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### ANTHROPOLOGY OF SMELLS: HISTORY AND MODERNITY

### Abstract

The smell is one of the most significant factors influencing human consciousness and behaviour. This is due not only to the biological aspects of its origin and the actualization of the bodily being of a human but also to deeply rooted in culture and society stereotypes and patterns of perception that determine the value system, cognitive attitudes and social structure of each particular culture. This is the essence of the relevance of the project of historization and anthropologization of smell, based on the original model of describing the transformation of human cultural practices, which equally takes into account the natural and social aspects of human life and can identify the regulatory mechanisms, order and principles of sociocultural changes. Although a modern man does not fully realize the power of olfactory area of his sense empire, this does not free him from the power of reflex reactions, cultural norms and social demarcations, originating in the olfactory receptivity. Perhaps, that is why the rationalistic ideal of deodorization has not been achieved by modern perfumers, who only mask, but not destroy smells, that are, in some sense, completely indestructible, because they can effectively shape a person's cultural identity, historical memory and even self-awareness.

*Keywords*: human, culture, anthropology of smell, the process of civilization, cultural practices, computer technologies.

### Introduction

Of the relatively new directions in the study of cultural practices, the most attention, in our view, is worthy of the history of smell and related crisscross subjects, concerning the sphere of relations between nature and culture. Indeed, the history of smell, on the one hand, reflects the idea of the natural essence of men and, on the other hand, successfully fits into the cultural and anthropological turn of philosophy and associated with it rethinking ways of knowing the world.

After all, for a successful and adequate response, a person needs not only neural processing of the received signal from outside but also its comprehension in the cultural and historical context. Therefore, the presented research, following C. Levi-Strauss, proposes to consider smell as a complex conceptual system, which includes many diverse components, both physiological and moral content and meaning. This will significantly expand the connotative field of the concept of smell, which reveals the possibility of its interpretation as a form of communication, in-

volving not only human consciousness but also his entire body. It also fits into a modern trend of reviving interest in archaic forms of culture, rethinking their role in human history and meaning for modernity.

In odorology thematic analysis, by referring to the texts of literary works in our research, is not accidental: the classification of smells by chemical composition is practically impossible due to their diversity, ephemerality and volatility. Even the verbal description of the smell will always be too subjective because it depends on individual susceptibility, age, social status and emotional mood. Also, many people to varying degrees suffer from anosmia, which significantly complicates the task of both natural-science and humanitarian studying of smell and sense of smell. For example, A. Corbin (1986), drawing a parallel between "the history of ideas and history of mentalities" gives great importance to literary sources. According to Corbin, the individual experience, revealed by a few poets, quickly acquired the status of scientific truth: the sense of smell was the sense of "tender memories" (pp. 201-202).

However, the position of Hans J. Rindisbacher, (we are actively using a similar approach in this research), creates an opportunity to look at the process of smell perception in a new way by emphasizing the philosophical, aesthetic and linguistic aspects of literary research, including them in the overall picture of social history. Rindisbacher (1992) claims that there is "strong theoretical evidence of evolutionary and anthropological developments that establish good and bad smells as an ancient classification underlying most sociohistorically grounded categories. Moreover, there is the simple, pleasurable, hedonistic aspect of the olfactory, that enlightenment philosophy has largely disregarded but that

is nevertheless a real life as well as literary phenomenon" (p. 20).

However, this is not so much about the scientific classification of smells. It is about the inclusion of them in the history of culture and society as full-fledged actors of the civilization process, but not a bitter misunderstanding or a pleasurable addition to the everyday existence of a man. To solve this difficult task, we have used various research approaches, allowing them to combine utterly different images and interpretations of smell and its perception. We tried to consider not only and not so much the history of perception and conceptualization of smell in culture, but to propose an integral anthropological method of its interpretation as a kind of the central phenomenon of human existence along with much more well-known and sublime phenomena of labour, play, love and death.

As demonstrated in our research, smell not only relentlessly accompanies these generally recognized phenomena of human existence, but is also their integral part, endowing them with empirical "flesh" and, thus, deserving separate and detailed study. The methodological basis of the presented research is the hermeneutic method of interpreting literary sources and cultural artefacts, the phenomenological method that reveals the constitutive value of smell for culture and society as well as the psychogenetic method of N. Elias, which allows to see the mechanisms of civilization process and to sketch a possible image of the future, in which smell returns to its deserved position through digital technologies.

### Words and Scents

Undoubtedly, the perception of smell is primarily due to the complex neurophysiological processes of the human's body mental system.

However, it is no coincidence that numerous neurosciences are so prevalent in modern interdisciplinary researches. Thanks to these studies, the boundaries between nature and culture, that seemed recently completely impenetrable, on the one hand, and Machine Man on the other, are becoming more transparent and ephemeral. Otolaryngologist S. V. Ryazantsev (1997) surprisingly confirms C. Levi-Strauss's hypotheses with scientific studies, explaining how the perception of smell drives complex mechanisms in the human brain. The sense of smell, in this case, is interpreted in the context of the evolution of the sense organs. The focus of the Russian scientist is the so-called olfactory brain, which is the oldest part of the human brain. According to Ryazantsev (1997), this part of the brain, being near to the limbic system, is involved in the formation of emotional and behavioural reactions and motivations: therefore it is the smells that are the fastest to evoke memory, and not logical, but emotional (p. 169).

The connection of associative memory with the sense of smell is also noted by H. M. McLuhan (1964). Analyzing the impact of means of communication on socio-cultural processes in society, he argues in favour of "the sense of smell long considered the root of memory". Thus, he notes that "the most integral and involving time sense imaginable is that expressed in the Chinese and Japanese cultures. Until the coming of the missionaries in the seventeenth century, and the introduction of the mechanical clocks, the Chinese and Japanese had for thousands of years measured time by graduations of incense. Not only the hours and days, but the seasons and zodiacal signs were simultaneously indicated by a succession of carefully ordered scents" (McLuhan, 1964, p. 163). From the artistic examples of the study of smells and the depiction of their capacity to revive images and events of the past vears in the human mind, Marcel Proust's bright phenomenon is the best known and representative one. Proust constructs his own picture of the world of smells through the use of thoroughly selected language tools. Memory idioms are the main language toolkit that characterize the author's style of Proust. "When from a long-distant past nothing subsists, after the people are dead, after the things are broken and scattered, taste and smell alone, more fragile but more enduring, more immaterial, more persistent, more faithful, remain poised a long time, like souls, remembering, waiting, hoping, aimed the ruins of all the rest; and bear unflinchingly, in the tiny and almost impalpable drop of their essence, the vast structure of recollection" (Proust, 1992, pp. 63-64). For R. Barthes (1997), unlike Proust, the only things that matter are the smells of the past, even the voice from the past is associated with smell: "For me, setting aside the voice, less a matter of sound, actually, than by its texture of perfume, memory... Of what will never return, it is the odor which returns for me. As with the odor of my childhood in Bayonne: like the world encircled by the mandala, all Bayonne is caught up in a composite odor" (pp. 135-136).

Andy Warhol (1975), for example, by having "smells stopped up in bottles", used his smell collection for "getting the memories" and being "in control". "Of the five senses, smell has the closest thing to the full power of the past. Smell really is transporting. Seeing, hearing, touching, tasting are just not as powerful as smelling if you want your whole being to go back for a second to something" (pp. 150-151).

The eternity of scents that evokes memories has been a favourite theme of many poets and artists. The power of smell is almost physically felt in the paintings of great Salvador Dali and the poems of Charles Baudelaire:

"All matter becomes porous to certain cents;

They pass through everything; it seems they even go through glass..."
(Baudelaire, 1936, p. 46).

A different model for constructing a sustainable associative link between "smell" and "memory" can be presented, based on the value of smell as one of the socio-cultural codes of the transcendental world. Their correlations are based on specific cognitive and cultural mechanisms, engaging to interaction the concepts such as "air", "love", "danger" and "death". For example, such associative parallels as "smell homeland", "smell - native land" demonstrate the possibility of philosophical and artistic rethinking of smell as a concept identical to the native land, native bread. Such semantic load evokes a profound emotional reaction and broadens the perception of the "soul of culture" by incorporating the smell: "And he came near, and kissed him: and he smelled the smell of his raiment, and blessed him, and said: See, the smell of my son is as the smell of a field which the Lord hath blessed..." (Gen. 27: 27, King James Version).

A bunch of steppe crispy grass
It smells so sweet when being dry!
At once the steppe me above
It raises all the charm revive<sup>1</sup>.
Here is Aragats near the vale,
Like an eagle at rest.
Looking down on the dale
Excites the childhood's scent! <sup>2</sup>
Wild honey smells like vast expanse,
Dust scents like beams of sun,
Young lady's lips have violet scent,

But gold just smells of none<sup>3</sup>.

The theme of smell as a cultural phenomenon arises in a variety of contexts. Thus, G. Kreydlin (2002) is talking about the role of smell in non-verbal communication. According to him, communication requires not only habitual hearing, seeing and tactile sense, but also the sense of smell: "A pleasant smell can remove spatial and other barriers between people. In the absence of bad odour, people can approach each other for a shorter distance and stay longer side by side in the same room" (Kreydlin, 2002, p. 476). For non-verbal communication, both artificial and natural smells are important. This is an inclusive system - within it one can give the additional characteristics to an individual. To the greatest extent, olfactory manifests itself in specific situations, when olfactory and tactile impressions are combined. "I said, I will go up to the palm tree, I will take hold of the boughs thereof: now also thy breasts shall be as clusters of the vine, and the smell of thy nose like apples:" (Song of Songs 7: 8, King James Version). Herein, King Solomon uses an oriental allegory to describe the beauty of his beloved through the pleasant smell of "apples", which poets and artists often associate with love.

Each new generation in the history of civilization always forms its own self-consciousness through cultural achievements, artefacts being arisen from its activity. The history of civilization shows that a man uses cultural artefacts to assert his place in society, to emphasize his individuality. This sets conditions and boundaries of reflection at the importance of his personality, successes and cultural achievements. "Man is artificial by nature and in accordance with the

See: <u>https://rustih.ru/apollon-majkov-emshan/</u> (Translated by L. Avakyan).

See: https://www.armmuseum.ru/news-blog/2018/6/3/ (Translated by L. Avakyan).

See: <a href="https://rustih.ru/anna-axmatova-privolem-paxnet-dikij-med/">https://rustih.ru/anna-axmatova-privolem-paxnet-dikij-med/</a> (Translated by S. Golubeva).

form of his existence; he is natural-artificial being" (Plessner, 1975, p. 310).

Acting as an "ontical necessity" ("ontische Notwendigkeit") for a man, culture becomes his second nature, shapes his inner world and puts him into a state of "second naivety" ("einer zweiten Naivität") (Plessner, 1975, p. 311). For the French historian of sensuality, A. Corbin, scents are a philosophical fact of the management of feelings, emotions, impressions and desires, which is embodied in presenting not only social, but also gender identity of a person. "Sniffing perfumed objects was an even better way of ensuring the imaginary presence of the mistress than looking at a photograph" (Corbin, 1986, p. 207). Thus, the smell can be a symbol, on which the personality model is built, and its social status is based.

As one of the factors of understanding the world and interacting with it, smells are always associated with some events. Here it is not that much a matter of memorializing events per se, but of the narrativization of this topic, in the process of which smells are endowed with a certain social meaning. They measure a social place of a person, making sense across boundaries of the status hierarchy, wealth and poverty, life and death, disease and danger.

This, in essence, is about such a conceptually rich understanding of smell, that covers not only issues related to physiology and biology, but also sociology, cultural science and psychology. The decryption of olfactory codes and symbols is of particular importance, as the process of "cultivating" the smell is connected not only with the attempt of a person to get rid of unpleasant natural odours but also with the fact that the use of smells can affect the person's behaviour. Scents can evoke the associated memories and sensations and, thus, induce an action. "The

which smell when the evil spirit had smelled, he fled into the utmost parts of Egypt, and the angel bound him<sup>3,4</sup>. It describes the miraculous deliverance of Sara from the evil spirit, which was driven away by something tangible through the smell.

Spicy and pungent smell of danger – You're coming so fast.

In our meetings, not a drop of clarity, only is rapidly melting the trust<sup>5</sup>.

The "smell of danger" until recently was considered to be a metaphor, symbolizing the state of anxiety and fear, that arises out of nowhere and carries information about a hidden or obvious threat. "And they were all mixed; the blast of fire, the flaming breath, and the great tempest; and fell with violence upon the multitude which was prepared to fight, and burned them up everyone, so that upon a sudden of an innumerable multitude nothing was to be perceived, but only dust and smell of smoke: when I saw this I was afraid"6. Herein, the word of Messiah was the only tool in the fight against enemies. It was as strong as the powerful stream of fire, accompanied by the smell of fire, symbolizing death and destruction.

The smell, as a marker of death, is a widely discussed topic, which is popular not only in esoteric but also in the works of writers, artists, filmmakers. There is even a special forum "What does the death smell like?"<sup>7</sup>. Fear of death, of the unknown, is universal for humanity at all times.

See: The Apocrypha. Deuterocanonical books of the Bible. The Book of Tobit, Tobit 8:3. <a href="https://avidrea-ders.ru/read-book/deuterocanonical-books-of-the-bib-le.html?p=103">https://avidrea-ders.ru/read-book/deuterocanonical-books-of-the-bib-le.html?p=103</a>.

See: <a href="https://stihi.ru/2015/02/03/7195">https://stihi.ru/2015/02/03/7195</a> (Translated by G. Tsimmerman).

See: The Apocrypha. Deuterocanonical books of the Bible. The Second Book of Esdras 13:11. <a href="https://avid-readers.ru/read-book/deuterocanonical-books-of-the-bible.html?p=35">https://avid-readers.ru/read-book/deuterocanonical-books-of-the-bible.html?p=35</a>.

See: <a href="http://www.ufolog.ru/forum/yaf\_postst6218\_Chiem-pakhniet-Smiert.aspx">http://www.ufolog.ru/forum/yaf\_postst6218\_Chiem-pakhniet-Smiert.aspx</a>.

Russian specialist on the Slavic World History Galina Kabakova, after having turned to ethnographic sources, proves that the smell of death, which is "attributed to destructive power", is always connected to the land. "A very old man is said, "to smell of land" (Belgorodskaya, Volynskaya, Bryanskaya regions) [...]. The land seems to penetrate the human body in the most material way, and not just through the smell" (Kabakova, 2010, p. 41).

Bloggers, having caught the baton of poets and writers, created a lot of opuses on an olfactory theme. It began with a lot of variations on the theme of Gianni Rodari's poem in S. Marshak's translation "What do crafts smell like?".

What do programmers smell like?

[...] The web programmer smells like a casual relation,

COBOL programmers smell like frustration.

PASCALer smells like something forgotten,

ACCESS developer like trough broken [...]<sup>8</sup>.

Then numerous satirical verses followed, being directed against the same poets and writers, who had touched on the olfactory theme. They all started the same way:

Every author has a special smell:
Cocaine and malice are the scents
of Baudelaire,
Proust smells like tea and Madeleine,
The smell of each other have Rimbaud
and Verlaine.

Further variations on the theme of the association of various poets and writers with smells ended with the line: "Only fic-writer smells nothing".

Maugham's smell is the theatre dust, Only fic-writer<sup>10</sup> smells nothing just. <sup>11</sup>

The presence in almost all languages of proverbs, sayings and winged phrases, associated with smell, is further proof of the importance of the olfactory component for communication.

Lucri bonus est odor ex re qualibet (lat.) —
Money has no smell;
Servabit odorem testa diu (lat.) — The first
scent you pour in a jar lasts for years;
Odor mortis (lat.) — The smell of death;
Odor specificus (lat.) — A specific smell;
The sweet smell of victory;
Odor of sanctity.

Smells appear to be as a form of expression of relationships: *be in bad odour with somebody*;

Fears: *smell a rat, smell danger;*Situations: *smell fishy, smell like a rose;*Actions: *wake up and smell the coffee, smell blood.* 

Thus, we see that in the process of perceiving the smell in the human mind, definite cultural meanings are formed, based on which smell can perform certain sociocultural functions. Each culture has its own identifying smells, associated with natural conditions, history, traditions, customs, rites and national cuisine.

Lavash gives birth to light in a heart with keeping the mountain freshness; a wonderful scent of home exuding, it dignifies the native coast with the rosy of its loaves. 12

Most often, the description of the smell begins with the phrase: "This smell is similar to...". The lack of olfactory terminology in Eng-

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See: <a href="https://tanchik.livejournal.com/249245.html?thre-ad=7499421">https://tanchik.livejournal.com/249245.html?thre-ad=7499421</a> (Translated by S. Golubeva).

See: https://olga-arefieva.livejournal.com/36429.html (Translated by S. Golubeva).

This final line is apparently an allegory: fic-writer (fic – fiction) is a person who writes fanfics to different blogs, using and developing others' ideas, thus the smell is not identified.

See: <a href="http://blogovine.ru/pyanicy-pisateli-prostitutki-si-sadminy-i-samuil-yakovlevich-marshak/">http://blogovine.ru/pyanicy-pisateli-prostitutki-si-sadminy-i-samuil-yakovlevich-marshak/</a> (translated by S. Golubeva).

See: <a href="https://poembook.ru/poem/1918606">https://poembook.ru/poem/1918606</a> (Translated by L. Avakyan).

lish is compensated by borrowing from the French language. In the Russian language, it is necessary to use transliteration, because the borrowed lexical units are not enough even when translated from English. For example, the dictionary of Russian synonyms for the word "smell" (neutral meaning) gives the words "stink", "spirit" and "stench" (clearly not of the neutral meaning), the rest being borrowed from other languages.

In the course of her research, A. A. Kolupaeva (2009) reveals only a small number of systematically fixed units of olfactory vocabulary in the Russian language. These units are related to different parts of speech: "Nouns (flavour, incense, fragrance, stink, spirit, stench, scent, etc.), verbs (to be fragrant, to stink, to smell, etc.), as well as their derivative adjectives (flavoured, fragrant, incense, stinking, aromatic, etc.), adverbs (fragrant, flavoured, smelly, stinking, noisome)" (Kolupaeva, 2009, p. 10). In general, etymological studies reveal that the list of synonyms for the word "smell" or its derivatives remains incomplete. In the English language, there are at least five tokens for the concept of "smell": scent, smell, odour, flavour, whiff. It is worthwhile noticing that the same ratio, one to five, corresponds to the number of scientific publications on this topic in Russian and English (Klimova, 2014, pp. 827-828).

Studying the topic of "smell" in Russian culture, Kabakova underlines the lexical deficiency of the verb with the meaning of "smell" in modern Russian language, regardless of the etymological and semantic connection with speech activities. According to Kabakova, despite the great importance of this channel of communication with the world, the appropriate terminology in Russian, as well as in other languages, is quite poor. The special verb "to smell" for native spea-

kers has no success. We have to use verbs with a more general meaning: "feel", "hear" (Kabakova, p. 50). Perhaps, a new round of interest in the topic of "smell", having been caused by the prospects of its integration into Internet communication, will lead to more successful attempts of its scientific classification and enrich Russian and other languages.

In essence, this is about overcoming the metaphorical load of the word "smell", which is woven into the linguistic picture of the world. This transfers the concept of "smell" from a less coherent, rarefied biological context to a denser and rich cultural and socio-psychological one, giving the smell a key role in identifying the world and interacting with it.

# Smell in the Process of Evolution and the Process of Civilization

Among modern works, devoted to the historical role of smells in Western culture from Antiquity to the Present, it is worthwhile mentioning studies of C. Classen, D. Howes and A. Synnott, that cover a wide range of topics from medieval "flavor of holiness" to the South American aromatherapy, from ethnic and sexual olfactory stereotypes to the importance of smells in postmodern society. Their result permits the conclusion that the current tendency to shift the olfactory aspect to the periphery of culture was due to the capacity of the smell "to expose the inner essence" (as opposed to sight and hearing). This contradicts the "modern one-dimensional concept of the universe", that protects the individual from external intrusions, so "olfactory codes often serve as a tool not so much for uniting of individuals, as for their separating and suppressing" (Classen, Howes, & Synnott, 2010, p. 50).

Despite the fact that "different odours are

often attributed to different social classes and ethnic groups in the West", higher society and ruling classes, which have always been associated with pleasant smells as opposed to "malodour of the working class" are in the modern society "in a position of olfactory neutrality" (Classen, Howes, & Synnott, 1994, p. 165). Classen, Howes and Synnott (1994) come to the conclusion that this tendency has a political background: "Formerly power was personal, and therefore imbued with the smell of those who wielded it; now it has become impersonal and abstract and, therefore, odourless" (p. 161). They believe that "the olfactory antipathy" is a manifestation not only of social class but also of "ethnic antipathy". This view is consistent with the conclusions of many researches of olfactory culture. J. N. Kaye, while studying HCI (Human-Computer Interaction), points out the religious aspect of communication through smell. Based on that, he states: "A cultural practice frequently involving scent has always been religion [...]: in many religions, across the world, there is an understanding that pleasant odors are smelled and appreciated by deities, and that unpleasant odors displease the gods" (Kaye, 2001, p. 61).

D. Laporte expressed truly original ideas about society's attitude towards smells. According to Laporte (1993), smells "when not deemed pleasant - can only be equal to their terrible selves. If we speak of limits, it is because odorlessness can only be approached or approximated. Even when exquisite, it will hint at hidden filth. Civilization despises odour and will oust it with increased ferocity as power strives to close the gap between itself and divine purity; [...] odor will always be suspect" (pp. 82-83). It is worth pointing out another trend, noted by Classen, Howes and Synnott. This is about the attempts to create special smell-suppressing sprays. "These

sprays contain odourless molecules — "antagonists" that block one's ability to perceive certain odours". Based on that, they assert that this will invariably lead to the fact that "apart from the likely problems of safety, we would lose our ability to experience the environment we live in [...] what is now at issue is whether or not we have a right to freedom of smell" (Classen, Howes, & Synnott, 1994, p. 172).

In continuation of the theme of smell's status, it should be noted that it is one of the few widely discussed topics due to the fact of being closely connected with the perfume industry. One of the prominent German philosophers and the creator of social interaction theory G. Simmel (1908) remarks that the social question is not only an ethical one but also a question of smell ("eine Nasenfrage"; p. 657). Based on that, Simmel declares that the personal contacts between the educated and the workers often so vividly advocated for the social development of the present, the approach of the two worlds, which is also recognized by the educated as an ethical ideal, one of which does not know how the other lives. This process fails simply because of irresistible olfactory impressions (Simmel, 1908, p. 657). He believes that smells are more likely to be repulsive than pleasant; the sense of smell, working on shorter distances, than vision or hearing, plays a somewhat divisive role in the communication process. According to Simmel (1908), if the other senses build thousands of bridges between people, the sense of smell, by contrast, can be characterized as dissociating one (p. 659). Agreeing with Simmel on the divisive role of smells, Corbin (1986) claims that smells can have the opposite effect if they evoke pleasant memories. He notes that "the sense of smell was both the sense of social repulsion and the sense of affinities" (p. 204).

An interesting idea belongs to Michel Serres. Believing that "smell and taste differentiate, whereas language, like sight and hearing, integrates" (Serres, 2008, p. 156). Serres compares the sense of smell with the knowledge of a second language, which undoubtedly expands communication. People, who know a second language – "inexhaustible, hidden for the time being", can use it any time, which makes their life more vibrant and more colourful. Based on that, he notes that "the sense, therefore, of the confusion of encounters; the rare sense of singularities: our sense of smell slides from knowledge to memory and from space to time - no doubt from things to beings" (Serres, 2008, p. 170).

The ability to identify space by smell is closely related to its ability to evoke memories. When a person enters into a different cultural environment, the sense of smell is the first of the media perceived by the body. "It is said that every city, every country, has its smell. Paris, they say, smells or used to smell of acrid cabbage. Cape Town smells of sheep. There are tropical isles that smell of roses, musk, or coconut oil. Russia smells of leather. Lyon smells of coal. The Orient generally smells of musk and corpses. Brussels smells of black soap" (Baudelaire, 2019, p. 13). Thus, the creation of an olfactory image through stereotypical ideas about the picture of the world allows not only to use olfactory units as a special odour code but also creates a kind of olfactory habitus, thereby facilitating the process of identifying one's own and foreign culture and interacting with it. This habitus reveals the very essence of a different culture and engages in a dialogue with it.

Anthropological and cultural-historical analysis of the transformation of the attitude to smells allows us to conclude that the human brain began to develop from the moment when

primitive people began to distinguish smells and give them particular importance. There is no doubt that hominids and primitive humans tried everything that they got into their hands to touch, smell and taste. The familiarity of hominids and primitive humans with fire and the effects of fire on nature inevitably and naturally led them to discover the properties of smoke, ash, soot and coal, which were explored by them by touch, smell and taste. At all times of the Stone Age primitive people, undoubtedly, not only searched and collected "that's not tied down", but they did it selectively - by appearance, image and likeness, taste, smell and colour.<sup>13</sup> However, in modern culture, scents have lost their sign nature (compared, for instance, with the perception of colour and sound signals). Our ancestors "comprehended by scents", while we only react to them, merely estimating as pleasant or unpleasant.

Simmel proposes to historicize this theme and analyze it through the prism of the civilizational process. He notes that the fact with the significance for social culture has not yet been sufficiently appreciated enough: with the improvement of civilization, the sphere of perception of all senses is obviously decreasing and their pleasantness or unpleasantness, on the contrary, is increasing. In particular, Simmel focuses on subjective and objective factors in individual development, in the course of which significant transformations in behaviour and in the management of senses occur. Based on that, Simmel (1908) highlights that the modern men are shocked by innumerable things, which seem unbearable to their senses, less differentiated and gentle people accept all these without any reaction of that kind (p. 658). He relates these processes to the tendencies of the modern men to-

<sup>&</sup>lt;sup>3</sup> See: https://proza.ru/2013/09/05/641.

wards individualization, enhanced personality and selectivity of their connections, where they are not asked about their personal taste and personal sensitivity (Simmel, 1908, p. 658).

That is not to say that it is wrong, but it is obvious, that the current understanding of smell is not limited to this, so far as the sense of smell appears to be connected with the significant shifts "in the process of individualization, not only quantitative but also qualitative ones. It is the emancipation of an individual, distancing from myths and traditions, the increased importance of We-connections, the growing mobilization of individuals and their inclusion into new vast aggregations on the one hand and the growth of individual self-regulation, the balance shift in We- identity and I- identity, in favour of the latter's primacy, on the other" (Gergilov, 2007, p. 122). Thus, the smell is one of the critical elements of social relations. Therefore, it is necessary to identify how dynamic and meaningful the smell is, being dependent on the civilization of its values. The diversity of civilizational processes in the modern world creates favourable conditions for such research, which is complex but promising one.

## Smells in Modern Culture: From Museum to the Factory

Recently the use of smells has been popularized in museums for more effective impact on visitors and enhancing their cognitive abilities. Not to mention the perfume museums, that exist in almost all countries, it is worthwhile mentioning the most interesting ones in the context of our research. First of all, it is a Natural History Museum in London, where each exhibition not only immerses visitors in a certain natural atmosphere but also fills it with appropriate smells; as well as

the unique exhibition of the city's disappeared scents in the History Museum in Yekaterinburg, which has been operating since July, 2013; or the Museum of Aromas in Spain, in Santa Cruz de la Salceda, having been opened in 2012 and aimed for people with a visual impairment. For the exhibition of works of the Russian avant-garde artist Yuri Annenkov "Yuri Annenkov. Revolution behind the Door" (13.02.2020, Moscow, The Museum of Russian Impressionism) perfumers recreated the favourite aromas of Anna Achmatova, Isadora Dunkan and other characters of painter's works. Thus, yet another trend of modernity is emerging: smells that are pushed out of society like unnecessary and outdated artefacts are being transferred to the category of museum exhibits.

Scientists from the Israel Weizmann Institute have created a multi-dimensional smell map with the function of determining the distance between the molecules that are responsible for a certain odour. In order to create the map, a team of researchers led by Noam Sobel (Professor of Neurobiology) and David Harel (Professor of Applied Mathematics and Computer Science) selected 250 basic aromatic substances, each of them having approximately 1600 chemical characteristics (later reduced to 40) that are necessary to determine the location of this smell on the map. The test showed that the reactions of the human brain when perceiving the true smell and the smell, obtained by the map, were very similar. Having used these indicators, the scientists predicted a possible neural response to 70 artificially created fragrances, the experimental results coinciding with the calculated models. According to them, these facts confirm their scientific theory about the existence of universal laws, that govern the olfactory function and how the brain perceives smells, contrary to the generally accepted opinion about the individuality of the sense of smell. The researchers at the Weizmann Institute believe that their smell map will help "digitize" fragrances and transmit them via the Internet<sup>14</sup>.

In the context of above-mentioned issues, J. N. Kaye (1999) claims, that the absence of an aromatic alert limits the capabilities of information technologies: "Imagine that computers can emit scents as easily as they currently play music. Sniffing the air tells you the state of the world, not just spring flowers blooming outside, but abstract information: inhaling the knowledge that someone loves you, or the whiff of your portfolio rising" (p. 13). J. M. Harris draws an unusual parallel between art and food. He claims, that "food and drink are as capable of being art forms as are painting and sculpture, drama or ballet, literature or music, [...] inasmuch art is not only aesthetic, but also sensual delight" (Harris, 1979, p. 6). According to Harris, the exclusion of taste (related to food consumption) and olfactory impressions from the process of creating artistic taste is evidence of "crude prejudice". Summing up, he states that "the power of food and drinks to evoke thoughts and scenes might well be used by chefs in the same way as painters, poets, and playwrights rely on us to make certain fairly obvious associations with things they depict or on certain images to evoke particular moods or emotions" (Harris, 1979, p. 8).

In continuation of the issues, raised by the above work, it is worthwhile mentioning how consistently these cultural practices are developed by Russian Doctor of Philosophy, S. A. Rassadina. Investigating the cultural and anthropological aspects of pleasure, she also draws a parallel with the works of art and other cultural

artefacts, believing that enjoyment of food, and hence the smell, demonstrates the connection between the natural and the social. She notes that the pleasure practices are the clearest example of the transformation of human biological needs into the field of cultural values, and they are based not only and not so much on the natural body as on the social one - the habitus of the subject of culture (Rassadina & Surova, 2009, p. 341). Thus, as an example of the discourse on the role of "taste" in consumer culture, Rassadina cites the picture "Foodscape" of Islandic postmodern artist Gudmundur Gudmundsson. She notes that a variety of snacks, on the one hand, are the symbols of surrogate taste, on the other hand, the diversity of tastes is becoming an integral part of the pleasure strategy (Rassadina, 2010, p. 189).

Within the domain of electronic communications, that accelerate globalization processes, pleasure practices occur towards diversification. From traditional practices, based on the reproduction of cultural identity, they are transformed into the phenomenon of new traditions, generated by the culture of consumption, which is influenced by the globalization processes and can freely redefine the boundaries between "one's own" and "alien". Having analyzed various aspects of the commercial use of tastes, Rassadina (2010) concludes that modern technologies allow manipulating the sense of taste in the same way as perfume technologies in the course of time allowed abstracting aromatic nuances from the material reality of their primary carriers (p. 193).

In modern culture, there is a decline of interest in semantic and informational connotations of smell, which were completely natural for traditional culture. The weakening of the role of smells is due to the shift of communications to the virtual world because the olfactory and taste representative system is not relayed through ex-

See: <u>http://www.sciencedaily.com/releases/2008/5/08-0527094159.htm.</u>

isting media technologies. McLuhan (1964) accuses the iconicity of smells of losing modern society's interest in them. Based on that, he claims: "The sense of smell is not only the most subtle and delicate of the human senses; it is, also, the most iconic in that it involves the entire human sensorium more fully than any other sense. It is not surprising, therefore, that highly literate societies take steps to reduce or eliminate odours from the environment" (p. 164).

R. Barthes believes that humanity is losing its natural ability to recognize the subtlest smells of the surrounding world, replacing first them with more intense synthetic fragrances and then trying to get rid of them later. Therefore, he notes: "By its smell I can detect the actual change of a certain type of consumption: the sandals (soles pathetically lined with rubber) are no longer handmade, the chocolate and the olive oil are bought outside the town, in a supermarket. The odours are over and done with - as if, paradoxically, the increase in urban pollution drove off the household smells, as if "purity" were a perfidious form of pollution" (Barthes, 1992, p. 8). According to A. Levinson (2000), the current trend, aimed at suppressing of natural odours, is a sign of a new olfactory civilization. The measure of efforts to get rid of natural and intimate odours and efforts to acquire public and artificial odours is a measure of the subject's involvement in modern civilization (p. 28).

Smells as a social phenomenon can erect as well as destroy class barriers, create and destroy political hierarchies, divide and unite people. The role of smells in strengthening and weakening of social and political structures, being underestimated and not sufficiently studied by philosophers, historians, sociologists and cultural scientists, is increasingly becoming the subject of the discourse. Professors of Multimedia Computing

at Brunel University G. Ghinea and O. Ademoye claim that the discourse should be guided by the principles of focusing on the problems around this important theme. In this regard, they note: "Smell is one of the last challenges which multimedia applications have to conquer. As far as computerized smell is concerned, there are several difficulties to overcome, particularly those associated with the ambient nature of smell. Use of olfaction leads to an increased sense of reality and relevance" (Ghinea & Ademoye, 2012, p. 17).

Scientists at Harvard University D. Edwards and R. Field, while exploring the oPhone (olfactory) technology for the iPhone, developed the oSnap app, which allows to send and receive the world's first aromatic messages, using a mobile phone or tablet: one need to take a photo of an object, such as a fresh fruit, attach the photo to the appropriate smell from the list of oMessages (contains about 3000 different flavours) and send it to another iPhone owner. To carry out this olfactory communication, one need to purchase a device oPhone Duo for \$ 149, which somewhat disappointed Internet community. On June 18, 2014, Edwards sent the smell of his New York breakfast - fresh bread, orange juice and strawberries - to Paris. His French colleagues recognized the smells and sent a response message the aromas of champagne and almond biscuits. This was the first successful attempt at olfactory Internet communication, although some sceptics claim that smell cannot be transmitted via the Internet, only created on the spot. According to Edwards, the main idea is to use the capacities of smell to evoke memories not to bring people back to their past, but to bring them closer to each other. Thus, he claims that the sense of smell is "one of the significant ways in which we engage the world. It is essential to some experiences - eating - and also interacting with friends and enemies and nature. The ability to bring scents to electronic communications enlarges the richness of communications online"<sup>15</sup>.

The sense of smell, if we take into consideration its closer link with emotions and memory and its richness as well as a variety of smells, is powerful, though not thoroughly studied, the alternative mechanism in human-computer interaction. This area has not been sufficiently studied for a number of reasons, including the technical difficulties of directional flavour generation; chemical difficulties with accurate reproduction of pleasant and safe (hypoallergenic) odours; lack of a scientific classification of smells and a clear understanding of the mechanism of their perception; problems associated with anosmia; numerous unsuccessful attempts to create peripherals with aromatic alert and a high price for devices, having been more successful in operation. It took about 50 years to develop a visual and tactile graphical interface for virtual reality, still inaccessible to the average PC user. In 1965 Ivan Sutherland, an American computer scientist, predicted a few years before the advent of personal computers that the future of computer science would be in transforming abstract mathematical constructs into the habitable world in the spirit of Lewis Caroll's "Alice in Wonderland". He noted: "A display connected to a digital computer gives us a chance to gain familiarity with concepts not realizable in the physical world. It is a looking glass into a mathematical wonderland" (Sutherland, 1965, p. 506).

In 1970 Sutherland created Head-Mounted-Display, a helmet-shaped device for visual immersion in virtual reality (a prototype of future automated design systems). Creating the olfactory graphical user interface (GUI) should take less time due to the development of technology. Perhaps, Internet technologies, having improved the idea of using smells, will return their importance at a higher level, first in the virtual and then in the real world. This will definitely enrich the culture of modern society, turning it towards its forgotten origins.

#### Conclusion

As revealed, smells have surrounded a man and humankind from the earliest times of their meaningful existence, organizing their living space, prescribing rules and constraints, establishing social relations and hierarchies. They are undoubtedly based on the archaic culture, impregnating it entirely and filling it with vitality, generating the sensual and emotional closeness and mutual understanding within the first human communities. The rationalist European culture for a long time either completely ignored or gave derogatory assessments to its dark, "smelly" past, creating a scientific picture of a world devoid of taste, colour and smell. However, today we are trying to return to a person the lost "empire of feelings", which is able not only to enchant them but also to create a rich context of truly human existence. Thus, the study of smell and its place and significance in culture is so important that it can open up entirely new prospects for humanitarian thinking about culture and society.

In the research detailed above, we have taken only the first steps in this direction. As a result, the following preliminary conclusions, regarding the anthropological meanings and aspects of this inexhaustible topic, should be highlighted:

• The main thesis is the one about the need to continue the interdisciplinary, large-scale

<sup>&</sup>lt;sup>15</sup> See: <a href="https://news.harvard.edu/gazette/story/2014/-06/now-available-on-the-web-smells/">https://news.harvard.edu/gazette/story/2014/-06/now-available-on-the-web-smells/</a>.

study of the cultural and social significance of smell as an essential phenomenon of human existence. Nevertheless, the values and meanings of this phenomenon, having been identified, demonstrates the importance of odours for the development of culture and society, as well as trace the history of their scientific understanding and artistic reception.

- The fundamentality of smell for human existence is determined by its total impact on a person, from mentality to the conceptual connection with life and death, domination and submission, and ultimately, the formation of a particular type of cultural-historical self-consciousness of humanity, which equally comprises both natural and cultural aspects of their being.
- Artificial intelligence technology, being one
  of the most promising areas of smell research, cannot be successfully implemented
  without considering the revealed value of
  smells for human consciousness and thinking. Current trends in the representation of
  smells via Internet technologies and the inclusion of olfaction in the communication
  process will probably enhance the role of
  smells whose perception is likely to become
  one of the main criteria for distinguishing
  between natural and artificial intelligence.
- The significance of smell for the formation of a person's cultural identity and self-awareness makes it a promising object of pedagogical researches, since modern pedagogical methods and technologies hardly use smells, although our study clearly shows this prospect.

We would like to believe that the proposed solutions and conclusions will become the basis

for productive scientific discussions and further researches in the target direction.

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