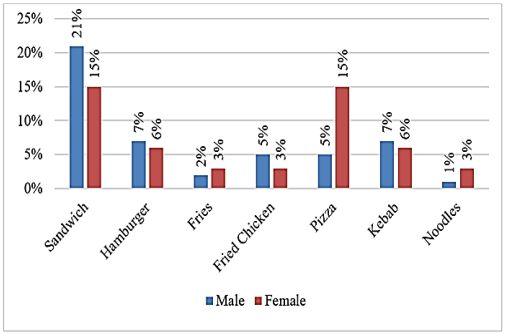

Figure 4.2: Percentages of Fast-Food Prototypes

4.3. Dairy Food (سپیاتی):

The results manifested that both males (26%) and females (18%) conceptualized YOGURT as a prototype among all the other items in the dairy food category. This may be due to the fact that yogurt is very commonly served and eaten at breakfast in the Kurdish culture. The second highest percentage was recorded for HERBAL CHEESE, and it was 15% (7% males, 8% females) followed by the item EGG, which was 11% (9% males, 2% females). It seems that the rest of the items were not significantly prototypical. Figure (4.3) shows the percentages of prototypes in the dairy food category.

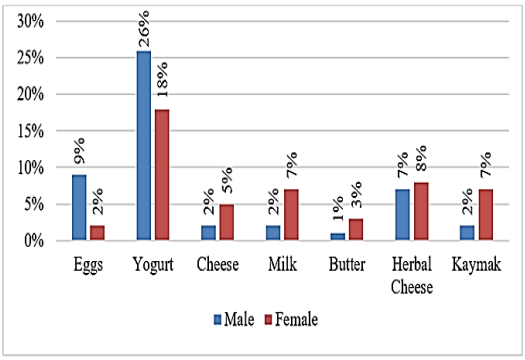

Figure 4.3: Percentages of Dairy Food Prototypes

4.4. Meat, Poultry & Fish (گۆشت و ماسی):

As indicated in Figure (4.4), the BK speakers perceived three items of the meat, poultry, and fish category to be conceptually regarded as prototypes. First, CHICKEN has calculated the highest percentage (36%) for both males (18%) and females (18%). Second, the LAMB has the second highest percentage (30%), where males (22%) recorded a much higher percentage than females (8%). Third, a percentage of 23% (9% males, 14% females) was for the FISH item. Here, the other items in this category are not considered as important prototypical examples of food, only the above-mentioned three items are the only prototypes of meat, poultry, and fish.

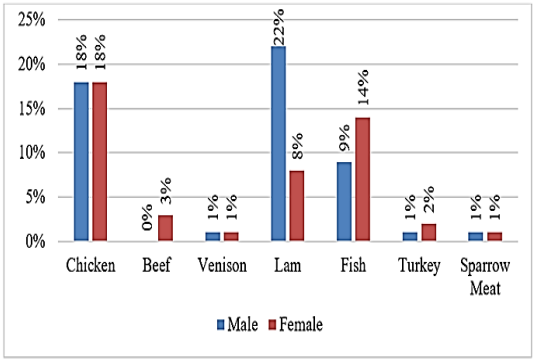

Figure 4.4: Percentages of Meat, Poultry and Fish Prototypes

4.5. Grains (بەرهەمێ هشک):

In the semantic category of grains, the majority of the BK speakers chose RICE as a prototype of grains. The percentage was 60%, where there was no noticeable difference between males (29%) and females (31%). Such a percentage was expected because almost every house in the BK cities, towns, and villages store enough amounts of rice. It is an everyday meal, especially lunches and dinners. The other items in this category had various percentages. However, they did not record high percentages except for BULGUR and CHICKPEAS with an equal percentage of 10% for both.

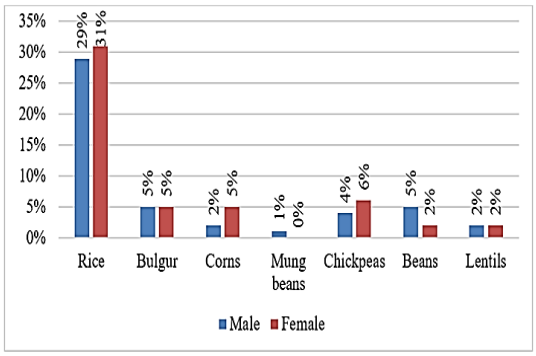

Figure 4.5: Percentages of Grains Prototypes

4.6. Nuts & Seeds (چەرەز):

Concerning the semantic category of nuts and seeds, the results showed that more than half of the participants (52%) perceived PISTACHIO as the best example, i.e., prototype of all types of nuts and seeds. With regard to gender differences, there was a slight statistically significant difference between males (24%) and females (28%). Further, the SUNFLOWER SEEDS was also used as a remarkably prototypical item of the category. It recorded a percentage of 23% (12% males, 11% females). The other items had low percentages. This means they cannot be regarded as prototypes in the nuts and seeds category.

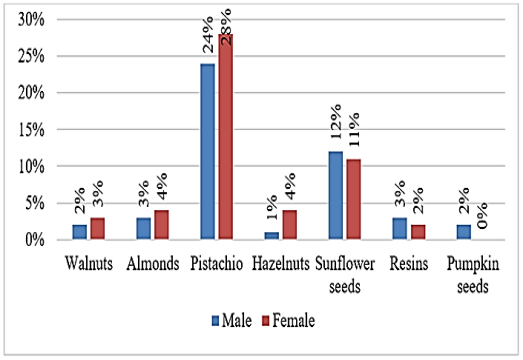

Figure 4.6: Percentages of Nuts & Seeds Prototypes

4.7. Fruits (فێقی):

As it is clear from the figure (4.7) below, almost all the items recorded approximately equal percentages. The only item that had the highest percentages was WATERMELON (25%), where there was no such statistical difference between males (13%) and females (12%). So, this item (i.e., WATERMELON) can be considered a prototype of the fruits semantic category. Other items including FIG, APPLE, ORANGE, and POMEGRANATE recorded exactly the same percentage, and it was 15%. Concerning these latter items, one cannot decide which one is more prototypical because both males and females manifested a variety of percentages between and across the items. For instance, males perceived the FIG as prototypical while females tended to choose the ORANGE as the best example. The results of the current study have not been supported by Rosch (1975), Schwanenflugel and Rey (1986), Jamalifar (2014), and Abdullah and Salih (2017).

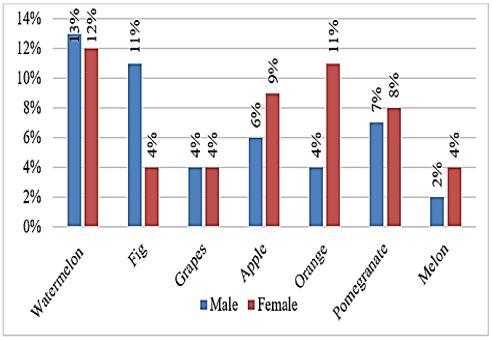

Figure 4.7: Percentages of Fruits Prototypes

4.8. Vegetables (زەرزەوات):

The results showed that TOMATO recorded the highest percentage (33%) as a prototype in the semantic category of vegetables with no such statistical difference between males (17%) and females (16%). Also, the BK speakers perceived other items to be probably prototypical in everyday life. A percentage of 23% was calculated for POTATO, 11% males and 12% females, followed by the items CABBAGE and CUCUMBER with relative percentages, 16% (3% males, 13% females) and 13% (% males, 5% females) respectively. Finally, it seems that the remaining items were not considered prototypical because they calculated low percentages. The findings are not in-line with the findings of Rosch (1975).

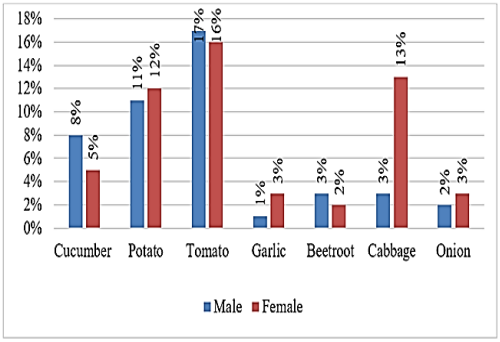

Figure 4.8: Percentages of Vegetable Prototypes

4.9. Sweets (شرێناهی):

In the last semantic category, i.e., sweets, the BK speakers perceived BAKLAVA (62%) as the most frequent item of sweets and the most prototypical example, with males showing a higher percentage (35%) than females (27%), as shown in the figure (4.9) below. According to these results, it seems that the majority of the BK speakers like to have BAKLAVA when they want to have some sweets after a meal. The other items of this same category were not chosen as prototypical because they recorded low percentages.

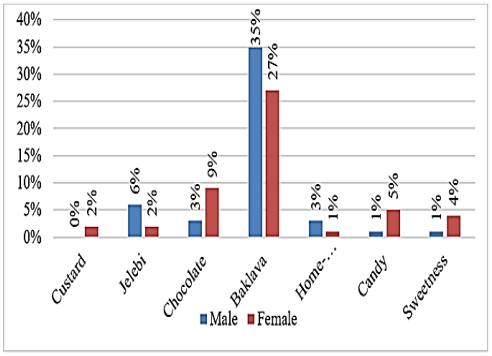

Figure 4.9: Percentages of Sweets Prototypes

5. Conclusions

The main points the present study arrived at t can be summarized below:

1. There are at least 9 semantic categories of food in BK: Homemade Food (خوارنا مالان), Fast Food (خوارنا سەرپێ), Diary Food (سپیاتی), Meat, Poultry & Fish (گوشت و ماسی), Grains (بەرهەمێ هشك), Nuts & Seeds (چەرەز), Fruits (فێقی), Vegetables (زەرزەوات), and Sweets (شرێناهی).

2. The semantic categories of food in the BK showed various percentages. Hence, the participants perceived the selected items in these categories as the best examples (or prototypes) differently: RICE & SOUP and DOLMA (Homemade food), SANDWICH and PIZZA (fast-food), YOGURT, HERBAL CHEESE and EGG (dairy food), CHICKEN, LAMB and FISH (meat, poultry and fish), RICE (grains), PISTACHIO and SUNFLOWER SEEDS (nuts and seeds), WATERMELON, FIG, APPLE, ORANGE and POMEGRANATE (fruits), TOMATO and POTATO (vegetables), and finally BAKLAVA (sweets).

3. Males and females manifested a variety of frequencies and percentages in each semantic category. For some items, the males recorded higher percentages than females. However, in some other items, the females calculated higher percentages.

6. Suggestions for Further Studies

On the basis of the results and conclusions, the following points are suggested:

1. Conducting studies on the semantic category of food showing cultural differences between Bahdini and Sorani dialects as two major dialects of Kurdish.
2. Investigating the perception of prototypes within other semantic categories such as transportation, animals, birds, flowers, etc.

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Appendix: Questionnaire (راپرسی)

Investigating Semantic Prototypes of Food in Bahdini Kurdish

فەکولینەک لدور نمومەیێن سیمانتیکی یێن خوارنێ د کوردیا بەهدینی دا

Gender:	Male نێر		Female مێ		Age تەمەن:	

The aim of this questionnaire is to find out what/how you see the following numbered items to be the best example for each semantic category of food. Please answer as honestly as possible reflecting on your own understanding experience. [You can choose more than one item]. Note: Circle the item you choose. Thank you for your cooperation.

ئارمانج ژ ڤێ راپرسیێ ئەوە کو ئێك یان هندەك ژ ڤان ناڤێن خوارنا یێن کو لخوارێ دیار وەك باشترین نموونە بهێنە هەلبژارتن. هیڤیدارین هندی د شیاندا بیت ب دروستی و ئاشکرایی بەرسڤێ بدە. [تو دشێی پتر ژ ناڤەکی ب هەلبژێری]. تێبینی: بو هەلبژارتنێ، پەیڤێ بکە د بازنەکێدا. سوپاس بو هاریکاریا وە.

Types of food جورێن خوارنان	1	2	3	4	5	6	7	Others
Homemade Food خوارنا مالان	Rice & Soup ئاقك و برنج	Dolma ئیپراخ	Bulgur ساڤار	Maqluba مەقلوب	Soup شوربە	Pilaf بریانی	Mahshi مەحشی	
Fast Food خوارنا سەرپێ	Sandwich لەفە	Hamburger هامبورگەر	Fries پتاتین قەلاندی	Fried Chicken مریشکا قەلاندی	Pizza پیتزا	Kebab کەباب	Noodles مەعکەرون	
Diary Food سپیاتی	Eggs هێك	Yogurt ماست	Cheese پەنیر	Milk شیر	Butter نیڤشك	Herbal Cheese ژاژی	Kaymak قەیماخ	
Meat, Poultry & Fish گوشت و ماسی	Chicken مریشك	Beef گوشتێ چێلێ	Venison گوشتێ خەزالێ	Lamb گوشتێ بەرخی	Fish ماسی	Turkey گوشتێ عەلوکێ	Sparrow Meat گوشتێ چیچکێ	
Grains بەرهەمێ هشك	Rice برنج	Bulgur ساڤار	Corns شامیك	Mung beans ماش	Chickpeas نوك	Beans باقلك	Lentils نیسك	
Nuts & Seeds چەرەز	Walnuts گیز	Almonds باهیڤ	Pistachio فستەق	Hazelnuts بندەق	Sunflower seeds توفکێن گولبەروژا	Resins مێویژ	Pumpkin seeds توفکێن کولندا	
Fruits فیقی	Watermelon شتی/زەبەش	Fig هژیر	Grapes تری	Apple سێڤ	Orange پرتەقال	Pomegranate هنار	Melon گوندور	
Vegetables زەرزەوات	Onion پیڤاز	Potato پتات	Tomato باجان	Garlic سیر	Beetroot تفر	Cabbage کەلەمی	Cucumber خیار	
Sweets شرینا‌هی	Custard کاستەر	Jelebi زەلابی	Chocolate چکلێت	Baklava بەقلاوە	Home-made cookies کادە	Candy شەکروك	Sweetness لوقمك/داتلی	

شرۆڤەکرنا پێشنموونەیێن واتاسازی یێن خوارنێ د کوردیا بەهدینی دا

پوختە:

تیۆرا پێشنموونەیی تیۆرەکا گرنگە د بیاقێ کەتیگۆربەندیێدا د واتاسازیا مەعریفیدا، کۆ د سالێن (١٩٧٠) یان ژ لایێ ڤەکۆلەر (رۆشێ) ڤە هاتیە دەستنیشانکرن. ئەڤ تیۆرە چارچووڤەکێ بنگەهییە د واتاسازیا مەعریفیدا، بۆ تێگەهەشتنا پێکهات و رێکخستنا کەتیگۆریێن د مەژیێ مرۆڤی دا. ئارماج ژ ئەڤێ ڤەکۆلینێ ئەوە دیارکرنا پێشنموونەیێن واتاسازی یێن کەتیگۆریێن خوارنێ د کوردیا بەهدینی دا، بۆ هندێ وێ ڤالاهیا د ڤەکۆلینێن سەردەمیانە پر بکەت. ئەڤ ڤەکۆلینە رێزبەندیا واتاسازییێن خوارنێ دیار دکەت، هەروەسا باشترین نموونە د هەر کەتیگۆریێ دا و کارتێکرنا رەگەزی ل سەر تێگەهەشتنا وان. ئەڤ ڤەکۆلینە چەندین پێشنموونەیێن واتاسازیێ شرۆڤە دکەت، وەک خوارنا مالان، خوارنا سەرپێ، سپیاتی، فێقی، زەرزەوات... هتد. ئەڤ ڤەکۆلینە ل دویڤ هەردۆک رێبازێن (شیکاری، رێژەی) هاتیە ئەنجامدان، ب رێکا دابەشکرنا راپرسییەکێ کۆ پێکدهات ژ نەهـ کەتیگۆریا ل سەر (١٠٠) کەسان، (٥٠ نێر و ٥٠ مێ) کۆ زمانێ وان یێ دەیکێ کوردیا بەهدینی بوویە، ل دویڤ مودیولا رۆش (١٩٧٣، ١٩٧٥). د ئەنجامێ ڤەکۆلینێ دا، نەهـ کەتیگۆریێن خوارنێ د کوردیا بەهدینی دا دیار بوون و د هەر کەتیگۆرییەکێ دا، باشترین نموونە هەبوونە، وەک: (برنج و ئیپراخ) بۆ خوارنا مالان، (پیتزا) بۆ خوارنا سەرپێ، (بەقلاوە) بۆ شرێناهیان... هتد. هەروەسا ب هەبوونا جوداهیێ دناڤبەرا هەلبژارتنێن نێر و مێ دا.

پەیڤێن سەرەکی: تیۆرا پێشنموونەیی، واتاسازییا مەعریفیدا، کەتیگۆری، خوارن، کوردیا بەهدینی.

تحليل النماذج ا الاصلية الدلالية للأطعمة في الكردية البهدينية

المستخلص:

نظرية الانموذج الاصلي هي نظرية تصنيفية مهمة في الدلالات المعرفية قدمتها الباحثة روش في السبعينيات. تُعد هذه النظرية إطارًا أساسيًا في الدلالات المعرفية لفهم تكوين وتنظيم الفئات في العقل البشري. تهدف الدراسة الحالية إلى تحديد النماذج الاصلية لمختلف فئات الأطعمة في اللغة الكردية البهدينية، وبالتالي تعالج فجوة في مجال الأبحاث المعاصرة حول هذه المسألة. تتناول الدراسة دلالات الأطعمة من خلال التركيز على التصنيف، وأبرز الأمثلة في الفئة المحددة، وتأثير نوع الجنس على إدراكها وتصنيفها. تحقق الدراسة في النماذج الأولية لتسع فئات دلالية تشمل: الأطعمة الجاهزة، الوجبات السريعة، منتجات الألبان، الفواكه، الخضروات، وغيرها. تعتمد الدراسة على منهجين وصفي وكمي، من خلال استبيان يتكون من تسع فئات غذائية تم توزيعه على 100 متحدث بالكردية البهدينية، بناءً على نموذج روش (1973، 1975). تم اختيار المشاركين من أقسام اللغة الإنجليزية واقسام الاختصاصات الاخرى في جامعة زاخو، وكان العدد متساويًا بين الذكور والإناث (50 لكل منهما). كشفت النتائج عن تسع فئات غذائية في الكردية البهدينية، تتميز بأمثلة تمثيلية أو الأفضل، مثل الأرز والدولمة للأطعمة الجاهزة، والبيتزا للوجبات السريعة، والبقلاوة للحلويات، وغيرها. كما ظهرت اختلافات قائمة على النوع الجنس، حيث أظهر الذكور والإناث تفضيلات متميزة للأمثلة ضمن هذه الفئات.

الكلمات المفتاحية: نظرية الانموذج الاصلي ، الدلالات المعرفية، الفئات، الأطعمة، الكردية البهدينية.