

## **"Naive anatomy" in the Kazakh language world picture in comparison with English and Russian**

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### **Abstract**

The article explores the naive and anatomical representations of native speakers of Kazakh in comparison with English and Russian languages. For comparative study, the method of cross-linguistic analysis using descriptors - comparison parameters was chosen. Quantitative and qualitative comparison of descriptors allows us to identify common and different signs in the conceptualization of the liver and lungs. The liver, the most important concept of the naive anatomy of the Kazakhs, is the focus of kinship relations, which are the dominant social and clan organization of nomads. The liver is the main organ in Kazakh naive anatomy. It undergoes a multifaceted, versatile conceptualization in this culture. Lungs are a significant component of the naive anatomy of Kazakhs. They appear to be the carriers of exclusively negative emotions and qualities. The naive anatomy of different peoples (Russians, English) reveals common features based on the unity of the physiological and anatomical structure of a person, and features determined by national history and culture. The cross linguistic analysis of vocabulary and phraseology of the Kazakh, English, Russian languages underlines the unique picture of the world of Kazakhs concerning their perception of a liver and lungs.

**Key words:** naive anatomy, cross linguistic analysis, idiom, metaphorical conceptualization, metonymy

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### **Introduction**

The interaction of a human with the outside world, its knowledge takes place at different levels, including everyday life. The results of this knowledge are laid down in his/her everyday consciousness. It is understood as the practical consciousness of people that goes beyond any narrowly specialized professional field and is the basis of everyday cognitive activity. Naive knowledge goes back to the scientific, acting as its concrete, worldly, practically oriented refraction. However, the logic, clarity, relative completeness inherent in scientific consciousness in ordinary consciousness can manifest to a lesser extent. Ordinary knowledge is not only rational, but also irrational, based not only on the logical perception of the world, but also on the mythological one. Ordinary consciousness of the surrounding reality forms a naive picture of the world. According to Y.D. Apresyan, a naive picture of the world “presents the ways of perceiving and conceptualizing the world reflected in natural language, when the main components of the language are combined into a single system of views, a kind of collective philosophy that is imposed as mandatory on all native speakers of the language” (1995: 350). Indeed, the linguistic picture reflects to a greater extent the knowledge of the pre-scientific stage of development of society, everyday ideas, which is why it is called “naive” (Apresyan, 2006: 35; Yakovleva, 1994: 10). In a naive picture of the world, one can distinguish naive geometry, physics of space and time, ethics, psychology, anatomy, etc. (Apresyan, 2006: 35). Scientists see the slow evolution of the language compared to culture and knowledge of the world as the reason that the language has an archaic, surviving picture of the world. Even E. Sapir (1963: 101, 102) pointed to the reflection by the language of the culture of the past.

The article considers a fragment of a naive world view of one of the modern Turkic peoples - Kazakh - in comparison with similar fragments of a world picture of native speakers of English and Russian. This fragment includes naive and anatomical ideas about the human body, its structure, internal organs, due to the specificity of the mentality of the people, their historical, cultural and spiritual development.

A person in the history of philosophical and religious teachings has traditionally been understood as a unity of body and spirit, and if spiritual (emotional, mental) is intangible and difficult for direct study, then body, on the contrary, is material and open to observation (Sukhorukova, 2017: 168). Verbalized ideas about the body and the human organism are formed into a "naive anatomy". The term used by E.V. Uryson, by analogy with naive geometry, physics by Apresyan (Uryson, 1995). Uryson notes that "naive anatomy" differs from the usual ideas about a person in at least two points. This is, firstly, a list of organs, and secondly, their functions" (Uryson, 1995: 7).

The Kazakhs, whose main occupation was cattle breeding, lived in constant close contact with animals, which served as their means of transportation, food, a source of clothing and other household items. Accordingly, the anatomical views of the Kazakhs, like among many other peoples, have been formed since ancient times on the basis of observation of animals.

The main object of the study is the naive and anatomical views of the Kazakhs, reconstructed on the language material. In the semantics of linguistic units - words, idiomatic expressions - traces of pagan, mythological representations of ancient Turkic nomads, their traditions, rites and rituals are preserved. The names of body parts (somatisms), structures, innards of a person belong to the oldest layer of the lexical universum of world languages, are included in the basic vocabulary of languages, form many stable phraseological expressions - idioms and proverbs. "Anatomical vocabulary is included in the oldest and most stable layer of the national language" (Temirgazina, Akosheva et.al., 2019: 150). The idioms with the component - the anatomical name of the innards - reflect "archaic concepts that have survived to this day as echoes and relics of the distant past of the Kazakh people. But at the same time, idioms that are "archaic" in their origin, due to their semantic nature - abstractness, portability, etc. - actively function in the language, expressing quite modern concepts that are accessible to perception" (Kozhakhmetova et.al., 1988: 5). Material for the study was collected in lexicographic sources: explanatory and phraseological dictionaries of the Kazakh language, as well as English and Russian languages, including electronic. The number of analyzed Kazakh language units was 61, English - 8, Russian - 5. A small amount of material related to the concepts of "liver" and "lungs" in English and Russian is explained, in our opinion, by the insignificance of the place of the liver and lungs in the naive anatomical representations of native speakers of these languages, as it will be shown later in the article.

## **Research methodology**

### **1. Cross linguistic analysis**

An important methodological basis of our study is the cross cultural approach, which allows us to compare the naive and anatomical views of the native speakers of Kazakh culture with the views of native speakers of English and Russian cultures. The aim of cross cultural analysis is to identify common and differing features in the naive anatomy of the carriers of such different cultures on linguistic material. "The objects of the vast majority of such studies are polar cultures, which is designed to verify the theoretical models of collectivism and individualism as cultural types. Such studies have not only a theoretical, but also an applied aspect, including establishing business relations in multi-ethnic groups, overcoming ethnic conflicts" (Bespamyatnyh, 2008: 17). The effective use of cross linguistic analysis in relation to different cultures and

languages can be seen in many contemporary works (Pit, 2007; Krawczak, 2014; Fernandez-Martinez, Faber, 2019 and others).

The object of comparison is the “cultural unit”, in the interpretation of which we follow H. Triandis. He included three parameters in the characterization of a “cultural unit”: time, place, and language: “Time, since we are usually interested in a specific historical period; place, as we focus on interpersonal contact or political organization; language as we focus our attention on mutual misunderstanding” (Triandis, 1980: 2).

From the point of view of Triandis, the boundaries of a cultural unit are revealed in its external explicit forms, and one of these forms, first of all, is language. Thus, cross cultural analysis is necessarily supplemented by a linguistic aspect. This allows for a cross linguistic analysis of linguistic units (lexemes, idioms), which are forms of external explication of a cultural unit - myths, traditions, customs and forms of behavior. A.H. Khan wrote about the influence of cultural patterns on thinking and the process of interpretation (2018).

## **2. Metaphor and metonymy as cognitive mechanisms of analogy**

Other important ideas that formed the methodology of our study are the theory of conceptual metaphor and metonymy. The study of metaphor and metonymy as meaning-generating phenomena helps to form an idea of the picture of the world of different people and its features.

The object of analysis, the founders of the theory of conceptual metaphor, J. Lakoff and M. Johnson (2003) considered the so-called erased or dead metaphors. Speaking about the correspondences in experience that underlie conceptual metaphors, they had in mind not individual, but collective experience, understandable to all representatives of this society. Another manifestation of the cognitive mechanism of analogy is metonymy (Lakoff, Johnson, 2003; Radden, Kövecses, 1999). Metonymy is a cognitive phenomenon, but with a different basis than a metaphor. In conceptual metonymy, two entities are connected in such a way that one replaces the other. From the point of view of cognition, in conceptual metonymy A replaces B, while in conceptual metaphor A is understood as B. It should be noted that often metaphor and metonymy are syncretic in nature, and they are quite difficult to distinguish. In this regard, works that consider the metaphor from a synergetic point of view are of interest (Muryasov, Samigullina, et.al., 2018).

## **3. The human body in the process of metaphorization and metonymization**

The opinion of Lakoff and Johnson (2003) that the body is a tool of metaphor and metonymy is significant for us. The conceptual system of language and culture is based on the body's perception of itself, as well as on the basis of the interaction of its body with other bodies. On the basis of a figurative rethinking of physicality, fundamental cognitive transfer models are structured in the following way: “internal - external”, “receptacle - accommodated”, “upper - lower”, “right - left”, “front - back”, “part - whole”, “center - periphery” and others. Such ideas “penetrate” into culture, social relations, reflected in linguistic forms. It is precisely on this conceptual potential of metaphorical-metonymic modeling of social processes, relationships, mental phenomena based on the experience of corporeality that we rely on in the cross linguistic analysis of the naive anatomy of Kazakhs, English and Russians.

Z. Kövecses (2001) listed the source areas from which knowledge is most often borrowed by the analogy mechanism. These are the areas of HUMAN BODY, ANIMALS, PLANTS, FOOD, FORCES (PHYSICAL INTERACTIONS). The target spheres are most often EMOTIONS, MORALITY, THINKING, HUMAN RELATIONS, TIME. As we see, the human body, knowledge about it, its structure, organs, parts and functions, according to many reputable scientists, are a truly inexhaustible source for understanding, learning more abstract, less familiar to a human areas.

The universal trend in the naive anatomy of the peoples of the world includes the establishment of a connection between the body (parts of the body, internal organs) and the mental world of a person (emotions, will, desires, thoughts). In 2002, a special issue of «The Body in Description of Emotion. Cross-linguistic studies» of the journal “Pragmatics & Cognition” was dedicated to the study of this relationship (2002).

In various internal organs, according to the indicated trend, various emotions, will, desire are localized, moreover, the constant properties of a person’s character. “Studies of emotions and individual emotional concepts, carried out by linguists and linguoculturologists within the framework of different linguocultures, allow us to assert that at all times the human mind seeks to connect the experienced feelings and emotions with any parts of the human body, to establish the place of their “localization” inside a person” (Zayats, 2017: 4). Thus, the internal organ is the habitat of any emotions, human qualities, and other mental processes. The established relationship between the internal organ and mental processes is of an idio-ethnic nature and reflects the culturally specific views of a particular nation. From a cognitive point of view, this relationship is represented as metonymic or metaphorical. “Physicality” in the process of the cognitive mechanism of analogy (metaphor and metonymy) is attributed not only to emotions, desires, but also to other mental properties of a person - constant character traits.

#### **4. Descriptors: the ways to derive and interpret them**

For the cross-linguistic description of the mental interpretation of the anatomical parts in the language, descriptors are used in this study. Descriptors are understood as parameters transmitting the most typical interpretations of anatomical phenomena in the cognition of various mental phenomena and processes of native speakers of Kazakh, English, and Russian languages. Identified descriptors contain generalized signs of metaphorical-metonymic understanding of anatomical concepts in three languages, fixing their commonality. Differences between cultures are found, firstly, in the quantitative coverage of the descriptor complex in the cultural interpretation of the anatomical phenomenon - the internal organ; secondly, in the peculiarity of the implementation of individual descriptors.

Descriptors are derived based on the analysis of the metonymic or metaphorical use of the names of internal organs (words, phrases) in the phraseology of three comparable languages (Kazakh, English and Russian). That is why descriptors contain culturally determined, rather than direct, objectively motivated meanings of the names of internal organs. So, for example, the descriptor “ability to have color” determines not the actual color of the organ, but the color attributed to it by native speakers due to the mechanism of analogy with mental phenomena, concepts and processes.

The internal organ is viewed through the prism of the identified descriptors in quantitative and qualitative respects in each language. The methodology for using the descriptors we obtained allows us to see common, similar features in the naive anatomy of different peoples, as well as differences. In this study, we consider only two internal organs - liver, lungs as the most interesting from cultural and anthropological points of view.

Moreover, the frame and scope of the article do not allow us to present the cultural and anthropological point of view of native speakers on other internal organs. The descriptors that we developed based on the semantic analysis of two organs mentioned above can be applied to the cultural interpretation of other names of internal organs, body parts, for example, heart, kidneys, spleen, stomach, etc. in various languages.

#### **Results and discussion**

Internal organs have a peculiar hierarchy and ethnocultural significance in the naive and anatomical representations of different peoples. The specific mechanisms of metonymization and metaphorization allowed them to realize a cognitive

understanding of internal organs and verbalize their relationship with mental phenomena and entities.

## 1. Liver

From the point of view of the Kazakhs, the most important internal organ of man is *bauyr* - the liver, and not the heart, as in most European languages. A lot of culturally specific ideas are associated with the liver, reflecting the peculiarity of the worldview of the ancient nomads, affecting not only the mental and emotional sphere, the character of a person, but also the social and tribal way of life.

Thus, the concept of the liver is primarily directly associated with kinship in the metaphorical model of "LIVER" - "CLOSE RELATIONSHIP" (metaphorical models at: (Temirgazina et.al., 2016)). Blood kinship, family ties were the most important socio-forming factor among the Kazakhs - representatives of Turkic nomads. The Kazakhs believe that it is the liver that is "responsible" for human feelings in the human body. It is liver that allegedly "worries" and hurts for relatives" (Kazaksha soyle, 2004).

For Kazakhs, the word *bauyr* metaphorically means "brother; blood relative; kinsman". Frequency is the appeal of *Bauyrym!* meaning "My brother!" (lit.: 'my liver'). The deceased is also mourned with cries of *Oh, bauyrym!* and the process of mourning the deceased is indicated by the verb *oj bauyrymdau*. "According to the custom of the Kazakhs, the rider notifies everyone about the death of a man, loudly wailing: *Oh, bauyrym!*" (lit.: 'Oh, my dear!')" (Kozhakhmetova et.al., 1988: 142). The most precious and important things Kazakhs call *bauyr et* (lit.: 'liver meat'), they say that about a child, children, blood and closest relatives - meaning "dearest; native" (Kenesbaev, 2007). See the Kazakh proverb: *Bala - adamnyn bauyr eti* (lit.: 'a child is the meat of the liver for a person') with the meaning "A child is the most precious for a person".

Kazakhs still have the ancient tradition of "*bauyryna salu*". Ethnographers write: "There was a practice when the first-born of the newlyweds were taken to their grandfather and grandmother for education - the husband's parents. This was called "*bauyryna salu*" (lit.: 'cuddle it to the liver')" (Kazaksha soyle, 2004). The verb *bauyryna salu*, in addition to the meaning "to adopt", also has the additional meaning of "bring the calf to the cow; to feed the calf", associated with the main occupation for Kazakhs - cattle breeding.

From the point of view of the Kazakhs, the liver also participated in the process of establishing fraternal, family relations, for example, the verb *bauyr lasu* with the meanings "to be related", "to fraternize", formed from the word "bauyr".

Many other verbs denoting affection, empathy are formed in the Kazakh language from the word *bauyr* in the framework of the metaphorical model mentioned above:

*bauyr tartu* (regret; treat like a blood relative; sympathize);

*bauyry elzhireu* (to regret);

*bauyr basu* (get used to; get attached strongly; shelter; adopt);

*bauyryna kiru* (to trust); *bauyryna tartu* (to attract to your side; to win over);

*bauyr syrau* (yearning for relatives) (Kasaksha-oryssha sozdik, 2013).

The phraseological expression *er-tokymyn bauyryna alu* (lit.: 'cling to the front of the saddle') has a syncretic metaphorical-metonymic meaning "to rebel; protest; disagree in every way" (Kenesbaev, 2007). The semantics of expression is constructed by the metonymic transfer "liver instead of the front of the object" and a metaphorical interpretation of the visual image of the rider, clinging to the bow of the saddle and preparing for a battle leap, to fight.

The adjective *bauyrmal*, formed from the word "*bauyr*" (liver), has the following meanings: 1) respecting relatives, welcoming to relatives; 2) responsive, kind (in relation to anyone) (Kasaksha-oryssha sozdik, 2013). An alienated person who does not recognize his relatives is also indicated by the word *bauyr*: *zhat bauyr*.

The health of a person, his family and loved ones is also metaphorically associated with the idea of the integrity of the liver. The expression *bauyry bytin* (lit.: 'liver is in sound condition') characterizes a person who is healthy and whose family and relatives are alive and well.

The concept of "liver" is actively used to describe such important qualities of a horse — the nomad's main asset as strength and endurance acquired as a result of training, according to the model with the source domain "LIVER" and the target domain "STRENGTH, ENDURANCE OF A HORSE ACQUIRED DURING TRAINING":

*bauyr zhazu* (long run - about a horse);

*bauyry tartyly* (to be trained; to be ready for horse racing - about a horse);

*bauyrynan zharau* (to be trained; to be ready for horse racing - about a horse) (Kenesbaev, 2007).

Kazakhs say about a stronger baby (and also about a foal): *bauyry katu* - get stronger (lit.: 'the liver has hardened / got stronger'). Metaphorical expressions with the word *bauyr* characterize the moral qualities of a person:

*kara bauyr* (lit.: 'black liver') - cruel; malicious;

*tas bauyr* (lit.: 'stone liver') - cruel; unmerciful; stale (Kenesbaev, 2007).

In the Russian language consciousness, the concept of "heart", not "liver", is usually used for similar characteristics of a person:

*chernoe serdce* (lit.: "black heart") is cruel, unkind;

*kamennoe serdce* (lit.: 'a stone heart') - merciless; stale.

In the liver, from the point of view of the Kazakhs, such human qualities as responsiveness, kindness, warmth are placed, see the noun *bauyrmaldyk* (lit.: 'liveriness'). In the naive and anatomical representations of the Russian people, similar qualities are localized in the heart - *serdechnost* (lit.: 'cordiality'), *serdechnyy* (lit.: 'cordial').

In English, "the liver appears as the center of fear: "the liver is the seat of fear" (2): *lily liver* 'a person who's afraid; a coward', *lily-livered* "extends to observation that a person's skin can turn pale with fear to suggest that all his / her organs do as well by using a lily, traditionally white, to convey the comparison" (Podgornaya, 2016: 117). Thus, the white liver (*lily*, *white*) is associated with cowardice and fear among the British: *white liver* in the meaning of "a coward" (Power Thesaurus, 2019).

In the Russian language, a negative attitude to the liver is also noted; see, for example, the idioms

*v pechenkah sidit* - "very tired, constantly disturbing" (lit.: 'sitting in the liver');

*vsemi pechenkami* (to hate, to want) (lit.: 'to want/ to hate with the whole liver') in the meaning "very strong" (Tikhonov, 2007).

In the dictionary of V.I. Dal' (1990: 108-109) the following idioms are recorded:

*govorit' pechenkoj* (lit.: 'speak with the liver' in the meaning of "angry");

*Ne hvatilo legkih, tak zagovoril pechenkoj* (lit.: 'Not having enough lungs, he spoke with the liver' in the meaning of "There wasn't enough loudness of the voice in the argument, so he became very angry");

*Ne gnevajsa, pechenku isportish'* (lit.: 'Do not be angry, you ruin your liver').

In all these idioms, the liver seems to be the place of localization of such negative emotions as anger, irritation, which, according to Russian speakers, can damage this organ.

In English, the noun *free-liver* (n.) functions with a specific meaning not noted in the Kazakh and Russian languages: "one who indulges the appetites" 1711, from free (adj.) + liver (n.2). Related: Free-living" (Etymological Dictionary of English, 2015).

The liver, in accordance with its localization in the human body, forms in the Kazakh language a kind of metonymy such as "the liver instead of the front of the body". That

is why *bauyr* has the figurative meaning "belly; abdomen", as well as "the front of the body", "chest". See, for example, the expressions:

- bauryrna basu* - to press to the chest;
- bauryrna kysu* - to press against you;
- bauryrn tosep zhatu* - lie on one's stomach (Kenesbaev, 2007).

The location of the liver in the body is also the basis for the metonymy "the location of the liver in the body instead of the slope / foothills": *taudyń bauryrynda* - located on the side of the mountain (lit. "near the mountain's liver") (Kenesbaev, 2007).

The burial place, a man's grave is figuratively called by the Kazakhs as *bauryr suyq kara zher* – lit.: 'a black earth with a cold womb' (Kenesbaev, 2007). This meaning is syncretic metaphorical and metonymic in nature. The syncretic meaning is characterized by the Kazakh idiomatic expression *ayak-kolyn bauryrna alu* – lit.: 'safely give birth to a baby (about a pregnant woman)' (Kenesbaev, 2007). Literally, this idiom is practically impossible to translate; it reflects a deeply specific perception of the process of childbirth of Kazakhs.

The significance of the liver in human anatomy is also manifested in the fact that the names of other internal organs are formed using the word *bauryr*:

- bauryr et* - diaphragm (lit.: 'liver meat');
- kokbauryr* - spleen (lit.: 'blue liver') (Kasaksha-orysssha sozdk, 2013).

Thus, the concept of "*bauryr*" (liver) was of extremely great importance in the world picture of the Kazakhs, denoting not only the most important internal organ of the human body, but also an essential concept in the description of family relationships within a nomadic society, in the reconstruction of the mental world - emotions, desires and other. This is evidenced by a significant number of idioms and words with figurative meaning, which include the "liver" component in the Kazakh language in comparison with English and Russian. See Table 1.

<i>Kazakh Language</i>	<i>English Language</i>	<i>Russian Language</i>
42	4	3

**Table 1. The number of idioms with the component "Liver"**

We emphasize that, according to the Kazakhs, mainly positive emotions and qualities of a person are concentrated in the liver - attachment, trust, pity, kindness, responsiveness, and cordiality. In contrast to the representations of Russians and English, Kazakhs also believe that it is in the liver that strength, endurance of a person and a horse nests, acquired over time during training.

Among Europeans in contrast to Kazakhs liver is not considered the habitat of kindred feelings. From the point of view of importance in the body and in the localization of human emotions and qualities, the liver in Kazakh naive anatomy is comparable to the role and place of such an organ as heart in Russian and English naive anatomy. A negative attitude towards the liver prevails in them: according to native English speakers cowardice and fear are concentrated in it; and according to the native speakers of the Russian language, anxiety from someone's annoyance is revealed there.

Table 2 shows the descriptors defined during the analysis of metaphorical and metonymic use of the name of the organ "liver" and the characteristics of the liver in accordance with the indicated parameters in three comparable languages. The first in the hierarchy of descriptors is "kinship", since this parameter is the most important in the nomadic Kazakh culture, whose foundation has been tribal relations since archaic times. The concepts of "kinship", "consanguinity" penetrates into all spheres of

managing, life, mentality of Kazakhs. The naive anatomy also reflects the primacy of this concept: it is localized in the largest internal organ of a person - the liver.

	<i>Internal body descriptors</i>	<i>Kazakh</i>	<i>English</i>	<i>Russian</i>
1	<i>LIVER</i>			
1.1	<i>Kinship</i>	blood relationship, close relationship		
1.2	<i>Positive emotions</i>	love for family, friends; empathy, trust, pity, homesickness		
1.3	<i>Negative emotions</i>		Fear	annoyance from someone's importunity; anger
1.4	<i>Positive human qualities</i>	kindness, cordiality, responsiveness, courtesy		
1.5	<i>Negative human qualities</i>	cruelty, maliciousness, callousness	Cowardice	
1.6	<i>Physical characteristics</i>	strength, man / horse endurance		
1.7	<i>Ability to have a colour</i>	ability to have blue colour	ability to have white colour	
1.8	<i>The ability to be made from any substance</i>	can be made from stone		
1.9	<i>Place in the hierarchy of values</i>	the most valuable, the most expensive for a person		
1.10	<i>Softness/ Hardness</i>	able to be solid, strong		
1.11	<i>Localization of something</i>	denotes the front of the body; foot, mountainside		
1.12	<i>Lifestyle</i>		free lifestyle	

**Table 2. Descriptors of the internal organ "Liver" in Kazakh, English, and Russian**

## 2. Lungs

*Okpe* (lungs) have an extremely specific feature in the consciousness of Kazakhs in terms of localization of emotions. They are the habitat of exclusively negative emotions - resentment, grief, discontent, and reproach. This is confirmed by numerous idioms:

*okpe saktau* - hold a grudge; murmur;  
*okpe ajtu* - take offense; make a grudge;  
*okpe artu* - take offense; be discontented;  
*okpe tarkatu* - stop being offended;  
*okpe* - *renish* – reproaches;  
*okpeli pishin* - offended look;



*okpeli saryn*- offended tone.

It is no coincidence that in the Kazakh language verbs with the meaning *okpeletu* «offend», *okpeleu* «take offense» formed from a noun *okpe* (lungs).

In the phraseology *okpesi kara kazandaj bolu* in the meaning of “strongly offended” (lit. ‘he has an offense the size of a black cauldron’) (Kozhakhmetova, et.al., 1988) reflects the archetypal opposition “white” - “black”, in which the term “black” characterizes negative values, phenomena, realities, in this case, emotions. In the phraseology *okpe ajtyp kysu* (lit. ‘crush, expressing resentment, reproaches’) with the meaning “seize reproaches”, the situation of intense verbalization of resentment using the word *okpe* is transmitted (Kenesbaev, 2007). The expression *bez okpe* (lit. ‘lungs hard as glands’) has the meaning 1) “cruel; heartless” (a person); 2) “hardy; strong” (about a horse).

Kazakhs imagine that, firstly, the lungs can be picked up: the idiom *okpesin ala zhygiru* literally translates as ‘running with the lungs in your hands’ and means 1) running very quickly; 2) to express an insult; secondly, the lungs can move and hide in the mouth: *okpesi auyzyna tygyly* literally translates as ‘lungs have risen to the mouth’ and means “suffocating from an excess of feelings, emotions” (Kenesbaev, 2007).

The lungs (*okpe*) have magical powers and are traditionally used by Kazakhs to treat the patient from the evil eye and other diseases. The Kazakh ethnographer S. Tokhtabaeva writes about it: “A common method of treatment (in particular, getting rid of the evil eye) is patting the patient’s naked body with the lungs of a freshly cut black sheep. After this procedure, the lungs that “took” the disease themselves had to be buried in the ground. This practice is still alive” (2017: 133). Perhaps such a negative idea of the human lungs is associated with this tradition of treatment, widespread in the culture of Kazakhs, when it was believed that the lungs absorb negative phenomena, diseases and emotions.

From the point of view of Europeans, lungs do not appear at all as the location of any emotions and, accordingly, are in no way connected with them; they perform vital, but purely physiological functions: they absorb and exhale air, ensure human breathing. Perhaps it was the connection with physiology that caused the concept of “lungs” meaning “voice power” in the English language; the etymological dictionary records the appearance of this meaning since 1900: “Lung-power” strength of voice “is from 1900” (Etymological Dictionary of English, 2019). The British believe that having good lungs means having a strong and loud voice:

*good lungs* - strong / loud / voice;

*he has a good pair of lungs* - he has a tinned throat (Akademik, 2019).

They also believe that the strength and volume of the voice are located in the upper part of the lungs: *at the top of one's lungs* - at the top of the voice, out of all urine (Akademik, 2019).

We have already cited the proverb *Ne hvatilo legkih, tak zagovoril pechenkoj*, in which the lungs mean “strength and volume of voice”.

A metaphor for the function is also recorded in English and Russian:

*urban lungs* (pl.) - gardens, parks, and squares (Sirotinina, 2006);

*cities lungs* - gardens, parks, and squares.

The insignificance of such an internal organ as the lungs in the naive and anatomical representations of native speakers of English and Russian is evidenced by the small number of phraselogical units with the “lungs” component in comparison with the Kazakh language.

<i>Kazakh Language</i>	<i>English Language</i>	<i>Russian Language</i>
19	4	2

**Table 3. The number of idioms with the component “Lungs”**

Table 4 presents the interpretation of the lungs by using descriptors.

	<i>Internal body descriptors</i>	<i>Kazakh</i>	<i>English</i>	<i>Russian</i>
2	<i>LUNGS</i>			
2.1	<i>Negative emotions</i>	resentment, grief, discontent, reproach		
2.2	<i>Negative human qualities</i>	cruelty, heartlessness		
2.3	<i>Physical properties</i>	force; human / horse stamina		
2.4	<i>The ability to move</i>	up to the mouth from an excess of feelings, feelings		
2.5	<i>The ability to have colour</i>	the ability to have black colour		
2.6	<i>Connection with voice</i>		voice power is connected to the upper part of the lung	voice power is associated with the lungs in general
2.7	<i>Transference to something</i>		supplying oxygen for breathing	supplying oxygen for breathing

**Table 4. Descriptors of the internal organ "Lungs" in Kazakh, English, and Russian**

We note once again that the idioms of English and Russian languages are not characterized by the use of the names of such internal organs as liver, lungs (Denisova, Gulyaeva, 2015: 66; Podgornaya, 2016: 106-107; Guancze, 2013), unlike the Kazakh language, where the use of the names of liver and lungs in phraseological units is a widespread practice. This indicates the importance of these organs in the naive anatomy of the Kazakhs.

### Conclusion

Thus our cross linguistic analysis of naive anatomy in three radically different cultures and unrelated languages using descriptors allows us to draw the following conclusions.

A liver has 12 descriptors, the most important of which for the Kazakh language consciousness is the ability of the liver to enclose kinship relations and feelings (see table 2). The significance of this internal organ in the naive anatomy of the Kazakhs is evidenced by the fact that the name “liver” is used to denote the highest value in the hierarchy of values of Kazakh culture. A liver contains positive emotions, constant positive and negative qualities of a person, physical characteristics of a person and a horse acquired as a result of training. The blue color is attributed to liver by the carriers of the Kazakh culture; liver can be made of stone.

In English, a liver has 4 descriptors - "negative emotions", "constant negative qualities", "the ability to have color" and "lifestyle", which are semantically related. The white color liver, besides, indicates fear and cowardice. The last descriptor is unique and does not occur in the functioning of the name of the liver in the Kazakh and Russian languages.

In Russian, a liver has 1 descriptor - "negative emotions."

All of the above indicates the importance of such an internal organ as a liver in the cultural representations of the Kazakhs, in comparison with the role and place of this organ in English and Russian speaking cultures where the concept of "liver" plays an insignificant role.

Lungs are a very significant component in the naive anatomy of the Kazakhs, the number of descriptors by which they are objectified in the language is 5, see table 4. The lungs appear in the linguistic consciousness of Kazakhs as carriers of extremely negative emotions and human qualities: resentment, discontent, cruelty and heartlessness. At the same time, such positive physical characteristics of a person and a horse as strength and endurance can be concentrated in them. The lungs may be black if the feeling of resentment is very high. They are also able to move in the body towards the mouth.

In English and Russian, the linguistic and cultural burden of such an internal organ as lungs is less significant, because the number of descriptors in them is 2. The strength of the voice is concentrated in the lungs, and they are associated in function with green spaces, parks, squares, forests that supply cities with oxygen.

Note that out of 5 descriptors, the concepts of "lungs" in the Kazakh language are not the same as those in the English and Russian cultures. The same can be said of 2 descriptors in English and Russian. In other words, the Kazakh culture in the interpretation of the concept of "lungs" is opposed to English-speaking and Russian-speaking cultures.

It should be noted that there is such a feature in the linguistic conceptualization of internal organs in Kazakh culture as the parallel correlation of their metaphorical and metonymic interpretation in humans and in domestic animals, primarily in the horse - the main property of a nomad. This indicates the importance of these organs in the naive anatomy of the Kazakhs, as shown by cross linguistic analysis of vocabulary and phraseology of the Kazakh, English, Russian languages.

The approach proposed in our article to identify the specifics of naive and anatomical views can be used on the basis of different languages and continued in further study in the Kazakh language picture of the world of all the names of internal organs that have linguocultural significance. This will allow scientists to recreate the full "naive anatomy" of native speakers of the Kazakh language or native speakers of some other language. The selection of descriptors for comparing the semantics of names in different languages clearly demonstrates the similarity and difference of naive-anatomical representations of carriers of different cultures.

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