






## ARTICLE

# Perceptual-Figurative Concept «Moral Traits and Qualities of a Person's Character»

*Aiman Nurgazina*<sup>1</sup> , *Klara Abisheva*<sup>2</sup> , *Gulzira Kenjetaeva*<sup>3</sup> , *Assel Baikadamova*<sup>3</sup> ,  
*Zhanar Jambayeva*<sup>1\*</sup> 

<sup>1</sup> Department of Theoretical and Applied Linguistics, Eurasian National University, Astana 101302, Republic of Kazakhstan

<sup>2</sup> Department of Social, Humanitarian Sciences and Linguistic Disciplines, Turan-Astana University, Astana 010013, Republic of Kazakhstan

<sup>3</sup> Department of Foreign Philology, Eurasian National University, Astana 101302, Republic of Kazakhstan

## ABSTRACT

The article is devoted to the study of the perceptual-imaginative concept, which gives an idea of positive and negative moral qualities of a person and the ethical evaluation of them. The conceptual space of this concept, which includes perceptual-verbal, figurative, ethical, evaluative, and nominative aspects, is considered. The aim of the article is to study the perceptual-imaginative concept, to identify and describe verbalized perceptual units in the process of sensual and artistic perceptions, and to find out the correlation of figurative meanings of taste vocabulary with the character of a person and his evaluation with the help of empirical methods. A complex method including a questionnaire survey, sociolinguistic survey, associative experiment, frame modeling, observation, statistical methods, and correlation analysis was used in the process of research. The following scientific results were obtained: the stages of ethical concept formation were revealed, its conceptual space was defined, and its components were analyzed: perceptual-verbal (which gives an idea about neurolinguistic mechanisms of taste, signifying the result of taste perception with the help of perceptual units); figurative (the formation of the figurative meaning of the perceptual concept with the help of metaphors is considered, and its anthropomorphic model is presented); evaluative (using empirical methods and correlation analysis). The results of

### \*CORRESPONDING AUTHOR:

Zhanar Jambayeva, Department of Theoretical and Applied Linguistics, Eurasian National University, Astana 101302, Republic of Kazakhstan;  
Email: v-taisova@mail.ru

### ARTICLE INFO

Received: 16 January 2025 | Revised: 4 March 2025 | Accepted: 5 March 2025 | Published Online: 19 March 2025  
DOI: <https://doi.org/10.30564/fls.v7i3.8449>

### CITATION

Nurgazina, A., Abisheva, K., Kenjetaeva, G., et al., 2025. Perceptual-Figurative Concept «Moral Traits and Qualities of a Person's Character». *Forum for Linguistic Studies*. 7(3): 1067–1079. DOI: <https://doi.org/10.30564/fls.v7i3.8449>

### COPYRIGHT

Copyright © 2025 by the author(s). Published by Bilingual Publishing Group. This is an open access article under the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License (<https://creativecommons.org/licenses/by-nc/4.0/>).

the questionnaire and sociolinguistic survey are calculated using statistical methods. The novelty of the work consists in describing the formation of a multilevel perceptual concept, detailing its components, finding out the way of forming the figurative meaning of the concept, and describing the correlation of this meaning with the qualities of a person's character and the ethical assessment given to him.

**Keywords:** Perceptual-Image Concept; Verbalization; Anthropomorphic Model; Questionnaires; Sociological Survey; Statistical Method; Correlation Analysis

## 1. Introduction

The relevance of the problem is due to several factors: firstly, the need to study the least studied fragment of the linguistic picture of the world—the model of taste perception. E.V. Uryson, considering the model of perception reflected in the Russian linguistic consciousness, writes: “This fragment of the Russian linguistic picture of the world is very logical. It is true that it is not developed by the language to the end—the idea of some invisible organs of perception is only outlined”<sup>[1]</sup>. Secondly, the study of perception, as one of the most important forms of human existence, is associated with the recognition of perception as a cognitive factor that sets the angle of comprehension and ways of representation in language of many categories of existence and consciousness: space, time, the reality of the state of mind, the opposition of the inner to the outer<sup>[2]</sup>. P. Mondal also emphasizes the connection between the perception of the categories of being (the physical world) and cognition as mental representations: “In order to explore the principles of coordination between perception and cognitive representations and processes in cognitive systems, including autonomous systems, we need to formalize linguistically encoded emotional representations of extensional equivalence, since they are easily applicable to everyday objects, events and things around us”<sup>[3]</sup>. The category of perception is indeed considered as a mechanism of cognition because it presupposes the connection of sensory perception with language and thinking. The results of sensory perception are not only designated by verbal units but are also subject to cognitive-mental processing in the creative activity of artists of the word, and in this case, artistic perception takes place. Such perception is considered not only as a mental action with sensory cognition but as a creative act that includes emotional comprehension of sensory experience, rethinking the meaning of a perceptual verbal unit (taste names) by transferring taste attributes (spicy, salty,

sour, sweet) to objects and concepts of the spiritual world. The process of forming a perceptual concept is carried out at two levels: (1) sensory-perceptual component (taste); (2) mental (it reveals the features of the author's consciousness-experience), transfer of food taste attributes to objects of the mental world (spiritual, ethical, etc.), expression of the author's subjective attitude, his assessment, cf.: he is like the best of the best, although small and smart, and friendly, and sweet (M. Zhumabaev. Confession, p. 26); In my life there was no more bitter experience than Beslan (Russian Reporter); I know you don't give a damn about me, I said bitterly (V. Pelevin); His face took on a sour expression (E. Sukhov); The locals are good at using a sharp word, generously seasoned with pepper (Yu. Govorukhin); Nina has absolutely nothing to do, and she began to sour from boredom (D. Dontsova); But the falseness of sweet, unctuous speeches is not always possible to recognize right away (comments in the chat); But this was not that cloying, candy-like beauty that makes you sick—but something else, because of which a woman's heart perishes (T. Tronina); Then we gathered as a group to listen to the bitter news about the results of the fire (Gregory David Roberts. Shantaram, p. 192). Indeed, “a cognitive system can extract important rare information from a rich data stream, just as it can represent perceptual data and other knowledge to provide appropriate factorization relevant to cognition”<sup>[4]</sup>. Thirdly, the study of taste perception in the interdisciplinary aspect implies the involvement of knowledge from various sciences: neurolinguistics (knowledge about what sections of the left and right hemispheres of the brain take part in the generation of speech, emotions, artistic images); text theory (information about artistic perception); cognitive linguistics (formation of a multilevel concept); linguosensorics (knowledge about the nature of artistic perceptivity, the results of sensory perception, the ways of its realization); cognitive semantics (knowledge about the ways of concept interpretation).

The relevance of the problem of the study of gustatory sensory perception in interdisciplinary terms and in the aspect of scientific interests of new sciences lies in the fact that the study of perception focuses on the semantics of perceptual units, the formation of their imagery, the construction of models of gustatory perception, their interpretation, as well as in following the principle of interdisciplinarity.

## 2. Literature Review

Perception is understood differently in different sciences: in psychology it is considered as the ability to perceive another person, so three types of perception are distinguished: (1) systems of direct perception; (2) systems of interpersonal perception; (3) systems of representational perception<sup>[5]</sup>.

Translation studies focus on the translator's transfer of the emotional impact made by the author of the original text on the reader of the translated text<sup>[6]</sup>. In linguistics and psycholinguistics, perception is studied from the side of revealing the meaning of the text<sup>[7]</sup>. In linguistics and linguosensorics, flavor characteristics are investigated in different directions: 1) lexicographic: K.M. Gerasimova considers the vocabulary composition of the block with the meaning of "taste"<sup>[8]</sup>; 2) linguocultural: E.Y. Yarovaya<sup>[9]</sup> and A.V. Nagornaya note that taste perception belongs to the category of cultural activity, so taste sensations are determined by the motivation of the subject perceiving them, belonging to one or another culture. A.V. Nagornaya studies the metaphorical landscape of taste in English culture, considering taste as an event, as a dimensional object, as a balance, etc.<sup>[10]</sup>; S.V. Musiyshuk believes that the study of the concept of "taste" is "determined by the need for the formation of cultural subjects as bearers and creators of certain spiritual values and meanings generated by the 'gastronomically spiritual'"<sup>[11]</sup>; 3) linguistic: representatives of this direction study gastronomic metaphors, the initial meanings of which are associated with taste characteristics (A.S. Boychuk, E.N. Kolodkina); 4) linguosensory: the focus of attention of the researchers of this direction (O.V. Avdeyeva, V.K. Kharchenko, S.Y. Lavrova, L.B. Kryukova, A.Y. Nagornaya) is artistic perceptivity: the perceptual structure of the poetic text, their content, the analysis of the concepts of "linguistic perceptivity," "perceptual image." S.Y. Lavrova defines perceptual image as "a mental evaluative image, the

physiological basis of which is a sensory component"<sup>[12]</sup>; 5) psycholinguistic, "when such metaphors as 'parting is such sweet sorrow,' 'to the bitter end' illustrate the use of our taste perception to express an emotional state, as well as the expression of a hedonistic evaluation (positive or negative)"<sup>[13]</sup>; 6) conceptual, focusing on the development of artistic perceptual concept (Z.K. Temirgazina, O.A. Meshcheryakova) it is noted that "linguocultural representations of tastes form an independent conceptual sphere of knowledge, in which lie the experiential data obtained by a person in the process of perception, awareness and comprehension of his sensory-perceptual sensations, primarily taste"<sup>[14]</sup>; 7) linguo-axiological: the linguistic sign—perceptual taste unit is considered in the value aspect of the word, having the meaning of taste, receives various evaluations (hedonistic, psychological, utilitarian, etc.). A.V. Baldova notes that food metaphors and phraseological units can convey a positive or negative assessment of human qualities<sup>[15]</sup>.

In this study, we focus on the perceptual-artistic multilevel concept "taste," which represents the knowledge of both the results of sensual perception with the help of taste organs and the moral state, emotions, and qualities of human character. The purpose of our article is to study the process of formation and functioning of a perceptual-figurative concept formed by transferring specific features of an object that has a taste during sensory experience, transferring them from the physical world (taste) to the mental sphere, rethinking, experiencing in the author's consciousness, and generating artistic images and moral concepts. To solve the goal set in the article, a complex method (including questionnaire survey, sociolinguistic survey, associative experiment), statistical method, and correlation analysis aimed at revealing the correlation between taste attributes of perceptual lexicon and the nature of ethical evaluation, correlation of variables (human actions, their figurative characterization based on the account of taste attributes, correlation of taste attributes of perceptual lexicon with human associations), and modeling method were used.

## 3. Methodology

A complex method was applied in the research process. It was conducted during two stages. At the first stage, there was a questionnaire survey; at the second stage—soci-

olinguistic experiment, observation, associative experiment. At the first stage, the program of the complex method was drawn up. The purpose of the program was the theoretical justification and development of the methodology of the questionnaire survey, sociolinguistic and associative experiment.

Objectives to achieve the goal:

- to reveal by what figurative means the figurative meaning of perceptual lexicon is formed;
- to observe the behavior of respondents and to identify by means of correlation analysis the correlation of variables: taste of food—ethical evaluation, taste of food—quality of a person’s character; taste of food—associations of a person;
- to develop the methodology of the complex method.

Hypothesis: conducting a questionnaire and associative experiment, as well as correlation analysis to identify the way of forming the figurative meaning of perceptual vocabulary, to find out the correlation between the taste attribute of perceptual vocabulary and the nature of associations, and to study the correlation between the taste attribute and ethical evaluation will be successful if:

- to reveal in the process of questioning the peculiarities of the respondents’ sensory and artistic perceptions;
- to observe the behavior of respondents and their associations in the course of sociolinguistic and associative experiments;
- to find out the correlation of variables: taste of perceptual vocabulary—nature of ethical evaluation; taste of perceptual vocabulary—respondents’ associations; human behavior—ethical evaluation;
- to select the methods to be used in the course of the com-

plex experiment. The field of choice includes traditional and empirical methods, as well as methods of processing the results: statistical method, correlation analysis.

For the application of the complex method, the base of the questionnaire, a sociolinguistic experiment was chosen. The study was conducted on the basis of the university “Turan-Astana,” Astana, Republic of Kazakhstan. Respondents were students of the university. The total number was 2000 people. The average age of the questionnaire participants is 18 years. The selection of survey participants was carried out according to the criterion of linguocreative thinking ability. They were given tasks aimed at realizing the ability to perform an artistic perceptual act aimed at verbalizing the results of sensual imagination and creating a verbal image.

At the first stage of the study, questionnaires were administered to the respondents, see **Table 1**. Questionnaires were sent to students by e-mail or directly distributed in groups. The questionnaire consists of three main parts: the first part of the questionnaire is the “address”; the second part is the demographic block (which includes questions that provide information about the age of the person, information about future profession, information about gender—male, female, and marital status); the third part of the questionnaire is the main part. Its questions are devoted to collecting and obtaining research information. These can be: 1. The questions asked to the respondents were open-ended (5) and closed-ended (5). Open-ended questions do not give the interviewee any guidance on the form or content of the answers. The closed questions are categorized into dichotomous and multiple choice questions. A total of 10 questions are given in the research unit: 5 open-ended, and 5 closed-ended.

**Table 1.** Questionnaire questions.

No.	Examples of Research Block Questions	Response Options
1	Вопрос дихотомического типа: наличие у вкуса аффективного измерения делает его продуктивным способом вербализации различных эмоциональных и моральных состояний. Какие эмоциональные и моральные состояния связаны со вкусом «плохой disgust»? «Dichotomous question: the presence of an affective dimension in taste makes it a productive way of verbalizing various emotional and moral states. What emotional and moral states are associated with the taste “bad disgust”?»	
	A. Отвращение (эмоциональное состояние), плохое (моральное состояние), качество характера (плохой). «Disgusting (emotional state), bad (moral state), character quality (bad)»	Yes
	B. Удовольствие (эмоциональное состояние), хороший (моральное состояние), качество характера (сладкоязычный). «Pleasure (gusto) (emotional state), good (moral state), quality of character (sweet-tongued)»	No

Table 1. Cont.

No.	Examples of Research Block Questions	Response Options
2	Вопрос закрытого типа: какими качествами характера человека коррелируется вкус «кислый»? «Closed-ended question: what qualities of a person's character are correlated with the taste "sour"?»	
	a) неприятный—«unpleasant»	Yes
	b) недружелюбный—«unfriendly»	No
	c) угрюмый—«sullen»	No
3	d) пребывающий в плохом настроении—«in a bad mood»	No
	Вопрос открытого типа: К. Корсмейер утверждает, что мы склонны наделять вкус смыслом, семантически нагружать его (Korsmeyer, 2002). «Open-ended question: K. Korsmeyer argues that we tend to endow taste with meaning, to semantically load it (Korsmeyer, 2002) Do you agree that redefining the vocabulary of taste gives rise to taste metaphor?»	Yes
	Вопрос дихотомического типа: в процессе метафоризации из физического мира в психический переносится признаки вкуса пищи. Какие признаки положены в основу метафоры: <i>горечь страданий, горечь радости, горькое сожаление</i> ? A. Неприятный, едкий B. Исполненный тягот, невзгод. «Dichotomous question: in the process of metaphORIZATION, the attributes of the taste of food are transferred from the physical world to the mental world. What attributes are the basis of the metaphor: <i>горечь страданий—bitterness of suffering, горечь радости—bitterness of joy, горькое сожаление—bitter regret?</i> A. Unpleasant, acrid B. Filled with hardships, hardships»	A
	Отличаете ли вы метафору от метонимии? Какой способ переноса используется при метафоризации? A. Перенос по смежности понятий в перенос по сходству признаков. B. Перенос по сходству признаков. «Do you distinguish between metaphor and metonymy? What method of transfer is used in metaphORIZATION? A. Transfer by the contiguity of concepts into transfer by similarity of features. B. Transfer by similarity of features»	A
6	Почему у слова «сладкий» в нижеследующих контекстах проявляется значение «лицемерный», хотя в «Словаре русского языка» <i>сладкий</i> имеет значение «приятный вкус». При помощи каких образных средств сформировалось значение «лицемерный»? «Why does the word "sweet" in the following contexts have the meaning "hypocritical", although in the Dictionary of the Russian Language <i>sweet</i> has the meaning "pleasant taste". With the help of what figurative means has the meaning " <i>hypocritical</i> " been formed?	A
	A. metaphors	
	B. Metonymy	
	C. Comparisons	
	D. Epithets»	

## 4. Results and Discussion

The problem of perceptual concept is considered by O.V. Mescheriakova, who defines it as “a mental formation of an integral type that unites concepts, the content of which is formed on the basis of processing submodus information coming through the channels of vision about light, color, shape and modus information coming through the channels of hearing, smell, touch, taste”<sup>[16]</sup>. This concept is characterized by the researcher not as a one-level concept representing knowledge about the results of sensual perception, but as an artistic concept formed as a result of artistic perception, the purpose of which is to create a verbal image. A.V. Baldova considers food metaphor formed by reinterpretation of

food names, verbalization and figurative use of the results of sensual perception of the sensory spheres “sound” and “smell.” Her interests also include axiological analysis of figurative means of language. We agree with the authors of the articles (O.A. Meshcheriakova, Z.K. Temirgazina) that these concepts are two-level, consisting of perceptual and cognitive-content and mental components. We also agree with the point of view of A.V. Baldova, who considers the evaluative aspect of food metaphor. At the same time, our work has different results obtained by using the integrated method. The difference of the obtained results is as follows: 1) if O.A. Meshcheryakova, Z.K. Temirgazina consider a two-level concept including perceptual-artistic and content components, we analyze a multilevel concept including in its

structure: perceptual-verbal, figurative, ethical, axiological, cultural-mental, associative and nominative layers; 2) if O.A. Meshcheryakova studies the perceptual-artistic concept of an individual linguistic personality (I.A. Bunina), and Z.K. Temirgazina studies the concept of the individual linguistic personality (I.A. Bunina). Temirgazina studies the concept of “taste” without regard to the specific material, our article focuses on the concepts of taste that characterize the qualities of a person’s character and evaluate his actions according to ethical, qualification and hedonistic evaluations; 3) if A.V. Baldova studies food metaphors in the axiological aspect, the object of our study is perceptual-artistic concepts of taste; 4) in our study, the perceptual-artistic concept is studied in an interdisciplinary aspect.

The analysis of the perceptual-artistic concept indicates that this multilevel concept has many components. The first of them is perceptual-verbal. When studying this component of the concept, attention is focused on the neurophysiological nature of taste. D.A. Alexandrov et al. write that “taste sensitivity is provided by secondary sensory receptor cells, at the apical end of which there are 30–40 microvilli. The membranes of these villi contain numerous protein molecules – taste receptors”<sup>[17]</sup>. These taste receptors of the tongue are connected with sensory zones of the cortex of the large hemispheres; they contribute to the definition of the sign of taste by sensation—bitter, salty, sweet, sour, etc. In the process of conceptualization of perceptual experience on the basis of the sign of taste of food, verbalization of taste sensations is carried out. The attributes of this or that taste are generalized, a concept about them is formed, and this concept is signified; a name of this or that taste is formed.

The second component of the concept is figurative. The problem of forming the figurative meaning of a word on the basis of metaphors has been considered in the works of many researchers: J. Lakoff, M. Johnson<sup>[18]</sup>, M. Lizenberg<sup>[19]</sup>. Y. Ning, emphasizing such factors of metaphor emergence as thinking, physiology, and culture, states that “potentially the body is a universal source for the emergence of metaphors,” while culture functions as a filter that selects aspects of sensorimotor experience and combines them with subjective experience and statements for metaphorical mappings (metaphor mapping)<sup>[20]</sup>.

The role of culture in the formation of metaphor is manifested in the fact that cultural codes (corporeal, zoomorphic, phytonymic, etc.) contribute to the linguistic representation

of cognitive metaphors<sup>[21]</sup>. Phan Ngoc Son, Nguyen Thi Kieu Vy, Truong Manh Hai and Nguyen Tran Thanh Vi talk about the culinary input of culture as a minimal denotative part of the semantic structure of the culinary term: composition of the product, method of preparation, color, taste<sup>[22]</sup>. Our work considers the food (taste) code of culture, which contributes to the formation of a “sign metaphor” used for emotional-psychological, suggestive, pragmatic, and communicative influence on the addressee of speech<sup>[23]</sup>, as well as an anthropomorphic metaphor used to describe moral feelings and character traits of a person, helping to single out “a certain object—really or virtually existing—from the general list of similar objects, to endow it with common and inherent only to it characteristics”<sup>[24]</sup>.

Thus, the gustic code of culture, moving from the material to the mental sphere, acquires a figurative character, acting as verbal representations of the mental and moral state of a person. The formation of such concepts is facilitated by anthropocentric metaphor, under which J. Lakoff and M. Johnson understand personification, which is “a general category covering a wide range of metaphors, each of which is based on a specific property of a person or a way of his perception”<sup>[18]</sup>.

In the following contexts, the anthropocentric metaphor used is based on the way of perception through the prism of moral experiences of a person. In this case, there is an indirect perception of the taste of food (material object), about the perception of mental actions, and the state of the subject as causing bitterness. Thus, the transfer of food attributes “unpleasant” to the mental area contributes to the appearance of the figurative meaning “heavy, bitter.”

Modeling of anthropocentric metaphor shows how the signs of material objects (the taste of food) are transferred to the mental sphere of a person, due to which the figurative meaning is formed, contributing to the expression of moral feelings of a person (**Figure 1**).

In order to identify the formation of the figurative meaning of perceptual units, we conducted a questionnaire (for information on the questionnaire program and questions, see the section “Methodology”). We have already become familiar with three questions from the questionnaire.

In this paper, the association coefficient  $\phi$  is calculated to perform a correlation analysis to identify the relationship between the flavor attributes of the perceptual lexicon and human character.

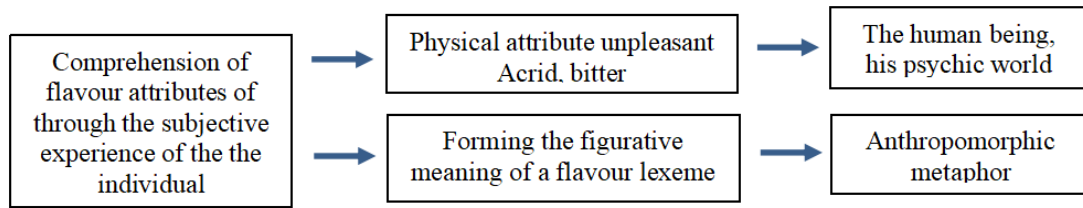


Figure 1. Frame model of anthropomorphic metaphor.

The association coefficient  $\phi$  is calculated by the formula:

$$\phi = \frac{p_{xy} - p_x * p_y}{\sqrt{p_x * (1 - p_x) * p_y * (1 - p_y)}} \quad (1)$$

where  $p_x$  is the frequency or proportion of a trait having a “1” on  $x$ ;  $(1 - p_x)$  is the frequency or proportion of the trait having “0” on  $x$ ;  $p_y$  is the frequency or proportion of a trait having a “1” in  $y$ ;  $(1 - p_y)$  is the frequency or proportion of

the trait having “0” in  $y$ ;  $p_{xy}$  is the frequency or proportion of a trait having “1” for both  $x$  and  $y$ .

According to the conditions for applying the association coefficient, the variables are measured on a dichotomous scale, and the number of data points for each attribute should be the same.

According to the questionnaire, in which 500 students participated, the following results were obtained (Table 2).

Table 2. Questionnaire results.

Taste Attributes	Positive Person, %	Bad Person, %
Sweet	70	30
Salty	50	50
Sour	60	40
Bitter	25	75

These conclusions are made according to correlation analysis, namely the calculation of the association coefficient  $\phi$ , where the data are presented on a dichotomous scale, i.e., for example,  $x$  is a sweet lover (1-yes; 0-no),  $y$  is a person’s character (1-good; 0-bad), and all flavor properties are considered accordingly.

According to the Cheddock scale, empirical calculation of the association (correlation) coefficient between all taste traits and human character shows a close relationship. It ranges from 0.7 to 0.9 in absolute value.

Thus, the empirical values of the correlation coefficient and Student’s  $t$ -criterion for all 4 flavor traits are as follows:

$\phi_{sweet} = 0,87$ ;  $\phi_{salty} = 0,75$ ;  $\phi_{sour} = 0,72$ ;  $\phi_{bitter} = 0,801$ ;

$T_{sweet} = 30,861$ ;  $t_{salty} = 25,151$ ;  $t_{sour} = 23,012$ ;  $t_{bitter} = 29,677$ .

Accordingly, the critical values of Student’s  $t$ -criterion at the significance level are as follows  $\alpha = 5\%$  equal to  $t_{cr} = 1,964$ , and at  $\alpha = 1\%$  equal to  $t_{cr} = 2,584$ .

In both cases, the empirical values of Student’s criterion for all four-taste attributes are statistically significant

and much greater than the critical values, i.e., hypothesis  $H_0$  is rejected and hypothesis  $H_1$  is accepted.

Therefore, this correlation analysis allows us to state that there is a relationship between the taste attributes of perceptual vocabulary and the nature of ethical evaluation.

The next component of the perceptual concept is evaluative. It shows that a person in the process of his cognitive-spiritual activity simultaneously carries out subjective-evaluative activity, correlating the studied objects (behavior, emotions, results of moral activity) with the attitudes and values of society, expressing “the attitude of a person (subject) to a particular object (subject or event)”<sup>[25]</sup>.

Values and evaluation are interrelated. Ethical evaluation expresses the assessment of moral and immoral deeds of an individual. Qualitative evaluation attributes a qualitative attribute to the object, including the attribute associated with the concepts of “good,” “bad,” “indifference.” Ethical evaluation means “characterization of a human personality in the axiological space of being-doing from the positions of value coordinates good-evil, good-bad, moral-immoral, etc.”<sup>[18]</sup>. Ethical evaluation has moral grounds. The theory

of moral bases focuses on the description of the structure of the moral sphere and mechanisms of moral evaluation, providing a quick, intuitive, emotionally colored evaluation of events and actions<sup>[26]</sup>.

From the five moral bases of evaluation (care, justice, loyalty to the group, respect, purity), we selected the fifth moral basis: purity (condemnation of disgusting, shameful acts, depravity and promiscuity; approval of chastity and honoring the sacred). This moral foundation concerns the relationship between man and others, his community. It is the person who, with the help of evaluative predicates moral-immoral, ethical-unethical, evaluates the deeds of another person. The subject of evaluation is also the person himself, his actions. To identify the correlation between human behavior, let us conduct a sociolinguistic experiment. For this purpose, let us select two groups of people as a result of a sociolinguistic survey and observation of people's behavior: 1) a group of people distinguished by moral behavior; 2) a group of people distinguished by immoral behavior. The sociolinguistic survey was conducted in the form of an absentee questionnaire. Respondents aged 20 to 40 were asked dichotomous questions, given tasks to make moral choices, and

observed in various situations. Before the implementation of the sociolinguistic experiment, the program was drawn up, and its goals, hypothesis, and methods were determined. The aim of the sociolinguistic experiment is to reveal, by means of an absentee questionnaire survey of respondents numbering 4000 people aged 20 to 40 years, the properties of human character, the character of evaluations (moral/immoral), and to find out the correlation of the qualities of human character with this or that figurative-evaluative meaning of perceptual lexicon.

Hypothesis: the sociolinguistic experiment will be successful if:

- select situations that demonstrate human behavior for discussion;
- ask questions in the process of the sociolinguistic survey that allow making a moral choice;
- analyze the results of the included observation of respondents' behavior;
- perform a correlation analysis to identify the correlations of various variables.

Here is a sample questionnaire (**Table 3**).

**Table 3.** Sample sociolinguistic survey.

No.	Survey Questions (Dichotomous)	Yes Morally	No Immoral	Correlation	
				Flavor Attribute- Evaluation (Ethical)	Behavior-Evaluation (Qualitative, Good-Bad)
1	How would you rate the behavior of a person who drinks heavily? Yes. A. Morally No. B. Immoral				
	Evaluation using a flavor metaphor A. Drinking in moderation B. Bitter drinker				
2	Is envy a virtue or an immoral character trait? A. Morally B. Immoral				
	Yes. A. Good No. B. Bad				
3	Evaluation using a flavor metaphor Yes. A. Bitter taste No. B. Bitter envy				
	How would you characterize tense relationships between people? Yes. A. Morally No. B. Immoral				
4	Yes. A. Good No. B. Bad				
	Evaluation using a flavor metaphor Yes. A. pungent smell No. B. Pungent relationship				



Table 3. *Cont.*

No.	Survey Questions (Dichotomous)	Yes Morally	No Immoral	Correlation	
				Flavor Attribute- Evaluation (Ethical)	Behavior-Evaluation (Qualitative, Good–Bad)
5	Money first. Make as much as you can. Do they bring happiness if they are gained by hard work? Yes. A. Morally No. B. Immoral				
	Yes. A. Good No. B. Bad				
	Evaluation using a flavor metaphor Yes. A. The bitter odor of wormwood No. B. Bitter money				
6	Is flattery moral or immoral behavior? Yes. A. Morally No. B. Immoral				
	Yes. A. Good No. B. Bad				
	Yes. A. Sweet pie No. B. Sweet-tongued, sweet-tongued lie, sweet-tongued man, sweet-tongued laughter				
7	What human behavior correlates with the expressions <i>sour man</i> , <i>sour face</i> ? Yes. A. Morally No. B. Immoral				
	Yes. A. Good No. B. Bad				
	Yes. A. Sour dough No. B. Why do they portray only the weak, sour and sinful? (A. Chekhov. Notebooks, p. 117).				
8	A criminal escapes from prison, wakes up in the woods. He spent the night in an old man's hut. The policemen came to the old man by chance at night, but the old man did not give away the criminal. During the night the criminal fled, taking the old man's gun. The old man found him the next morning and demanded the gun back. The young criminal said he had a hunt to live and shot the old man. The old man also wanted to live. What moral choice will you realize from Shukshin's story "The Hunt to Live"? How will you evaluate the young man's behavior?				

The correlation between the variables, human behavior - ethical evaluation; taste sign of food, evaluation of human behavior using food metaphor was calculated using partial new analysis, see **Table 3**.

The results of the questionnaire which are shown in **Table 3** are obtained for 2000 respondents (students of 2022–2023, 2023–2024 years of study in the following educational programs: 6B02301—"Translation Studies", 6B03103—"Psychology", 6B04201—"Jurisprudence", 6B03101—"International Relations", 6B03201—"Journalism", etc.; female representatives—1547, male representatives—453) and processed by correlation analysis for the relationship between the two variables.

Thus, the empirical values of the correlation coefficient and Student's *t*-criterion between the evaluation of human behavior and food metaphors are as follows:

$$\varphi'_{\text{calculated}} = 0.89; t_{\text{calculated}} = 27,462.$$

Consequently, the critical values of Student's *t*-criterion at the significance level are as follows  $\alpha = 1\%$  equal  $t_{cr} = 2,601$ .

The empirical value of the criterion is statistically significant and much larger than the critical value, so this correlation analysis suggests that there is a relationship between human behavioral evaluation and food metaphors.

In the process of the associative experiment, respondents were offered stimulus words to which they had to give

reactions by providing associations—phraseologisms according to the way of involving stimulus words in syntagmatic relations. Such phraseologisms should have components with the lexicon of taste. The associative experiment is directional. In this case, reactions to the stimulus words are

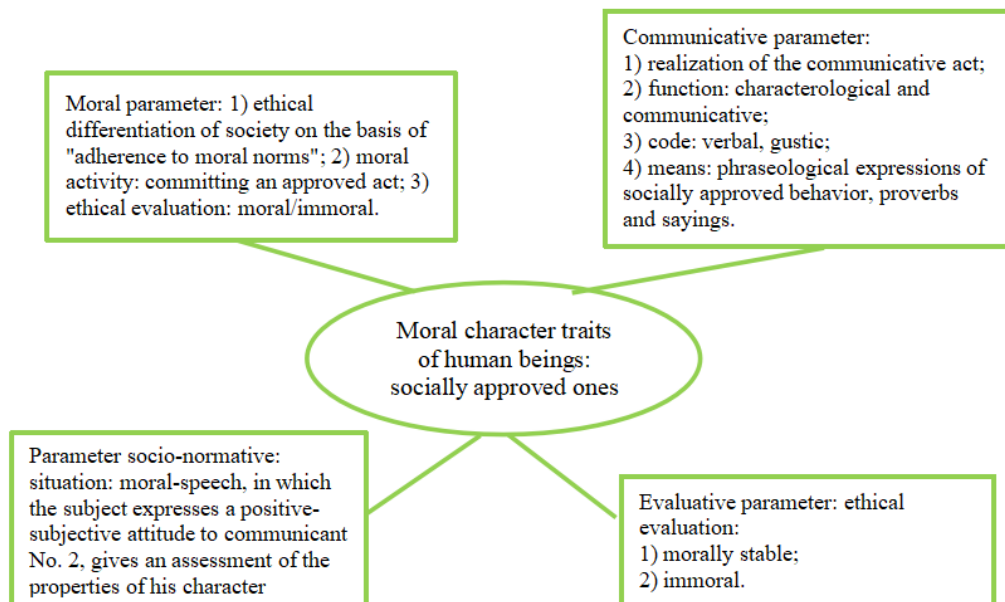
selected purposefully. The words-stimuli bitter, sweet, salty, and sour were answered by phraseologisms that were presented in associative fields: phraseologisms denoting moral or immoral deeds of a person, see **Table 4**.

**Table 4.** Phraseologisms-associates for ethical assessment.

No.	Immoral Deeds	Moral Deeds
1	The stimulus word is bitter: <i>Ashchy ter, ashchy kujik, gor'kie stradaniya, ashchy zor.</i>	The stimulus word is bitter: <i>to know ever, thing is to know nothing, koren' ucheniya gorek, plod ego sladok, ashchy men tushchyny tatkan biler, ashchy men tattini tatkan biler</i>
2	The stimulus word is sweet: <i>zapretnyj plod sladok, the appels on the other side of the wall are the sweetest, hren red'ki ne slashche, a black plum is as sweet as white, no sweet without sweat, honey is sweet, but the bee stings, a honey tongue, a heart of gall, all sugar and honey, tatti sozdin damin ketiru</i>	The stimulus word is salty: <i>hleb da sol', salz leschmack, salt taste, tuzyn aktady, s'est' put'soli, hleb- sol'ne branyatsya</i>
3	The stimulus word is fat: <i>misfortunes tell us what fortune us, as fat, as butter</i>	The stimulus word is sweet: <i>tatti ujky, tatti dam, tatti til, tatti soz</i>
4	The stimulus word is salty: <i>salz auf kopf schitten, en aibt, salz und bachtp, sypat'sol' na ranu, damtuzy zharaspady, rassypat'sol', posypat' golovu sol'yu, tuz kospaj sojle, tuzy sor, enbegi em boldy, tuzdaj kuyru, ostrye otnosheniya</i>	The stimulus word is spicy: <i>ostryy yazyk, ostryy um, ostryy sud'ya</i>

To identify the properties of a person's character, let us consider the moral-situational behavior of individuals, which is characterized by the use of certain phraseological

expressions denoting moral/immoral properties of a person's character. For this purpose, let us construct moral-situational and parametric models, see **Figure 2**.



**Figure 2.** Frame situational-parametric model—"good person".

The phraseological expressions expressing the idea of the moral properties of a good person include such phraseological expressions with the lexicon of taste with figurative meaning as: *hardworking (no sweet without some) sweat—to*

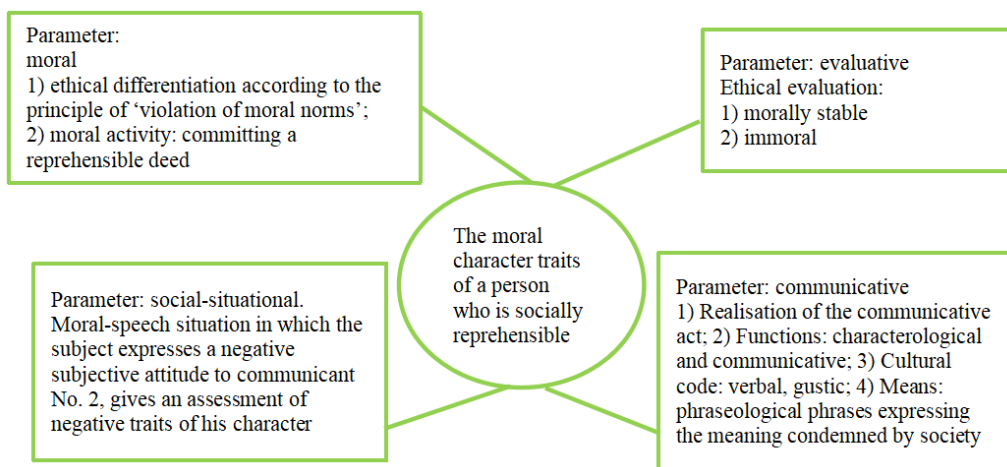
*get sweet, you need to sweat (ashchy teri shykty), smart (sheni tatti tilin men aldaj almajsyn), experienced (in the bitter and unleavened understand the one who tasted), straightforward, not afraid to tell the truth to the face (otkir til), faithful (tuzyn*

*aqtady, put soli s'el).*

The study of moral character traits of a bad person allows us to construct a frame model of a bad person whose moral traits allow us to judge his immoral behaviour. An immoral person can be characterised as: indecisive (*honey is sweet but the bee sting i hochetsya i koletsya*); unable to achieve the intended goal (*the appets on the other side of the wall are the sweetest*); a man not different from others (*a black plum is as sweet as white chernaya sliva takaya zhe sladkaya, kak belaya; there is small choice in rotten apples—hren red'ki ne slashche*; two-faced (*a honey tongue,*

*a heart of gall*); wimpy, insincere person (*all sugar and honey*); carefree, lighthearted (*sladkaya zhenshchina*); a man who talks about things he doesn't understand (*professor kislyh shchej*); picky (*s zhiru besitsya*); loser (*solono prishlos', pokushat' gor'kogo i sladkogo, hlebnut' gor'kogo liha*); drinker (*zapit' gor'kuyu, gor'kij p'yanica*); uncooperative (*dam—tuzy zharaspady*); absent-minded (*tuzy zhenil adam*); ungrateful (*tili tatti, isi katty, tuzy aram adam*) etc.

The frame situational-parametric model of an immoral person is as follows, see **Figure 3**.



**Figure 3.** Frame situational-parametric model—“bad person”.

The nominative component of the moral concept gives an idea of how the moral concept is represented, with the help of which verbal means:

- a) lexemes denoting the taste of food: *sweet, bitter, salty, spicy, greasy*.
- б) synonyms: *saharnyj, medovyj, mangovyj; kislyj, uksusnyj, limonnyj; zhirnyj, ostryj, chesnochnyj*;
- в) antonyms: *gor'kij-sladkij, solenyj-presnyj, zhirnyj-postnyj*;
- г) collocations: *sladkij yazyk, gor'kie sozhaleniya, gor'kaya pechal', gor'kie dumy, gor'kaya pravda, ostryj um, ostryj sud'ya, zhirnaya perepelka, hleb-sol'*;
- д) phraseological expressions: *hleb-sol', sladkij golos, sahar medovyj, honey is sweet but the other side, ashchiter, ashchy kujik, salt taste, to know every theing is the know nothing, tuzy sor, tuzday kuyru, salz und brot macht wangen rot* etc.

## 5. Conclusions

As a result of the research, the following conclusions were made: a concept can be not only one-level but also multilevel, including not only the perceptual-verbal component but also the cognitive-content, formed at the level of subjects' interpretation of the results of sensory perception. The subject processes the results of sensory perception at the mental level, associating flavor attributes with the moral state and character traits of a person.

Figurative reinterpretation of a perceptual unit becomes possible at the level of artistic perception when the subject brings together the features of subjects and objects of the material and mental worlds based on similarity of features and functions. Anthropomorphic metaphors arise based on transferring the attributes of food flavor to human qualities.

The ability of the perceptual lexicon of taste to assess the qualities of a person's character, to associate with his/her

properties, and to correlate with the ethical assessment given to the subject is supported by the data from questionnaires, sociological surveys and associative experiments.

The results of the study are correlated with the hypotheses of the research, as the selection of effective methods was carried out; the methodology of their implementation was developed (stages of questionnaire survey, selection of questions, tasks, and ways of counting the results of the questionnaire and sociolinguistic research).

Potential limitations and shortcomings of our study are explained by the still insufficient research experience in perceptual linguistics and linguosensorics (neurolinguistics, new sciences). More informants should be involved in the questionnaire for the reliability of the results. Further research is planned to be conducted from an interdisciplinary perspective, focusing on the study of perceptual-verbal perception.

## Author Contributions

Writing—review and editing, A.N., G.K. and Z.J.; data curation, A.N., K.A. and Z.J.; methodology, K.A.; data supervision, G.K.; writing—original draft preparation, A.B.

## Funding

This research “Studying the ethical concept sphere of the nations and thinkers of the past through approaches, principles, methods of cognitive-ethical linguistic synergetics is a new humanitarian knowledge was funded by the Science Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan (Grant No. AP 19680020).

## Institutional Review Board Statement

Not applicable.

## Informed Consent Statement

Not applicable.

## Data Availability Statement

We confirm that the data supporting the findings of this study are available within the article.

## Conflicts of Interest

The authors declare no conflict of interest.

## References

- [1] Uryson, E.V., 2018. Problemy issledovaniya yazykovoy kartiny mira: analogiya v semantike. *Yaziki slavyanskikh kultur*: Moscow, Russia. p. 224.
- [2] Apresyan, YU., 1995. Obraz cheloveka po dannym yazyka: popytka sistemnogo opisaniya. In: *Izbrannye trudy. YAzyki russkoj kul'tury*. p. 224.
- [3] Mondal, P., 2022. A unifying perspective on perception and cognition through linguistic representations of emotion. *Front Psychol.* 13, 768170. DOI: <https://doi.org/10.3389/fpsyg.2022.768170>
- [4] Guo, D.D., Xu, W.H., Ding, W.P., 2024. Concept-cognitive learning survey: Mining and fusing knowledge from data. *Information Fusion.* 109, 102426. DOI: <https://doi.org/10.1016/j.inffus.2024.102426>
- [5] Neisser, U., 1967. *Cognitive psychology*. Appleton-Century-Crofts: New York, NY, USA. p. 351.
- [6] Vinogradov, V.S., 2004. *Perevod: Obshchie i leksicheskie voprosy*. KDU: Moscow, Russia. p. 240.
- [7] Zimnyaya, K.A., 1976. *Smyslovoe vospriyatie rechevogo soobsheniya*. Available from: <https://clck.ru/3FZJCP> (cited 12 October 2024).
- [8] Gerasimova, K.M., 1986. *Leksikograficheskaya i semanticheskaya interpretaciya prilagatel'nyh vkusovogo oshchushcheniya: avtoref. dis.kand. filol. nauk*. Moscow, Russia. p. 16.
- [9] Yarovaya, E.YU., 2013. Otrazhenie lingvokul'turologicheskikh osobennostej koncepta «solenyj» v russkom, francuzskom i anglijskom yazykah. *Nauchnye vedomosti. Seriya Gumanitarnye nauki.* 3(24), 184–191.
- [10] Nagornaya, A.V., 2023. Metaforicheskie sredstva opisaniya vkusovogo oshchushcheniya v sovremennoj angloyazychnoj kul'ture. *Vestnik SPbGU. YAzyk i literatura.* 20(1), 79–97.
- [11] Musijchuk, S.V., 2022. *Vkus kak «oshchushhenie i dejstvie duxa» v didakticheskoi i gastronomicheskoi refleksii*. *Mir nauki. Pedagogika i psixologiya.* 10(2). Available from: <https://mir-nauki.com/issue-2-2022.html>
- [12] Lavrova, S.Y.U., 2017. *Govoryashchij kak nablyudatel': lingvoaksiologicheskij aspekt*. CHGU: Cherepovets, Russia. p. 240.
- [13] Avery, J., Liu, A., Carrington, M., et al., 2022. Taste Metaphors Ground Emotion Concepts Through the Shared Attribute of Valence. *Frontiers in Psychology.* 13, 938663. DOI: <https://doi.org/10.3389/fpsyg.2022.938663>
- [14] Temirgazina, Z.K., 2013. *Predstavleniya o vkusah*

- kak kognitivnaya oblast' znaniy. Voprosy kognitivnoj lingvistiki. 2, 115–121.
- [15] Baldova, A.V., 2016. Miromodeliruyushchaya i aksiologicheskaya funkci pishchevoj metafory v russkom yazyke: avtoref. diss. kand. filol. nauk. Available from: <http://surl.li/dgwire> (cited 14 October 2024).
- [16] Meshcheryakova, O., 2013. Hudozhestvennyj perceptivnyj koncept kak mental'noe obrazovanie osobogo tipa. In: *Kognitivnye issledovaniya yazyka*. Izdatel'skij dom TGU im. G.R. Derzhavina: Tambov, Russia. pp. 811–815.
- [17] Aleksandrov, D.A., Harlamova, A.N., Severina, T.G., et al., 2016. Vkusovaya sensornaya sistema-nejrofiziologicheskie mekhanizmy (lekciya dlya studentov). *Smolenskij medicinskij al'manah*. (2), 203–209.
- [18] Lakoff, D., Dzhonson, M., 2008. Metafory, kotorymi my zhivem. Izdatel'stvo LKI: St. Petersburg, Russia. p. 256.
- [19] Leezenberg, M., 2001. Metaphor and metalanguage: from metaphors to idioms. Oxford University Press: New York, NY, USA. p. 134.
- [20] Ning, Y., 2008. Metaphor from body and culture. In: Gibbs, R.W., Jr. (ed.). *The Cambridge Handbook of Metaphor and Thought*. Cambridge University Press: Cambridge, UK. pp. 247–261.
- [21] Pimenova, M., 2007. Kody kul'tury i problemy klassifikacii konceptov. In: *Yazyk. Tekst. Diskurs: nauchnyj al'manah Stavropol'skogo otdeleniya RALA*. RALA: Stavropol, Russia. pp. 79–86.
- [22] Phan, N.S., Nguyen, T.K.V., Truong, M.H., et al., 2024. Vietnamese food-related borrowings in Russian mass media. *Media Linguistics*. 11(3), 380–397. DOI: <https://doi.org/10.21638/spbu22.2024.306>
- [23] Polyakova, A.A., Yurina, E.A., 2020. Metafore izolyaciy vkusovy'x priznakov v russkom yazy'ke i kartine mira. *Vestnik Tomskogo gosudarstvennogo universiteta*. 2(208).
- [24] Postovalova V., 2000. Eticheskaya ocenka drugogo i samoocenka v pravoslavnoj duhovnoj tradicii (na materiale epistolyarnogo naslediya svyatitelya Ignatiya Bryanchaninova). In: *Logicheskij analiz yazyka: yazyki etiki*. Yazyki russkoj kul'tury: Moscow, Russia. p. 406.
- [25] Cralam, J., Haidt, J., Motyl, B., et al., 2018. Moral Foundations Theory. In: Gray, K., Graham, J. (eds.). *Atlas of Moral psychology*. The Guildford press: New York, NY, USA. pp. 211–222.
- [26] Haidt, J., 2001. The emotional dog and its rational tail: a social intuitionist approach to moral judgment. *Psychological Review*. 108(4), 814–834. DOI: <https://doi.org/10.037/a0021847>