

A. Burshtein

THE REALITY OF MYTH

Translated by Leah Burstein and Marina Ritzarev

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Note of the Translators

It was our privilege to know Arkady Burshtein and to be part of his circle. Making his work available to an English-reading audience was both an honor and a tribute to a person from whom we received so much human and intellectual generosity. Drawn to, and drawing in, all kinds of creative people, he radiated the joy of effortless communication, taking genuine delight in others' talents and accomplishments. Modest by nature, he showed no hint of stardom – yet he was a star. At our gatherings, he was often barely heard, choosing instead to play the gracious host, supporting others in sharing their gifts. It was his presence, and the visible pleasure he took in watching others' presentations and performances, that made him the true heart and soul of his circle of friends.

Our contribution to Arkady's memory is also inspired by our deep admiration for his amazing wife, Bella. Selflessly co-creating with him the warm and welcoming atmosphere of their evenings, she has since taken up the torch and continues this cherished tradition.

If one were to define Arkady's interests and creative work, he was above all a passionate analyst of poetry, driven by a belief in the inexhaustible depth of its meanings. Searching for semantic connections led him everywhere: to languages, psychology, the subconscious, history, sociology, and cultures. All these spheres, like rays, converged on myth as their core – an original, universal substance, the beginning of beginnings. The title *Reality of Myth* may seem metaphorical, but for Arkady it was meant literally and defines the book's fundamental idea.

In the Russian edition of the book, Vidary Levit is listed as co-author – a tribute to Arkady's characteristic generosity. Long-time friends united by many shared views, the two discussed Arkady's ideas for years, and Vidary's role as an engaged creative listener was deeply important to the maturation of this book.

Burshtein wrote the manuscript and set it aside in his early thirties, in 1985, while still in his native Ekaterinburg. Later, he produced a series of fascinating essays on Russian classical poetry, offering strikingly unexpected yet deeply convincing interpretations. He never sought publication, nor did he show concern for protecting his intellectual property. He simply shared his work with those capable of appreciating it. He was above such vanity – and, in the end, it was repaid. Remarkably, many years after he had settled in Israel, his friends and colleagues in Ekaterinburg, led by Elena Sozina, took it upon themselves to collect, edit, and publish his book, including *Reality of Myth*, selected essays, and letters of his friends discussing his interpretation of the Aristotelian catharsis.

The task of this translation presented some dilemmas. The first was the translation of Russian poetry extensively quoted by the author. Rather than using existing poetic translations, and certainly not attempting equirhythmic translations ourselves, we chose to provide interlinear translations as close as possible to the semantic series derived by the author from the vocabulary of the analyzed examples. However, there was one exception. In one of the chapters, he invited the reader to witness his experiment – composing a rhyming poem using given semantic series. In a striking anticipation of artificial intelligence, Burshtein demonstrated one of its future capabilities – “manually”. Today, the AI Claude has provided us with many such examples for this book.

The second dilemma was whether to follow his writing style. The Russian style in general, and the academic style in particular, contradicts the concise elegance of the English language. Nevertheless, wishing to preserve Arkady Burshtein's individual manner – very clear and precise both in thought and expression – we decided to retain its Russian flavor. We sincerely thank the creators of Claude for taking into account our most subtle requirements for achieving semantic accuracy in the translation.

Translation, as every new touch upon the academic text meant for another audience, involves elements of editing. Since the author broadly used foreign studies in their Russian translations, we strove to replace his quotations and references with either English-language originals or existing translations of Russian books into English.

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Part One

ON SEMANTIC SERIES, MAGICAL FORMULAS, AND POETIC ART

Chapter 1

IN FRONT OF THE DOOR

Any reader of poetry has likely encountered verses that, despite having seemingly neutral content or defying logical analysis, evoke unexpectedly powerful emotional responses. Such verses appear in the works of virtually every great poet, regardless of their literary movement or historical period. The mystery of their impact in many ways parallels that of incantations, and this justifies referring to them as *shamanic verses*.

Poets whose work consists primarily of shamanic verses are rare (notably, they typically emerge from moments of highest inspiration rather than being deliberately crafted). Osip Mandelstam was one such poet, creating lines like “I studied the science of parting / In bareheaded nocturnal lamentations”. These lines contain no rational imagery, yet they elicit a precise emotional response. Viktor Sosnora appears to be another such poet, whose recent collections feature profound shamanic lines of remarkable sublimity:¹

My soul is simple as a death sign... (from “Continuation of Pygmalion”, 1969-70)

or

*Snake chime! – for the earth of all brides
Mine and not yet mine – I drink the cup,
Hemlock of tears! I fear not the heavens
Their wrath is but a caress of our hatred...* (from the cycle “Letters from the Forest”, 1965)

Even Bulat Okudzhava, known for his autumnal lucid clarity, produced the undeniably shamanic poem “A girl is crying – her balloon flew away” (“Blue Balloon”, 1957), which generates an inexplicably profound wave of sadness.

We will attempt to explain rationally the secret behind the impact of such verses by analyzing several poems and excerpts to identify patterns common to all shamanic-type verses.

Before proceeding with specific analyses, it's worth considering Yuri Tynyanov's observations from his article “Promezhutok” (The Interval, 1924):

“Verse as a system possesses its own coloring property, its own force: it generates verse-specific shades of meaning... Mandelstam's contribution lies in special word shades, in distinct semantic music... Words united by a single, familiar melody share one emotion, and their unusual order, their hierarchy, becomes inevitable... In Mandelstam's semantic structure, a single image or vocabulary series assumes a decisive role for the entire poem, subtly coloring all others – this is the key to the complete hierarchy of images... The shade, the coloring of a word in each verse, persists, condensing in the subsequent one. Thus, in his final poem (‘January 1, 1921’), we find an almost inconceivable association between

¹ Translators’ note. Writing in early 1980s, the author probably related to such Sosnora’s collections of poems as “Crystal” (1977), “Verses” (1977) and “Moon Song” (1982).

'Underwood' and 'Pike bone.' This might appear nonsensical to those who seek to unlock others' premises, however accessible, with their own key".²

To summarize Tynyanov's insights:

1. Verse creates new shades of word meaning.
2. These new shades or meanings can exist only within verse.
3. All words in the verse, whether used conventionally or in a new, unique to the poem, sense, share a common emotional coloring.
4. Attempting to find purely rational meaning in Mandelstam's verses would be similar to unlocking "others' premises, however accessible, with their own key".

The impression emerges that everything Tynyanov said about Mandelstam's verses can be extended to all shamanic verses – with the following minor correction.

In linguistics, words are analyzed along two dimensions: the plane of expression and the plane of content. The plane of expression encompasses the phonetic reality of the word – its sonic structure. The plane of content comprises the concepts associated with its sonority. Within the plane of content, each word consists of various combinations of semantic quanta – the smallest, currently indivisible, units of meaning.

The nature of semantic quanta is dynamic; they tend to subdivide into smaller components while words simultaneously acquire new meanings. Due to our current limitations in scientific methodology, we cannot isolate individual semantic quanta; we can only verify their existence. Our analysis must therefore work with their combinations, as any possible word meaning represents a specific arrangement of semantic quanta.

The multitude of semantic quantum combinations exhausting the meaning of a given word forms the meaning field of that word. Each word possesses a strictly defined meaning field. However, this field can evolve when reality changes – expanding with the emergence of new phenomena or contracting with the obsolescence of old ones. At any given moment, however, a word's meaning field remains finite.

When a word appears in a phrase, it rarely activates its entire meaning field;³ instead, only a portion becomes relevant. Moreover, we can never definitively state that it would be impossible to construct a phrase that would activate an even narrower subset of its meaning field. In other words, a word's meaning field is continuous (by Anaxagoras's definition, continuity is infinite divisibility).⁴

We shall term the portion of a word's meaning field activated within a specific phrase a *seme*. Whether in prose or poetry, when a word *appears* in a phrase, its meaning must belong to its

² Tynyanov, Yury. "Promezhutok." In *Poetika. Istoriya literatury. Kino* ("Interval," in Poetics. History of literature. Cinema). Moscow: Nauka, 1977, pp. 188-189.

³ From our point of view, the entire field of word meanings is realized in a phrase when this field consists of a single *seme*.

⁴ Nalimov, Vasily. *Veroyatnostnaya model' yazyka* (Probabilistic model of language). Moscow: Nauka, 1981, p. 217.

established meaning field. In extreme cases we might encounter a word used with a meaning that, while belonging to its field, has an exceptionally low probability of activation in normal discourse.

The concept of Bayesian reading was creatively developed in Vasily Nalimov's extensive and productive research on the probability of word meaning activation. Our analysis builds upon his conclusions, and readers interested in exploring this topic further should consult his illuminating work,⁵ which we will refer to repeatedly. It may presumably be considered that fields of meaning are generated not only for words, but also for images.

Let us now attempt to unlock the door to the inner sanctum of shamanic verse, to discover rational meaning in what appears to lack it. Readers can judge our success in this endeavor.

We begin with Okudzhava's previously mentioned poem:

*A girl is crying – her balloon flew away.
They comfort her, but the balloon flies on.
A young woman is crying – there's still no groom.
They comfort her, but the balloon flies on.
A woman is crying – her husband left for another,
They comfort her, but the balloon flies on.
An old woman is crying – she lived too little.
But the balloon returned, and it's blue.*

First Plane: Surface Narrative

The plot of this poem is simple. As the girl's balloon escapes, we rise with it into the air, peering through windows as we drift by. In every scene we glimpse, someone mourns a loss of their own. Then, in the poem's last line, the balloon returns to the child. It is a simple consolation: don't cry, little girl, the balloon has returned, and it's blue.

What is the secret of that remarkable sadness that this poem evokes despite its generally neutral content? The glimpsed scenes are sad in themselves, but there is nothing unusual about them. The first plane won't help us understand the secret of shamanic verses.

Second Plane: Parabolic Interpretation

Generally speaking, the poem's plot can be interpreted in two ways. Above, we presented one interpretation – particular events occurring at a particular time. The plot, however, can be perceived as a parable. Parabolic understanding becomes possible due to the incompleteness of context. The context allows all that the poem says to be attributed to the same person. With such an understanding of the text, every two lines will correspond to kind of a photographs of the dotted-line episodes of a person's life taken with a flash and snatching from the darkness. Each of the dotted line is a line of the verse containing the word "crying". And at the end, where the dotted line ends, the person's life ends, too. Moreover, like any photograph, the pictures of

⁵ On the word meaning field, see *ibid.*, p. 217; on the Bayesian language model, see *ibid.*, pp. 74-96, 217-218.

the dotted line are static, and, since the poet doesn't specify those who cry, the person we see in the photograph is a person in general. The dotted line begins to acquire a universal character.

With such understanding, the plot of this poem remarkably resembles an ancient Eastern plot, known in all Buddhist countries. In one version, a magician comes to the raja and claps his hands. The raja finds himself in a forest and marries an untouchable to avoid dying of hunger. He lives a life full of deprivation and adversity, and, at the moment of death, he finds himself in the palace, where he sees the magician clapping his hands. They tell him that he was absent for the time between two claps.⁶

Another plot tells of a student who falls asleep in a temple, using a wooden headrest. He wakes up, goes to the capital, where he takes first place in the examination, becomes a minister, lives a life full of ups and downs, and wakes up. He slept no more than 15 minutes, as the porridge in the pot that was put on the fire before he fell asleep had not yet finished cooking.⁷

Two hand claps, a pot of porridge on the fire, a brief balloon flight – they all emphasize the ephemeral nature of passing human life. The mood evoked by the old parables and Okudzhava's poem is a mood of loss. Let's keep in mind this word – loss.

But why does the old parable evoke a sense of loss? After all, we all know that life is short and death is inevitable. The parables (and the poem) simply reminded us of things known as well as that two times two is four. No, the second plane is also not helpful for unlocking the door to the workshop of shamanic verse.

Third Plane: Semantic Structure

The poem is constructed on the repetition of the line “They comfort her, but the balloon flies on”. What meaning does this line have when it is used for the first time? A girl's balloon flew away. From a child's perspective, losing a balloon is an irreversible loss. The balloon has flown away, it cannot be returned. Thus, comforting her is futile. The loss is irreversible.

The next dot of the dotted line is a young woman. “A young woman is crying – there's still no groom. They comfort her, but the balloon flies on”. Why do we get the thought that the young woman won't find a groom? The repeating line is already associated in our minds with the sensation of loss. It has retained the meaning of its previous use, and in the text of the current line, nothing could change or destroy the meaning of the previous use. Thus, here, too, the repeated line means the same: “All is futile! Nothing can be returned” – the meaning of irreparable loss.

The next frame of the dotted line is a woman. “A woman is crying – her husband left for another. They comfort her, but the balloon flies on”. Again, we perceive the repeated line in the meaning of its previous use: “All is futile, nothing can be returned”. The same applies to the

⁶ Narayan, Rasipuram Krishnaswami. “Lavana.” In *Gods, Demons and Others*. New York: The Viking Press, 1964, pp. 15-23.

⁷ “Golden Millet Dream.” <https://keatschinese.com/china-culture-resources/golden-millet-dream/>.

next photo frame of the dotted line: “An old woman is crying – she lived too little. But the balloon returned, and it's blue”.

Here things are somewhat more complex. From the repeated line, only one word is used – balloon. But this word in the repeated line has already acquired its special meaning (recall Tynyanov's article that we quoted above). And the line “But the balloon returned, and it's blue” suddenly also acquires the meaning: “All is futile, nothing can be returned”. This meaning is further strengthened by the last line of the verse entering into a relationship of inverse symmetry, or, as literary scholars tend to say, opposition, with the previous line. We saw above that the last line of the verse offers comfort addressed to the little girl who lost her balloon at the very beginning of the verse. And in the previous line, an old woman cries, whose life is coming to an end.

Note, by the way, that where the images of the verse enter into relationships of inverse symmetry, the sensation of loss almost always arises. The collision of opposite principles creates a situation of unstable equilibrium, which cannot last long. Such a situation is pregnant with loss. The images that make up the lines of our text also enter into relationships of inverse symmetry: “Lived too little” – the finitude of being, “and it's blue” – blue is the color of eternal sky, of eternity. At the same time, blue is the color of sorrow and sadness (“blue sadness”). In English, “blue” means both “blue” and “sad”.

So, we saw that the even lines of the poem functionally reduce to the phrase “All is futile, nothing can be returned”. Now, let's look at the odd lines. All of them are built according to the following model: “subject cries” – “reason for crying”. Crying is a sign of loss. The reason for crying is the same for everyone – the loss of something: a balloon, a groom, a husband, life. Moreover, each subsequent loss is heavier than the previous one. But for us, something else is more important. Namely, that all images of the verse reduce to one denominator, and this denominator is irreversible loss (Tynyanov also spoke about all words being colored by one emotion). Not only do all lines of the verse turn out to be synonymous with each other, but all images of the verse do too. It's time to look back and draw the first conclusions:

1. All images of this verse form one series – a series of loss.
2. All lines of the verse are synonymous with each other and speak of the irreversibility of loss.
3. The events of the verse (analyzed in the second plane) tell of loss.
4. The meaning of loss also arises because some images and lines of the verse are in a relationship of inverse symmetry with each other.

So, our perception of Bulat Okudzhava's poem reduces to the perception of a repeating phrase:

Loss. All is futile, nothing can be returned.
Loss. All is futile, nothing can be returned.
Loss. All is futile, nothing can be returned.

This pattern emerges at every level of analysis.

Through rational examination, we have traced the associative pathways our consciousness traverses instantaneously while reading the verse. While we cannot map every possible chain of meaning, we can identify the primary ones. The reduced form we've arrived at bears a striking resemblance to a hypnotist's incantation designed to instill specific emotional states.

Hypnosis? Perhaps here lies the key to unlocking the workshop of shamanic verse.

Chapter 2

IN THE WORKSHOP

Might we have been mistaken? Perhaps the poem about the balloon is simply a unique phenomenon in terms of the interconnectedness of its planes? Let's examine another poetic excerpt that evokes an acute sense of sadness while not describing any sad events. We will pay attention only to the presence of the third plane, to that deep level of the verse from which the level of its common denominator opens up (Alexander Pushkin, "On Georgia's Hills", 1829):

On Georgia's hills lies the night mist.

Aragvi roars before me.

I am sad and light, my sorrow is bright.

My sorrow is filled with you.

The night mist on the hills evokes instability, transience, a precarious balance. Morning will come – and it will disappear – loss. Aragvi roars – the movement of a mountain river, eternal water change, one cannot step into the same river twice – instability, loss.

I am sad and light. My sorrow is bright.

Here we have two examples of inverse symmetry at once: in the word "sadness" the meaning of sorrow dominates, and in the word "lightness" – joy, as in the word "light". And inverse symmetry, as we have already said, describes a situation fraught with loss. Moreover, Georgia and Aragvi are alien to the poet, something he is destined to lose.

My sorrow is filled with you.

Through this very act of "filling", the woman who is the cause of the Poet's sorrow becomes an embodiment of sorrow herself.⁸ One might think that she will be lost, like Georgia or Aragvi, or that, having remained in Russia, she is lost to the Poet, or that she does not love the Poet and is therefore already lost, or that the Poet grieves because he realizes that his love will pass, but still cannot help but love – from the perspective of the third plane it does not matter. What matters is that this too represents loss.

Examining each image in the verse for its ordinary meaning, we find that the images naturally fall into two groups in this quatrain by Pushkin. The first group comprises night, mist, hills, flowing waters, passing noise, sorrow, sadness, and woman. All images of this group, considered by themselves, outside the verse, have, among other qualities, the quality of sadness. Light, lightness – the second group. Its images are united by the opposite quality – joy. In the future, we will call groups consisting of images (words) united by a common meaning (seme) a semantic series. The entire set of images in the quatrain fit into two semantic series.

The process of identifying semantic series in verse parallels the mathematical process of factorization (forming a quotient structure), with the series themselves functioning as factor-

⁸ Translators' note. No definite female personality stands behind the poem's metaphor. Based on biographical context, scholars suggest one of three women: Maria Volkonskaya, Natalia Goncharova or Anna Olenina.

sets (quotient sets). Factor-sets, as is well known, can possess properties not found in their constituent elements. These sets can themselves serve as elements for further operations.

Thus, we have identified new operational structural units in the verse: semantic series of images. The common seme of images in one semantic series essentially serves as the name or identifier of this series. Each appearance of images from this series serves as a repetition of the seme common to the entire series. Images within a single semantic series, as well as different semantic series with distinct identifiers (semes) identified within the same verse, enter into symmetrical relationships with one another. The symmetry of their relations can be simple and inversionsal.

Both semantic series identified in the above quatrain are connected by relations of inverse symmetry. The relations of inverse symmetry existing in Pushkin's poem flip the semantic series of joy and turn it, paradoxically, into its opposite: the semantic series of sadness. Thus, the application of inverse symmetry leads to the strengthening of one seme by others. As a rule, the seme that predominates in the work of art will be the one that is strengthened. Since all elements included in one semantic series are connected by relations of symmetry of repetition, the use of images that, in our perception, are reduced to a single semantic series leads to the creation of a *suggestion formula* (in a hypnotic sense) in the artwork.

To determine the leading seme of the verse⁹ means to determine the content of the inner suggestion formula. The ability to form a suggestion formula is the first new property that a semantic series reveals as a factor-set. In our analysis of Bulat Okudzhava's poem, we saw that all structural levels of the poem participate in creating the suggestion formula – the story, the plot, the selection of images, and the selection of words.

With the above Pushkin's quatrain, things are somewhat different. The plot of the poem does not indicate the suggestion formula at all. The poet contemplates a certain landscape and thinks about a woman. The deep meaning of the quatrain was revealed only after we dismantled the fabric of the verse and re-assembled it through montage. Is it appropriate to do this?

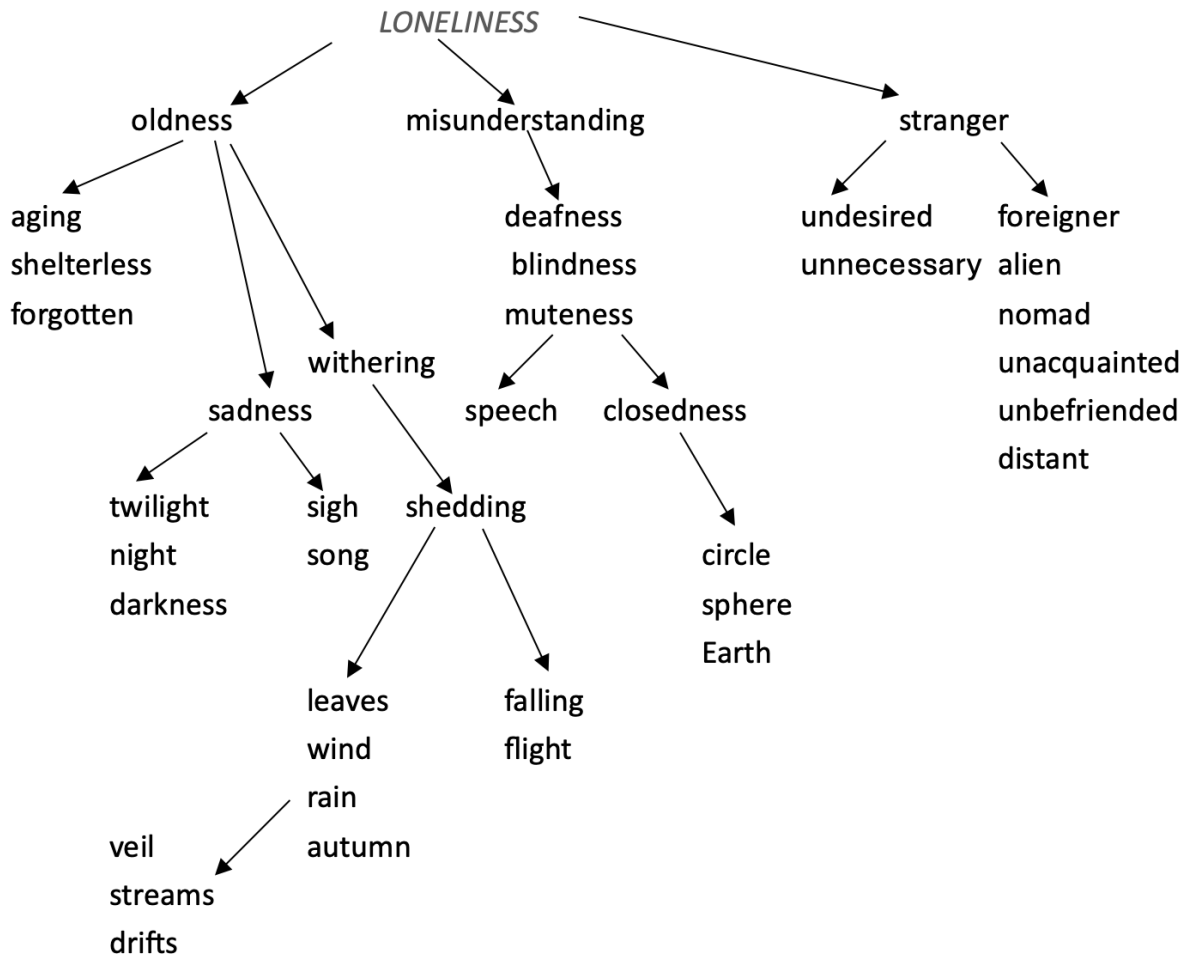
Montage: series of lexemes, fields of meaning, semantic series and suggestion formula

Yu. V. Pukhnachev, in his nuanced and interesting study,¹⁰ writes about the montage nature of our vision, thanks to which montage pieces in the viewer's perception coalesce into a single image. Probably, we can talk about the montage nature of perception in general. When perceiving, we divide the fabric of an artwork into pieces (frames), and from them we assemble a single whole (semantic series). But might there be an error in our reasoning and analysis? Let's experiment by artificially constructing a series of lexemes, where each lexeme's meaning field contains the seme of loneliness.

⁹ The leading seme of a verse is the seme representing the psychological state that the poem suggests. Sometimes to designate this psychological state, one can find an existing word in the language that names the emotion.

¹⁰ Pukhnachev, Yury. *Chislo i mysl': Chetyre izmereniya iskusstva* (Number and thought: four dimensions of art). Issue 4. Moscow: Znanie, 1981, pp. 101-102.

We compiled a tree of 39 words sharing a common seme. Though chosen through free association, the words follow a natural semantic progression.



Using words from this series, let's compose several quatrains, paying attention only to grammatical correctness, rhythm, and rhyme, without concern for the meaning of the phrases. Many such quatrains can be composed from this series. We constructed several and invite the reader to exercise on their own. The quatrain can be composed literally by poking at words at random with a finger.

*1. Age stands alone and undefended,
The distant twilight growing dim,
The autumn's circle unbefriended,
The rain, the Earth, and shadows grim.*

*2. A stranger's shadow, old and grey,
Moves through the darkness, undefined,
As withered songs of yesterday
Leave only silence, deaf and blind.*

*3. In autumn's circle, strangers meet
Where rain and sorrow interlace,*

*Their footsteps on the darkened street
Erase each other's fleeting trace.*

*4. The nomad darkness claims its sphere,
Through withered distance shadows glide,
While circles of the night draw near
And loneliness grows deep inside.*

*5. A rain of shadows, strange and deep,
Falls through the sphere of endless night,
Where circles of the darkness keep
Their shelterless nomadic flight.*

*6. Through spheres of shadows, strange and deep,
The rain of endless night descends,
While darkness in its circles keeps
The nomad flight that never ends.*

We are far from considering these quatrains poetry; they are predominantly awkward constructions, with the possible exception of a few of them. Yet each of them evokes a mood of sadness, with quatrains 2 and 3 evoking a particularly strong sad mood. This is not surprising: each word in them repeats the same sense of loneliness. The suggestion formula remains the same in all these verses; what differs is the degree of its realization. We will discuss this in more detail in Chapter 3.

The suggestion formula was most successfully created in the quatrains “about the strangers”. Notably, they demonstrate that logical connections in verse are not really important – we got the third quatrain by shaking up the words in the second quatrain and swapping the subject and object. We will even make a bold assumption: shamanic verse is shamanic verse precisely because it generally weakens logical connections between images, focusing on the third plane. This does not mean shamanic verse lacks logic – it has its own logic, the logic of semantic series, or, to look ahead, the logic of dreams.

Semantic Series and Incongruous Images

This reveals another property of semantic series: their ability to combine seemingly incongruous images in verse. As an example, let's consider the following poem by Mandelstam (1933):

*In needle-sharp plague goblets we
Drink strange obsessions of all causes,
With hooks touch measures, brief and free,
Like easy death that barely pauses.*

*And there where pick-up sticks now weave,
The child holds silence, still and steady,
Great Universe finds sweet reprieve
In small Eternity's soft cradle.*

We invite readers to try to determine for themselves the content of the suggestion formula implemented in this verse. We will only hint that “easy death” refers to instantaneous death, and that measures as slight as easy death are so ephemeral that they exist on the threshold between being and non-being.

Let's consider another example from O. Mandelstam's work – an excerpt from his creative translation of Petrarch's sonnet (1934). Compare two versions of one line's translation:

1. *My days flew by like a running doe...*

and

2. *My days flew by as if of deer
A scything run...*

The second version of the translation was done by O. Mandelstam. One needn't be a poetry expert to recognize that it is more vivid, powerful, and effective, even though Mandelstam's phrase stands, as they say, on its ears. “A scything run” – what is this? A run that scythes down deer? Or the run of deer being scythed down? And what is being scythed? And who wields the scythe? Reason stumbles on this phrase and begins cycling through all possible interpretations. The scything run of deer. The scythe that cuts the grass. Death with its scythe, cutting down deer. The scything motion of autumn rain... These images align into a series by virtue of being united by two semes – the seme of death, decay and the seme of swiftness, which in itself is included in the series of death (after all, the days have already flown by).¹¹

One of the quoted lines creates a quite powerful suggestion formula. Pukhnachev writes: “What is reading if not solving, interpreting, extracting the secret that remained behind the lines, beyond the words. 'Reading is above all co-creation,' wrote Tsvetaeva.¹² And one recalls theoretical judgments about how deeply montage images are perceived in film, conditioned precisely by the fact that 'montage pieces work as irritants, provoking associations; the viewer's emotions and reason are included in the creative process; the viewer creates an image guided by these precise directorial cues; this is the same image that was conceived and created by the author, but this image is simultaneously created by the viewer's own creative act' (according to Eisenstein).¹³

The suggestion formula may either develop further or serve as an intermediate step, evoking an emotional ornament in the reader. It is clear that no analysis can encompass all the richness of associations, since everyone has their own life experience. In other words, no analysis can definitively measure the power of suggestion in an image, line, or verse. The depth of verse is, therefore, infinite.

¹¹ “In fact, much of the understanding of certain kinds of poetry is based on this ability to find interpretations for grammatically unusual constructions – an activity which can be especially pleasurable”. Slobin, Dan I. *Psycholinguistics*. Berkeley: University of California Press, 1971, pp. 4-5.

¹² Tsvetaeva, Marina. “Svodnye tetradi I, 1921-1932.” In *Izbrannaya proza v dvukh tomakh 1917-1937* (“Collated notebooks I, 1921-1932.” In Selected prose in two volumes 1917-1937), vol. 1. Rossica Publishers, 1977, p. 238.

¹³ Pukhnachev, Yury. *Chislo i mysl': Chetyre izmereniya iskusstva* (Number and thought: four dimensions of art). Issue 4. Moscow: Znanie, 1981, p. 75.

But even at that rough level available to us, it is clear that the emotionally neutral line “My days flew by like a running doe” is not capable of evoking a deep series of associations colored by one seme of swiftness. The seme of death in the image of a running doe is not felt at all. Of course, it is there, but the probability of its realization is close to zero. The context of “My days flew by” turns out to be insufficient to reveal this seme in the image of a running doe.

Here we should pause and return to our awkward constructions of the quatrains. What we were doing in composing them was essentially creating a montage of word-elements, word-frames of some picture. And it's worth noting that cinematographers did something similar at the dawn of cinema. Indeed, they continue to do so today. Here's what Sergei Eisenstein, who devoted considerable time to developing the theory of montage, wrote:

The “Leftists” in matters of montage went to another extreme: while handling pieces of film, they discovered a certain property of montage which so impressed them that they could not shake off the impression for several years afterwards. *This property reveals that any two pieces of a film stuck together inevitably combine to create a new concept, a new quality born of that juxtaposition.*

<...>

In this case, each montage piece is not something unrelated, but becomes a *particular representation* of the general theme which in equal measure runs through all the shot-pieces.¹⁴

The juxtaposition of such particular details in a given montage construction produces the same *whole and general* which has given birth to each of the details, namely, the generalized *image* through which the author (and, after him, the spectator) relives the theme.¹⁵

Suppose we try to express what Eisenstein said in terms and concepts that we have introduced and used throughout this work. In that case, we get the following: all particular details are elements of one semantic series, and they are connected by relations of symmetry of repetition of the seme. The perception of all particular details leads to the repetition of their common seme (the Eisenstein's generalized image in which the viewer experiences the theme in question), that is, to the formation of a suggestion formula. Suggestion presupposes a deep emotional state of experiencing suggested reality. This was the method we used to construct our quatrains. We utilized particular details (words, in our case) from within a single semantic series.

How accurately can one define the suggestion formula? And how effectively can its meaning be conveyed?

This question does not promise a simple answer. However, we have seen that understanding the role and means of creating the suggestion formula enables us to construct verse-like quatrains. Perhaps the suggestion formula will be the tool with which it will be possible to build a rigid model of a poem?

¹⁴ The objects are united by containing a common seme, through which they form a semantic series that creates a suggestion formula.

¹⁵ Eisenstein, Sergei. “Montage in 1938”. <https://www.robertspahr.com/teaching/ela/montage1938.pdf>

Let's consider the famous five-line poem by Velimir Khlebnikov (1908-1909)¹⁶, over whose mystery probably every second philologist has pondered:

*Bo-beh-o-bi, sang the lips,
Veh-eh-o-mi, sang the glances,
Gzy-gzy-gzeh-o, sang the chain.
Thus on a canvas of some correspondences
Beyond extension lived the Face.*

Now we'll try to build a model explaining how this five-line poem was constructed.

The five-line poem is built on the repetition of the word “sang”. One of the possible meanings of this word is extension, prolongation in time, vocality. The seme of extension is emphasized and reinforced by the prolonged vowel combinations – o-eh-o-bi, eh-eh-o-mi, as well as y-y-eh-o. The sound “b” in the word “bo-beh-o-bi” corresponds to the “b” of the word “lips”¹⁷. The word “bo-beh-o-bi” resembles a drum roll. The sound “v” of the word “veh-eh-o-mi” corresponds to the sound “v” of the word “glances”¹⁸. “Gz” of the word “gzy-gzy-gzeh-o” corresponds to “tz” of the word “chain”¹⁹. The word “veh-eh-o-mi” resembles the prolonged thin sound of a flute. The word “gzy-gzy-gzeh-o” resembles the sound of a plucked string. And in the last two lines of the five-line poem, precisely the words “extension” and “correspondence” appear.

It remains to add that correspondence can exist only in space or time and both Space and Time have a common seme – the seme of extension. Canvas on which the Face lived is also stretched, thus spatial extension is the paramount quality of the verse.

If we are saying that the suggestion formula of the verse is extension, why then “Beyond extension lived the face”? Here, another pattern of verse as a genre is revealed: not every word in verse has meaning. The word “beyond” has no meaning at all in this line. Only the seme of extension is important. Hence, the word “extension”. The semantic series of extension renders the word “beyond” meaningless.

Let us note (in parentheses) that a semantic series may include words related to its identifier through semes indirectly inherent in them. Words may not be used in their a priori sense, but they must either contain a symmetric seme or participate in a grammatical construction symmetric to the dominant semantic series. Such words can include words-indicators of place and time and, apparently, parts of speech – negations and negative particles. The connection can be as freely associative as possible. The most sophisticated example of a semantic series that we managed to find is contained in Andrey Bely's well-known poem (the 1900s), from which we will quote only the first quatrain:

Stormless tsar! As of old, in azure currents loom;

¹⁶ Translators' note. In fact, this poem has seven lines (<https://allpoetry.com/Bo-beh-o-bi-Sang-The-Lips>). It remains unclear whether Arkady Burshtein used some censored Soviet edition or some other source. In any case, this circumstance does not compromise his analytical method.

¹⁷ Translators' note. Russian: “guby” – губы.

¹⁸ Translators' note. Russian: “vzory” – взоры.

¹⁹ Translators' note. Russian: “tsep” – цепь.

*In azure, storm's fury and wind's fury soars,
Soars, sweeps and whirls through leaden dust's dark room,
Drives forth, drives back; and again sweeps and roars...*

Here is what V. Etkind writes:

"... In just the first stanza – all these chains of words convey gusts of stormy wind, 'storm currents'.

... The sonority of the word acquires great meaning, especially the vowel sound 'u', which is picked up by neighboring words... Unexpectedly it turns out that the words 'stormless' and 'azure', opposite in meaning to the word 'storm', become close to it thanks to their sound, and this sound proves to be more important than meaning".²⁰

Both words "azure" and "stormless" belong to the semantic series of storm, where in "stormless" the suffix "less" is effectively ignored. That is somewhat similar to what happens in Khlebnikov's five-line poem, when the word "beyond" is not perceived.²¹

Now that we comprehend why Khlebnikov uses almost every letter in his word formations and almost every word across all five lines of his verse, and we understand the suggestion formula within the poem and the structure into which the poet has cast it, we can attempt to construct a poem following the same model, while considering the criteria outlined above. We recognize, of course, that our algorithmic model is just one of many possibilities. We will use a different suggestion formula, while following an algorithm analogous to Khlebnikov's (though his may be just one of many possible approaches). We will take "tension" as the seme for our suggestion formula. Our task is to construct a series of images that repeat this seme.

*To contract – muscles froze.
To sharpen – bones froze.
To harden – flesh froze.
Through the firmament of doors with steely force
The petrified hand passed.*

Each of the composed lines repeats the seme of tension. Now we must encode the first word of each line to achieve three aims: 1) the sound should emphasize the tension in the line's content, 2) all sounds should associate with words from the semantic series of tension, and 3) the consonant sounds in our new word formations should correspond to specific words within each line. One of the possible solutions:

*Mutracai! – muscles froze.
Rashebo! – bones froze.*

²⁰ Etkind, Efim. *Razgovor o stikhakh* (Conversation about verses). Moscow: Detskaya literatura, 1970, p. 54. In our model, in connection with the montage (inertial) nature of perception, we can speak about temporal (by inertia, for the duration of perceiving a given work) fixing of a seme to a sound, with the selection of sounds possibly not being arbitrary but historically conditioned.

²¹ Perhaps this phenomenon is somehow connected with relationships of inversion symmetry? By the way, non-perception of "outside" is analogous to non-perception of "not" in formulas of hypnosis and self-suggestion.

*Shirandai! – flesh froze.
Through the firmament of doors with steely force
The petrified hand passed.*

The “karate” coloring of this five-line poem arose unintentionally. The first requirement is fulfilled by stressing the final syllable of each composed word: the stressed endings -ai and -e emphasize tension and suggest the swift movement that such muscular tension would produce.

In “mutracai”, the initial “mu” corresponds to “muscles”.

“Trac” – the root of the word “contract” – remained unchanged.

“Bo” of the word “rashebo” corresponds to “bo” in the word “bones”.

“Rashebo” is composed of letters from the word “sharp”.

“Sh” of the word “shirandai” corresponds to “sh” of the word “flesh”. All consonants of the word “shirandai” are borrowed from the word “hardens”.

Our proposed algorithmic model proves workable – while not identical to Khlebnikov's, it allows us to construct a similar five-line poem.

Again, these exercises are not intended as poetry. Rather, our constructions serve to reveal patterns in the creative process. And since we are discussing Velimir Khlebnikov's work, we should address another important property of semantic series.

We noted earlier that a word's sound in verse can outweigh its meaning. But can the reverse be true? Can a word's meaning outweigh its unusual sound? Indeed, it can. This property of semantic series underlies many of Khlebnikov's word formations, according to our model.

As long as the semantic series is maintained, individual words within that series can be distorted in any way, taking on the most unimaginable forms through unconventional word-formation models – yet they will not be perceived as alien. Let us now build a semantic series around the concept of transience.

moment	flicker
sand	star
mirage	night
butterfly	peace
woman	clay
ray	shards

The associative chain from word to word is clear. Interestingly, some words emerging in this series – peace, clay, shard, star – might seem alien to the sense of transience, suggesting instead a series of eternity. Yet in this context, each word speaks to transience, capturing the fleeting nature of existence.

Just as we constructed verses from the previous semantic series, let's construct several quatrains. But now we will add one more parameter to consider: each line should contain a neologism formed by using an unconventional word-formation pattern from its root²²:

1. *For sand – to clay-become,
For butterfly – to ray-become
For shard – to night-become
For woman – to star-become.*
2. *Moment like sand, sand – mirage
O woman of Stars!
Butterfly rays flicker,
The shards night-become.*

The row of quatrains can be continued, but even these two make it clear that the semantic series neutralizes to some extent the unfamiliar sound of words in its composition.

Through the concept of semantic series, we can explain the creative phenomenon in Yunna Morits's work. Though mixing high and low styles traditionally creates a comic effect, Morits combines them to create remarkably refined poetry (1957).

*Into a cup of blue flower
The evening light was gathering,
The door creaked, clouds
With sweet snow from a cone
Sprinkled thorn branches,
Slightly frozen.*

We propose an alternative understanding of the comic effect: rather than being caused by simply mixing words from different semantic series, it stems from violating the expectations that the inertia of thinking creates. Each semantic series establishes expectations about how the semantic composition will unfold in subsequent words. When a word from a different series appears, it breaks this symmetry, ruins the suggestion formula and provokes laughter, perhaps because it forces us to perceive the poem through our daytime logically-structured consciousness, while we become aware of the numerous logical inconsistencies that pervade the verse.²³

²² In modern linguistics, a productive model of word formation is understood as that method of forming new words from a given word stem which is widely used in contemporary language.

²³ Here are the lines:

*“God's little bird knows not
Neither care nor labor,
Does not busily weave
A long-lasting nest”*

And here is M. I. Tsvetaeva's commentary on them: “So what does it [God's little bird – A. B.] do then? And who then weaves the nest? And are there really such birds, except for the cuckoo, which isn't a little bird but a whole big bird? These verses were clearly written about a butterfly. But such is the power of poetic melody that no one, it seems, for more than a hundred years, thought to verify this little bird. And least of all – the then six-year-old – me.

But here we are getting ahead of ourselves. We will explore different forms of consciousness in Chapter 5.

If it's said so – then so. In verses – that's how it is". (Cited from: Tsvetaeva, Marina. *Sochineniya v dvukh tomakh* (Works in two volumes). Vol. 2. Moscow: Khudozhestvennaya literatura, 1980, p. 346.)

Chapter 3

SUGGESTION FORMULA

Previously, we established that the suggestion formula emerges where there are repetition, rhythm, and semantic series, and cited S. M. Eisenstein's idea that the cinematic frame is a natural stimulus for the brain.

In our model, the repetition of the same seme leads to resonance phenomena in the brain (like a frame, the seme stimulates neural centers); it is precisely these resonance phenomena that underlie our ability to enjoy works of art.

Research conducted at the Bekhterev Institute of Neurophysiology²⁴ showed that the same brain cell is activated when stimulated by a seme, sound, and image. If we recall that the brain communicates with the body in the language of electrical impulses, and that the activation of one nerve center changes the frequency of oscillations of electrical impulses generated by the human brain, then the assumption about resonance phenomena does not seem too improbable. Incidentally, the familiar phenomenon of “frisson” or “aesthetic chills”, which we experience when perceiving a remarkable work of art, also points to resonance.

In Chapter 2, we tried to show how semantic series form the suggestion formula. As for the sonic aspect of verse, it is known that vowel sounds are carriers of emotions. If the seme of the suggestion formula is the seme of emotion (and this is almost always the case in verse), then vowels and consonants could well work toward the suggestion formula, as can meter, which is used in sound writing. Note that sound and meter can still play only a secondary role in poetry. This is proven by the existence of literary parody, where sometimes both meter and sound structure of the original are preserved (for example, in Yu. Levitansky's parodies), but the parodist destroys the suggestion formula of the original.

It was probably for the same reason that the Futurists failed to achieve their goal. Remember Alexey Kruchenykh, whose poems today are rarely referred to without irony as *zaum*²⁵, translational poetry. This dismissive view misses his intent – Kruchenykh was deliberately attempting to create *zaum*, poetry that would transcend rational meaning. Through sonorous combinations, he attempted to bypass reason and speak directly to the emotional centers of the subconscious, which remain beyond rational control. However, what is achievable in music seems beyond poetry's reach today (we emphasize *today*, as this limitation seems to be relevant to our time). There are grounds to believe that this was not always so. We will return to this discussion in Chapter 7, where we consider how different art forms employ different means while sharing a common goal: the creation of a suggestion formula.²⁶

Let's assume that the emotions carried by meter, stressed vowel sounds, and semantic repetition enter into symmetrical relationships. Does this affect the suggestion formula? Consider two different translations of the same poem, each using different meter and different

²⁴ Translators' note. For reading about Natalia Bechtereva's research see her *The Neurophysiological aspects of human mental activity*. New York: Oxford University Press, 1978.

²⁵ Translators' note. Russian: *зѳумь*; literally “beyond mind”.

²⁶ Naturally, the creation of suggestion formula is not the only purpose of arts.

words while conveying the same content. Take, for instance, Tyutchev's (1826)²⁷ and Lermontov's (1841)²⁸ translations of Heine's most famous poem "Ein Fichtenbaum steht einsam"²⁹ (The Pine Tree, 1822-1823) – they are of vastly different quality, where Lermontov's "На севере диком стоит одиноко" ("In the wild North a pine tree stands alone") achieved the status of a world lyric masterpiece. Would the suggestion formula remain the same in such translations? Suppose two translators understood the meaning of the translated text in the same way. In that case, the suggestion formulas in the translations (as in the case with Lermontov and Tyutchev) will most likely coincide. But the degree of realization of the suggestion formula in the verse – surely will not.

In Chapter 2, we saw how the same suggestion formula can have different realizations (recall our quatrains constructed from words sharing the seme of loneliness). Now, we will examine what conditions lead to the most effective realization of the suggestion formula.

1. We presume that one key condition for the effective realization of the suggestion formula appears to be its concealment – the formula must remain encoded to be perceived subconsciously. Consider hypnosis: it is well known that a person consciously resisting hypnosis is difficult to hypnotize.³⁰ However, when there is no awareness of suggestion taking place, resistance is absent. This concealment of the suggestion formula is made possible by circumventing the rational thinking which tends to fail recognizing semantic connections between words belonging to the same semantic series. Take the example from Chapter 2. Would our mind find any logical connection between the words "loneliness", "circle", and "wind"? Very unlikely. Yet when combined in phrases ("lonely wind in circles", "circles of loneliness of winds", "circles of winds and loneliness"), they create a powerful mood precisely because they belong to the same semantic series – the series of loneliness. By contrast, direct repetition of the same words would only lead to semantic satiation, presumably because it decodes the suggestion formula, making it too obvious.

2. We know that the suggestion formula emerges where there is certain degree of repetition, symmetry, rhythm, and semantic series. For a seme to be suggested effectively, it must be repeated a certain number of times.

CONCLUSION: The effectiveness of the suggestion formula depends on the frequency with which the suggested seme appears in the text. If the seme appears too few times, the suggestion fails to take hold – the reader remains unmoved and unconvinced. This is understandable. However, if the seme appears too frequently, there is reason to believe the suggestion formula will be undermined – leaving the reader equally unmoved and unconvinced.

Marina Tsvetaeva believed that excessive repetition makes things appear ridiculous. This holds true, but only starting from a certain point. Beyond that point, what is excessively repeated loses its meaning entirely, dissolving into meaningless sounds. This can be easily demonstrated:

²⁷ <https://www.culture.ru/poems/46102/s-chuzhoi-storony>.

²⁸ <https://www.culture.ru/poems/37198/na-severe-dikom-stoit-odinoko>.

²⁹ https://de.wikisource.org/wiki/Ein_Fichtenbaum_steht_einsam.

³⁰ See, for example, B. Porshnev's article "Kontrsuggestiya i istoriya". In B. F. Porshnev and L. I. Antsiferova eds. *Istoriya i psikhologiya* ("Counter-suggestion and history." In History and psychology). Moscow: Nauka, 1971.

take any word and repeat it aloud – in a matter of moments, it becomes merely an abstract collection of sounds, stripped of meaning for consciousness. Once you stop repeating it, the meaning gradually returns. This phenomenon, known to psychologists and linguists as “semantic satiation”, has been the subject of scientific study. Some researchers, notably Osgood and Hull, have approached it through stimulus-response theory. Osgood suggests that if word meaning is understood as a response to verbal stimulus, this response naturally diminishes with repeated stimulus presentation. Hull's learning theory elaborates on this, proposing that “reactive inhibition accumulates upon repeated pairings of stimulus and response, bringing about temporary inhibition of response”. Following this theoretical framework, if we view word meaning as a response either to the word's sonority or to the act of pronunciation itself, Hull's theory would predict that repeated presentation of the word would temporarily inhibit such meaning-response.³¹

We will not address here the legitimacy of how behaviorists like Osgood and Hull identify word meaning with reaction to a word. Even if, as opponents of the reactive theory argue, there is some intermediary between word and reaction – namely, the word's meaning – this does not significantly alter our understanding of semantic satiation. After all, if a phenomenon evokes no reaction in us whatsoever, it effectively does not exist for us – we cannot perceive it. The only change to Hull's scheme would be that instead of: “word → reaction → inhibition → absence of reaction” we would have: “word → meaning → reaction → inhibition → absence of reaction → absence of meaning”.

To return to the concept of resonance in connection to neurophysiological stimuli, it could be appropriate to note that in physics, resonance can lead to the destruction of resonating bodies. Might we be observing in inhibition and absence of reaction some kind of protective mechanism of the organism?

We can conclude, therefore, that a poem's maximum impact on the reader depends on achieving an optimal number of some repetitions within one semantic series. But can we determine the boundaries of such repetition? In principle, yes – if we resolve several key problems, including those outlined below.

1. Two fundamental considerations:

- a) Suggestion intensity varies with text length. The same number of some repetitions will produce different effects in a 500-word text versus a 1000-word text.
- b) Different words carry varying degrees of saturation with a given seme.

To address this, we propose introducing two terms: “text saturation with seme” and “word saturation with seme”. We can approximately assume that a word's saturation with a seme depends on how much of the area of that word's meaning field that seme occupies. Thus, determining optimal text saturation with a given seme means establishing optimal boundaries for seme repetition. While expert evaluation can measure how saturated individual words are

³¹ Slobin, D. *Psycholinguistics*, p. 93. Slobin refers here to Charles Osgood's “Psycholinguistics.” In S. Koch (Ed.), *Psychology: A Study of a Science*. Vol. 6, McGraw-Hill, 1963, pp. 244-316.

with their constituent semes, we can measure more precisely the relative saturation of different words within a semantic series with their seme-identifier – and the method for doing so is known.

Between 1920s and 1950s, Soviet psychologists Alexander Luria and Olga Vinogradova conducted a series of experiments directly related to what we are discussing in this chapter.

The work of Luria and Vinogradova (1959) is especially interesting in that it seems to reveal levels of relatedness of meanings in semantic fields. Subjects were given electric shock upon the presentation of a given word in a series, and the generalization of vasomotor responses to other words was tested. It was found that subjects made an involuntary *defense* response (vasoconstriction of the blood vessels of both the finger and the forehead) to words close in meaning to the word on which they received shock, and that they made an involuntary orienting response (vasoconstriction in the finger and vasodilation in the forehead) to words more distantly related to the critical word. For example, if a subject was given a shock to the word *violin*, he made a similar defense reaction to such words as *violinist*, *bow*, *string*, *mandolin*, and others. He made an orienting response to names of stringless musical instruments, such as *accordion* and *drum*, and to other words connected with music, such as *sonata* and *concert*. In addition, of course, there were neutral words to which the subject made no autonomic response.

This experiment revealed not only the existence of complex semantic structures, but also that the subjects themselves were largely unconscious of such structures. While they responded consistently on an involuntary response basis, when interviewed after the experiment they were usually not aware of obvious semantic clusters of words to which they had responded.³²

The phenomenon described in the above experiment became known as “semantic generalization”. Clearly, all words that triggered reactions belonged to the same semantic series. Nalimov, in his book “Probabilistic Models of Language”, proposed a model of Bayesian inference (or Bayesian reading) which we mentioned earlier. In simplified form, this model suggests that each person associates an a priori meaning with any given word, which surfaces in consciousness whenever they encounter that word. If this a priori meaning doesn't fit the phrase's context, the next potential meaning becomes available, and so on until a suitable one is found.

Thus, all word meanings have a probabilistic character, and for each person, one could construct a probabilistic scale (in descending order) of all possible meanings for any given word. Nalimov's actual model is more sophisticated than this description suggests, as it accounts for the continuity of the field of word meanings.

We are interested, however, in a slightly different aspect of the model. The broader the portion of a word's meaning field activated in a phrase, the closer the corresponding meaning appears to be to the maximum values on the probabilistic scale. Words in a semantic series formed by a seme with high a priori probability for the electric shock-associated word should have evoked stronger protective reactions than words in series formed by semes whose a priori probability for “shocking” word is low (corresponding to a narrow part of the meaning field).

³² Slobin, D. *Psycholinguistics*, p. 85. Slobin refers to Luria, A. R., & Vinogradova, O. S. “An Objective Investigation of the Dynamics of Semantic Systems.” *British Journal of Psychology*, 1959, 50:89-105.

Yet, we defined word saturation with a given seme to be directly proportional to the area occupied in the meaning field and thus to the a priori probability of that seme's realization for that word. Therefore, higher word saturation with a given seme should correlate with stronger protective reactions to words in the corresponding semantic series – exactly what the Soviet psychologists observed in their experiment.

For example, in the meaning field of “violin”, the semantic quanta combination “string musical instrument” should occupy a larger area than “musical instrument”, which in turn occupies more than “musical performance” or simply “music”.

Charles E. Osgood believes that the phenomenon of semantic generalization confirms the reactive theory of meaning. Suppose a series of different stimuli (for example, words) causes the same reaction (for instance, meaning). In that case, these stimuli are equivalent, and the reaction caused by one of these words extends to other words through internal mediated reactions, the types of which Osgood described.

Dan Slobin, criticizing supporters of reactive theories of word meaning (including Osgood), argues that studies of semantic generalization cannot explain the fact that different words have different meanings:

In the Luria and Vinogradova experiment, for example, a response conditioned to the word *violin* generalized to such words as *bow*, *string*, *violinist*, and *mandolin*. Following Osgood's argument, one would have to claim that these words are all synonyms.³³

Assessment of meaning's reactive nature lies outside the scope of this work, but for objectivity's sake we must note that Slobin's remark seems peculiar. The words “bow”, “string”, “violinist”, “mandolin” do indeed share a common seme. Different words have different maximum-probability meanings, while other meanings in different words may coincide. Evidently, we traditionally designate as synonyms those words that are close precisely in their maximum-probability a priori meanings.

Thus, to create an optimal suggestion formula, a text of given length should maintain optimal saturation with a given seme regardless of its constituent words. In other words, $Y(L) = F(\sum X(i))$, where Y represents the optimal saturation with a seme of the text of length L , X represents the word's saturation with seme, and i represents the word (image) of text.

Since text itself is a variable with length as its sole constant attribute, its constituent words must also be variables. However, Y remains constant for any given value of L . Each value of L must have its corresponding constant value Y – the optimal saturation of text of length L with given seme S .³⁴

2. Another important factor that must be taken into account is the reader's emotional state, which may either coincide with or contradict the suggested emotion. In this case, the inertia of

³³ Ibid.

³⁴ Y is constant for a given recipient at a given moment in time. In our limited model, we will consider Y a constant value not just at a given moment, but always.

thinking can alter the value of optimal text saturation with seme for a given recipient. Thus, even for a single recipient, the optimal text saturation with seme is not constant.

3. Let us suppose we have managed to measure the optimal saturation with seme of text of length L (though along the way, we will need to resolve another complex question: what constitutes a unit of text length? Clearly, a unit of text length is not a letter, not a sound, and probably not even a word). This can be done experimentally by taking as a model some poem in which the suggestion formula is close to the optimal.

Then, if we know the saturation of each word belonging to a certain semantic series with seme S , the identifier of the semantic series, we can compose such a combination of words belonging to the semantic series whose identifier is seme S , that $\sum X(i)$ would approximate $Y(L)$, where $Y(L)$ represents the optimal saturation with seme S of text of length L , which we composed from words belonging to the semantic series with identifier S .

Now, however, we encounter another difficulty. Consider the word combination “table of death”. Clearly, it is saturated with the seme of death. Now let us slightly modify this:

“Table of death of a porcupine” – V1

or

“Table of death of Ivan Fedorovich” – V2

or

“Table of your death” – V3

Variant V3 evokes a stronger emotion than V2 and V1. Variant V1 evokes almost no emotion. However, the saturation with the seme of death in the phrase “table of death” consists of $X(\text{table})$ and $X(\text{death})$. The saturation with the seme of death in variant V1 consists of $X(\text{table})$, $X(\text{death})$ and $X(\text{porcupine})$, where X represents the saturation of the word with the seme of death. Thus, the saturation value with the seme of death for variant V1, calculated according to our formula, exceeds that of the word combination “table of death”. Yet the length of V1 does not appear to exceed the length of “table of death” sufficiently to warrant such a significant increase in the value of Y for variant V1. Moreover, it is evident that the value $X(V1)$ is immeasurably less than the value $X(\text{table of death})$. We seem to have overlooked something here. Specifically, we may have failed to account for both the volume a word occupies in the text and, however slight it may seem, the difference in lengths between the two texts.

In V1 the maximum volume is occupied by the word “porcupine”, which has minimal saturation with the seme of death.

We will have to introduce the concept of volume coefficient $C(i)$, as well as the concept of length coefficient $CL(L)$.

However, we cannot dismiss another explanation: when the subject of action remains undefined, consciousness tends to identify it, by default as it were, with the personality of the perceiver (or even more broadly – with the perceiver's world). Thus, the “table of death” is

perceived as “Table of your death” or, more broadly still, “Table of death of the world”. Which of these two explanatory attempts comes closer to truth can be demonstrated only through computer-based experimental modeling of the word combination that takes into account the coefficient of word volume.

The development of volume coefficients is, in principle, feasible since the concept of “word volume in text” closely correlates with the traditional theory of sentence parts. This area of linguistics appears to have been researched in sufficient detail to solve our task. In any case, the formula now takes this form:

$$Y(L) = \sum X(i) C(i) CL(L),$$

where the problem of measuring the values of coefficients C and CL remains an open one.

4. The next problem we must solve to determine the boundaries of seme repetition (or, equivalently, text saturation with a given seme) and achieve effective realization of the suggestion formula concerns the role of associations. All associations arising in the perceiver’s mind must form semantic series whose identifiers maintain either repetition symmetry or inversion symmetry with the identifier of the poem's leading semantic series. Accounting for all possible associations a perceiver might form proves extremely difficult. Moreover, associative images can disrupt the rhythm and destroy the suggestion formula.

5. A fundamental question arises: does resonance occur invariably? In other words, will readers always perceive the work as its author does? The answer is no. Mere repetition cannot generate resonance; for resonance to emerge, the total quantity of suggested seme must be distributed throughout the work's space according to some harmonic law – gradually increasing to a local maximum, then falling to the locally maximum value of the inversely symmetric seme, then increasing again, and so on. This growth can occur in two ways, as illustrated in Fig. 1.

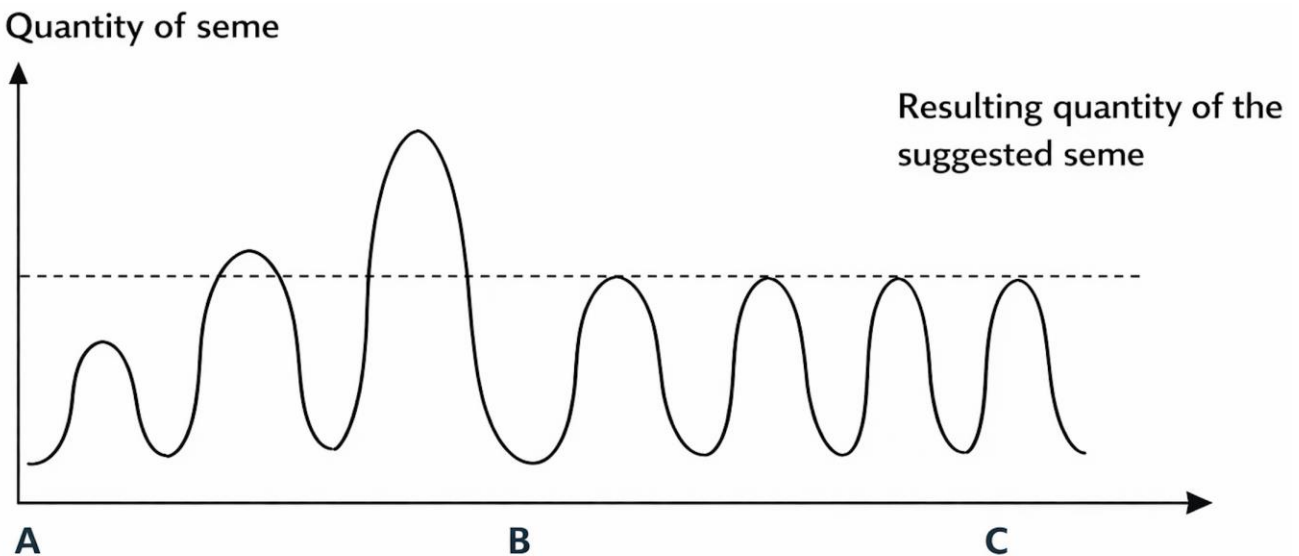


Figure 1. Distribution of seme in text space

Segments *AB* and *BC* correspond to two parts of text of equal length. Along segment *AB* we observe oscillation in some quantity within words with gradual increase, where the number of some repetitions per unit length remains constant. Along segment *BC* – the same quantity per word remains constant while the number of repetitions per unit length of text increases. The figure thus illustrates the well-known physical principles of amplitude and frequency modulation.

Thus, the proper distribution of some in text space induces a gradual oscillation of consciousness; this gradualness allows the process to accumulate momentum imperceptibly and, through inertia, increases the probability of selecting the required meaning from each word's semantic field. Meter maintains the proper rhythm of semantic oscillations. Otherwise, an ill-timed or quantitatively inappropriate portion of some would inhibit the induced process of suggestion (perception) or even destroy proper realization of the suggestion formula. For a work of art to achieve its effect, it must contain an optimal quantity of optimally oscillating leading some.

As a consequence of these considerations regarding the perception process, we arrive at the following requirement: proper realization of the suggestion formula demands the presence of inversely symmetric elements. Consequently, works where “better” “conflicts” with “good” are inevitably destined to fail. This requirement simply manifests the well-known dialectical law of unity and the struggle of opposites in this sphere of human activity.

6. Another factor influencing the realization of the suggestion formula, which we have not yet considered, is the following: words belonging to one semantic series can, when combined in a phrase, produce an image that does not belong to this series. Consider this example of verbal alchemy from Andrei Bely's poem (1903):

*In a crown of fire under the realm of boredom
Above time ascended
Frozen magician, folding hands,
Prophet of timeless spring.*

The semantic series present are: 1) crown, fire, realm, time, ascension, prophet, spring; 2) frozen magician, folding hands (yoga pose), boredom, and timelessness.

The identifiers of these series are ascension and immobility. Of particular interest is the line “Above time ascended”. This line is unique: both “above time” and “ascended” belong to the series of ascension, yet their combination creates a sensation of profound immobility.

Bely frequently employed paradoxes of such kind. In this case, the resulting image stands in inverse symmetry to its constituent words. We have seen that inverse symmetry can produce various unexpected effects. However, we cannot simply attribute this discovered phenomenon to inverse symmetry and its paradoxes. We lack sufficient evidence to conclude that words cannot combine to form an image lacking symmetrical relations with existing images in the verse.

We have examined several conditions necessary for the effective realization of the suggestion formula. Undoubtedly, many more such conditions exist – potentially as significant as those we have identified in this chapter. All these conditions are processed instantaneously by some evaluative mechanism that enables us to assess and select appropriate words for any given line. When poets reject certain words, they do so because these words would destroy the formula of the verse being created – either because such words are saturated with the needed seme to a degree greater or lesser than required to fill the lacuna in the text's seme saturation.

This evaluative mechanism functions with varying degrees of effectiveness in different individuals. When we declare one poet more talented than another, we are essentially acknowledging that their word-selection mechanism operates with greater precision. Hence – the superior quality of their verses. This mechanism can be refined – which explains why poets can “grow”. Various factors affect the evaluative mechanism's operation, causing it to function differently at different times – thus we sometimes note that even accomplished poets temporarily lose their feeling for words.

DIGRESSION 1

Earlier we discussed how the suggestion formula can achieve ideal realization. If we accept the possibility of realizing the suggestion formula perfectly in a literary work, then any attempt to interpret such a work in another medium – theater, for instance – must fail. Any change in text saturation with seme (which is inevitable, as actors employ gestures, voice modulations, and other theatrical devices to influence viewers) will diminish the quality of the formula's realization. While theatrical interpretation might enhance the impact of a text with an imperfect suggestion formula, a text with ideal realization cannot be successfully transferred to stage. Is this perhaps why no staging of “Hamlet” has ever exhausted Shakespeare's text? Should we then abandon attempts at equivalent theatrical interpretation of dramatic masterpieces? No – for there is a subtle insight that the creators of Noh theater understood.

Noh plays represent masterpieces of Japanese literature. Their actors deliver text in monotonous, expressionless voices, swallowing syllables, effectively “killing” the text. Instead, they emphasize movement and dance, song and music. The actors wear masks that eliminate facial expression, yet each mask is saturated with its own seme. Thus, Noh theater actors achieve a powerful realization of the suggestion formula by different means. Having weakened suggestion in one aspect, they strengthen it through purely theatrical techniques. In our model, this represents the director's function – to identify optimal paths to realize the suggestion formula. (Indeed, the hypnotic, suggestive aspect of theatrical action in Noh theater is particularly pronounced, further enhanced by the Buddhist themes of Noh plays.)

DIGRESSION 2

If we determine the optimal saturation with seme of a text whose length is L , establish the volume coefficient $C(i)$ for each word, and determine each word's saturation with the same seme, can we construct an algorithm for machine versification?

In first approximation, perhaps yes. However, we cannot be confident in the quality of machine-generated output, since failure to satisfy even just conditions 4 and 6 (concerning side

associations and secondary seme saturation in images created by word combinations) could easily invalidate our already crude formula. These factors appear to be almost unpredictable. Moreover, we must remember that our six conditions for realizing the suggestion formula surely do not exhaust all criteria actually relevant to works of art.

At present, we can assert with certainty only this: solving the problem of machine versification appears impossible without developing a specialized dictionary containing information about all semes in each word's meaning field and that word's saturation levels for each seme. Creating such a dictionary presents an enormously labor-intensive task, with uncertain feasibility. This stems from two factors: first, such a dictionary would become obsolete more rapidly than conventional explanatory dictionaries; second, and more fundamentally, any dictionary treats semes as discrete units, while in reality – a word's semantic meaning field is inherently continuous. How one might identify all semes within a word's meaning field remains unclear.³⁵

In concluding this chapter, we must emphasize that nearly all questions raised here require dedicated investigation beyond our present scope. Examining these problems may prove valuable, particularly for machine versification and machine translation. Several concepts outlined in this chapter might benefit cyberneticists working in these areas. At minimum, we can now see how to teach computers to write (admittedly poor) poems using the suggestion formula. Employing the principle of semantic series (composing poems from words in symmetric semantic series) should resolve the primary challenge in mechanizing versification – the problem of combinability. All words within a semantic series naturally combine, each containing the common seme from the outset.³⁶

³⁵ “We know the word – a code designation of a semantic field and some unclear description of this field, given through other, similar code designations. All the diversity of semantic content remains hidden – it is revealed only through the potential possibility of constructing an unlimited set of phrases. The continuous semantic content standing behind the discrete symbols of language proves to be fundamentally immeasurable. Only individual fragments are accessible to us, arising in our interpretation of certain phrases”. Nalimov V. *Veroyatnostnaya model yazyka*, pp. 218-219.

³⁶ Following Popper, we propose the following model for extracting meaning from word combinations. Let there be a set of words (X_1, X_2, \dots, X_n), and each word has a corresponding meaning field with the same name. When we use a word in a phrase, the fields X_1, X_2, \dots, X_n overlap, and that segment which is common to all fields, conditionally speaking, will be extracted in each word. If for some word no common seme (segment of meaning field) is found, then this word does not combine with the other word fields of the phrase. Since in our case the common seme is present in words of a given semantic series by condition, the problem of word compatibility in a phrase is removed.

Chapter 4

VERSE SPACE

In previous chapters, we proposed that resonance phenomena in the brain underlie our ability to enjoy works of art. In Chapter 2, we attempted to demonstrate that in poetic works of art, the imagistic space is structured into strict symmetrical series, where the symmetry connecting these series can be either symmetry of repetition or inversion symmetry. More complex forms of symmetry than those we have seen may exist in the imagistic space of verse.

The “resonance” hypothesis of art perception explains the presence of symmetrical relationships. However, resonance cannot exist outside symmetrical relationships. It follows that if a work of art aims to create a resonant state, then its artistic space's orderliness (symmetrization) must achieve a high degree.

It should be noted that many, if not consciously recognized, at least sensed this internal orderliness of artistic space.

*Go, seek another slave!
But over poets your power is weak,
That he should criminally mix his sacred rights
With mud because of you
What makes his words touch hearts?
Is it thanks to just a loud phrase?
His soul's harmony with the world –
That is the essence of this secret power.
When nature spins life's thread
And time's spindle turns,
It cares not whether the thread runs smooth
Or the fiber has snags.
Who gives, while straightening the spinning wheel,
Both momentum and smoothness to the wheel?
Who brings into the wretched noise of discord
The harmony and beauty of a chord?
Who aligns the storm with turmoil of feelings?
Who twins sadness with sunset by the river?
By whose will does the flowering plant
Drop petals on lovers?
Who crowns heroic deeds? Who protects
The gods beneath Olympian groves?
What is this? Human might,
Openly manifest in the poet.*

Goethe, “Faust”

Goethe clearly contrasts the “wretched noise of discord” with a chord – ordered noise.³⁷ Presumably, the orderliness of artistic space must have been recognized in the period when art first emerged – the period reflected in ancient myths.

³⁷ Translators’ note. This is an English translation by Claude Al of a Russian translation by B. Pasternak, quoted by the author from Goethe J. W. *Sobranie sochineniy v desyati tomakh* (Collected works in ten volumes). Vol. 2. Moscow: Khudozhestvennaya literatura, 1976, p. 12. Below is another English translation from the original German by Bayard Taylor, found at <https://www.gutenberg.org/files/14591/14591-h/14591-h.htm#>. It preserves the juxtaposition – just the different words are chosen: “discordant tones” – “consonance”:

Go, find yourself a more obedient slave!
What! shall the Poet that which Nature gave,
The highest right, supreme Humanity,
Forfeit so wantonly, to swell your treasure?
Whence o’er the heart his empire free?
The elements of Life how conquers he?
Is’t not his heart’s accord, urged outward far and dim,
To wind the world in unison with him?
When on the spindle, spun to endless distance,
By Nature’s listless hand the thread is twirled,
And the discordant tones of all existence
In sullen jangle are together hurled,
Who, then, the changeless orders of creation
Divides, and kindles into rhythmic dance?
Who brings the One to join the general ordination,
Where it may throb in grandest consonance?
Who bids the storm to passion stir the bosom?
In brooding souls the sunset burn above?
Who scatters every fairest April blossom
Along the shining path of Love?
Who braids the noteless leaves to crowns, requiting
Desert with fame, in Action’s every field?
Who makes Olympus sure, the Gods uniting?
The might of Man, as in the Bard revealed.

Here is the original German text, found at <https://www.gutenberg.org/cache/epub/21000/pg21000-images.html>:

Geh hin und such dir einen andern Knecht!
Der Dichter sollte wohl das höchste Recht,
Das Menschenrecht, das ihm Natur vergönnt,
Um deinetwillen freventlich verscherzen!
Wodurch bewegt er alle Herzen?
Wodurch besiegt er jedes Element?
Ist es der Einklang nicht? der aus dem Busen dringt,
Und in sein Herz die Welt zurücke schlingt.
Wenn die Natur des Fadens ew’ge Länge,
Gleichgültig drehend, auf die Spindel zwingt,
Wenn aller Wesen unharmon’sche Menge
Verdrießlich durch einander klingt;
Wer theilt die fließend immer gleiche Reihe
Belebend ab, daß sie sich rythmisch regt?
Wer ruft das Einzelne zur allgemeinen Weihe?

Here is what A. F. Losev writes about this: “Everything stable, everything formed and ordered, everything structural and organized was perceived by the Greeks as coming either directly from Apollo or established by him, depending directly on him”.³⁸

Thus, the formedness and structuredness of artistic space was felt so strongly that it was perceived as the source of order in the world generally. One might suppose that, for instance, the space of verse must have its own specific geometry, with its own theorems, axioms, etc. Naturally, we are not attempting to develop a geometry of verse space for the simple reason that we still poorly understand this space – we know almost nothing about it. But we will try to demonstrate the existence of a geometry of verse's imagistic space.

Wo es in herrlichen Accorden schlägt,
Wer läßt den Sturm zu Leidenschaften wüthen?
Das Abendroth im ernsten Sinne glühn?
Wer schüttet alle schönen Frühlingsblüten
Auf der Geliebten Pfade hin?
Wer flicht die unbedeutend grünen Blätter
Zum Ehrenkranz Verdiensten jeder Art?
Wer sichert den Olymp? vereinet Götter?
Des Menschen Kraft im Dichter offenbart.

Too keep the fun going, another AI-generated English translation of the original gives this:

Go and find yourself another servant!
Should the poet frivolously squander
The highest right, the human right,
That Nature grants him, all for your sake?
How does he move all hearts?
How does he conquer every element?
Is it not the harmony that flows from his breast,
And draws the world back into his heart?
When Nature, indifferently turning,
Forces the eternal thread upon the spindle,
When the discordant multitude of beings
Jangles unpleasantly through one another;
Who divides the ever-flowing uniform series
Animating it, so that it stirs rhythmically?
Who summons the individual to universal consecration,
Where it strikes in glorious harmonies?
Who lets the storm rage into passions?
The sunset glow with solemn meaning?
Who scatters all the beautiful spring blossoms
Along the beloved's paths?
Who weaves the insignificant green leaves
Into a wreath of honor for merits of every kind?
Who secures Olympus? unites the gods?
The human power revealed in the poet.

³⁸ Losev, Alexey. *Antichnaya mifologiya v eyo istoricheskoy razvitiy* (Ancient mythology in its historical development). Moscow: Gosudarstvennyy uchebno-pedagogicheskiy institut, 1957, p. 430.

Since we aim only to demonstrate rather than fully investigate the problem, we will limit ourselves to analyzing a very short text – two lines by Marina Tsvetaeva (1920):

*Love, love: both in convulsions and in coffin
I'll grow alert, be charmed, confused, dash forth...*

If we identify the semantic series of words here, the following groups emerge:

1. love, be charmed, confused
2. grow alert, dash forth
3. convulsions, coffin

Is it not true that the first group of words evokes the image of a coquettish schoolgirl and seems taken from a cheap romance? So let us call it the “schoolgirl series”. The second group of words, saturated with indomitable movement, evokes the image of a steed full of distrust and energy. Let us call it the “steed series”. The third group of words is the death series.

The “schoolgirl series” is saturated with the seme of artificiality, falseness. The “steed series” is inversely symmetric, breathing natural freedom and tension. And the death series is inversely symmetric to both the “steed series” and “schoolgirl series”, as it acts like an equation sign between these series, where the seme of artificiality and the seme of naturalness merge in death. But that is not all. Convulsions are a natural movement filled with the highest degree of tension. The highest degree of tension inevitably leads to the destruction of the one who strains, to death. The “death series” proves a natural continuation of the “steed series”.

But the “death series” also proves a natural continuation of the “schoolgirl series”, since the seme of falseness, artificiality, which intensely saturates the “schoolgirl series”, itself enters the “death series” (look at the word “falseness” surrounded by words from the “death series”: falseness, convulsions, coffin).

CONCLUSIONS

1. Three semantic series, each inversely symmetric to the other two, combine into a geometrically regular pattern (ornament), filling the entire imagistic (we consider only the imagistic) space of the verse.
2. There are poems in which the imagistic space is constrained by more than two semantic series.
3. We can hypothesize that each semantic series in such a poem is symmetric to all other series.

It may be worth noting that for the objects connected by point symmetry relationships, of which inversion symmetry is a special case, the concept of “congruence” exists. “A is congruent to B” means that the plane or space can be transformed in such a way that A and B will coincide, merge, become the same. For example, the right and left edges of this page are symmetric, opposite, but if the page is folded in half lengthwise, the left and right edges will coincide and become the same.

Applied to language, congruence appears to manifest in the following way: one can always find a hierarchical metalevel of language (in Bertrand Russell's sense of hierarchical levels) at which the seme-identifiers of inversely symmetric series cease to be perceived as opposed to each other and become the same.

Part Two

REALITY OF MYTH

Epigraph 1

"The Ancients knew that all creatures enter but for a short while into life, and must suddenly depart in death. Therefore they gave way to their impulses and did not check their natural propensities".

"They denied themselves nothing that could give pleasure to their bodies; consequently, as they were not seeking fame. but were following their own nature, they went smoothly on, never at variance with their inclinations. They did not seek for posthumous fame. They neither did anything criminal, and of glory and fame, rank and position, as well as of the span of their life they took no heed".

Liezi. From Chapter Three "Yang Zhu" <https://www.sacred-texts.com/tao/ycgp/ycgp03.htm>

*"He who knows how to live can walk abroad
Without fear of rhinoceros or tiger.
He will not be wounded in battle.
For in him rhinoceroses can find no place to thrust their horn,
Tigers no place to use their claws,
And weapons no place to pierce.
Why is this so?
Because he has no place for death to enter".*

From Laozi, *Tao Te Ching*, chapter 50. Translation by Gia-Fu Feng and Jane English.

<https://www.wussu.com/laotzu/laotzu50.html>

*The True men of old knew nothing of the love of life or of the hatred of death.
Entrance into life occasioned them no joy; the exit from it awakened no resistance. Composedly they went and came. They did not forget what their beginning had been, and they did not inquire into what their end would be. They accepted (their life) and rejoiced in it; they forgot (all fear of death), and returned (to their state before life).*

From Zhuangzi Chapter 6, *The Great and Most Honoured Master* (English translation: James Legge)

<https://www.taoistic.com/chuangtzu/chuangtzu-06.htm>

Epigraph 2

*The sea is harmony.
Shapely in debate, all elements cohere.
Rustling in the river's reeds,
musical designs inhere.*

*Imperturbable form is the outward sign
of nature's utter consonance.
Only our spectral liberty
imparts a sense of dissonance.*

*Whence this disharmony? How did it arise?
In the general chorus, why this solo refrain?
Why do our souls not sing like the sea*

and why must the thinking reed complain?

<...>

Fyodor Tyutchev "Pevuchest' est' v morskikh volnakh", 1865 (*Est in arundineis modulatio musica ripis [Lat.]*) The Complete Poems of Tyutchev. In An English Translation by Frank Jude, p. 192.

<http://www.pereplet.ru/moshkow/LITRA/TUTCHEW/english.html>

Epigraph 3

Incantation to summon twilight

With ringing sting –

Into clay of honey cup.

No drinking moisture

For Valhalla's daughters,

Clanking with womb

Of water, cold and crimson

In stone chambers

Gods grow mute, and their age

Has passed.

The incantation for summoning twilight was constructed by the authors using the method of semantic series. Each word in it contains the seme of twilight, indistinguishable without special analysis.

Chapter 5

REALITY OF MYTH

Now it is time to state that, according to our model, symmetrical relationships structure not only artistic space but consciousness itself.

Moreover, it appears that this property emerged in human consciousness during humanity's earliest stages when humans were just learning to think and had not yet grasped causal relationships. This property belongs more to the subconscious than to reason. To explain what we mean, we must examine how the mechanism of associations has been investigated. Though Aristotle developed what remains the best classification of associations to date (albeit incomplete), the subject has been studied extensively since his time. There is a vast body of literature on associations, but we are primarily interested in associative experiments.

The first to conduct an associative experiment was Sir Francis Galton, a renowned English scientist and Charles Darwin's cousin. As Dan Slobin summarizes,

He wrote each of 75 different words on a separate card and filed the cards away for several days. Then he looked at the cards one at a time. He timed himself with a stop-watch, starting at the moment the word caught his eye and stopping it as soon as the word had suggested two different ideas. He recorded these ideas as he went through the list but refused to print them. "They lay bare", he commented, "the foundations of a man's thoughts with a curious distinctness, and exhibit his mental anatomy with more vividness and truth than he would probably care to publish to the world."³⁹

Subsequently, numerous psychologists and psychiatrists have conducted associative experiments, particularly to investigate the laws of thinking. While vast literature exists on verbal association research, we will focus on psychologist James Deese's conclusions from his 1965 book "The Structure of Associations in Language and Thought".

Deese's insights into the cognitive operations that appear to govern associative mechanisms are of particular significance. Deese maintains that grouping and contrast constitute the fundamental relationships between words. He states (quoted from Slobin):

The data on associative distributions suggest that the two fundamental operations for sorting out meaningful – that is, logical and syntactical relations among words – are contrast and grouping.⁴⁰

From this, Slobin concludes that polar contrast represents a universal linguistic concept. Regarding grouping, its existence is compellingly demonstrated by the phenomenon of semantic generalization, which we examined in Chapter 3.

You can see how Deese's operations align with concepts we discussed earlier: his "grouping" corresponds to our relationships of symmetrical repetition, while his "contrast" manifests as relationships of inversion symmetry. Moreover, Deese's word groups parallel the semantic

³⁹ Slobin, *Psycholinguistics*, p. 78.

⁴⁰ *Ibid.*, p. 83.

series we have identified in literary texts – the same series that Luria and Vinogradova discovered through semantic generalization.

It is appropriate to recall that any literary work is, first and foremost, a result of associations. Since the basic operations used by the associative mechanism are operations of grouping and contrast, this results in the symmetrization of the space in an artwork. V. Nalimov believes that moments of creative inspiration arise when thinking transcends logical boundaries.⁴¹ J. Hadamard wrote: “every mental work and especially the work of discovery implies the cooperation of the unconscious”.⁴²

It is no coincidence that symmetry manifests most clearly in shamanic verses – verses where logical analysis is almost impossible and which speak not so much to reason as through reason to the subconscious (or as Hadamard would term it, the unconscious). Symmetry also manifests remarkably clearly in the ideological sphere. Consider the oppositions that have permeated our ideology since time immemorial – such fundamental pairs as “us-them”, “friend-enemy”, “good-evil”. What are these if not manifestations of symmetrical relationships? Similarly, is not dualism, which has penetrated the vast majority of known religions, another manifestation of such symmetry? We see this pattern extends even to children's fairy tales with their stark division of characters into good and evil. This division reflects the inversion symmetry of life and death and, by extension, the plots of cosmogonic myths that emerged in prehistoric times.

Jung, however, succeeded in identifying ancient mythological motifs in the dreams of modern people and showing the similarity between paranoid delusions, ancient cosmogonies, and eschatological prophecies.⁴³ “Where do these archetypes – these ancient universal human images – come from?” asks V. Nalimov.⁴⁴ Might the answer to this question lie in studies of resonance phenomena in the brain and the symmetrization of thinking?

The creation of myths and the birth of gods arose from consciousness's fundamental ability to group worldly phenomena into semantic series. Then the seme-identifier would separate and become personified, acquiring qualities (attributes) from its “parent” semantic series. The personification of a seme marked the birth of a new god, while the god's acquisition of attributes marked the birth of a new myth associated with that god.

It probably could be presumed that the content of the seme-identifier of any series participating in the process of “god-birth” must be an emotion, a psychological state of humans during the epoch of “god-birth”.⁴⁵ Therefore, all gods “participated” in human life and were connected to humans. The human of the “god-birth” epoch knew nothing of causal relationships, did not try to explain the world logically. The world existed in harmony with

⁴¹ Nalimov, V. *Veroyatnostnaya model' yazyka*, p. 224.

⁴² Hadamard, J. *An Essay on the Psychology of Invention in the Mathematical Field*. Garden City: Dover Publication, 1954, p. 112.

⁴³ Jung, Carl. *Symbols of Transformation* (Collected Works of C. G. Jung Vol.5). Princeton University Press, 1977.

⁴⁴ Nalimov, V. *Veroyatnostnaya model' yazyka*, p. 252.

⁴⁵ If a human of the Mousterian period saw, say, some animal, it was immediately placed in their representation among other phenomena of the surrounding world that evoked the same or similar psychological state (i.e., a semantic series emerged).

human emotions, where each new phenomenon found its place in a corresponding series according to the emotion it evoked. There was no need to explain it – the explanation inhered within the semantic series itself. Logical filters for processing and evaluating information did not yet exist. However, the ability to structure the imagistic space of the world (or more precisely, the space of representations about the world) into symmetrical semantic series, where all elements were equal, did exist. This is the same ability that led to creating the “third plane” in an artwork.

Thus, we have connected the concept of “shamanic verse” with a state of consciousness that differs fundamentally from our familiar logically structured consciousness – a state that appears to have been the only one known to humans of the mythological epoch, humans of the Mousterian period.

But why do we – living in an age where myth has been replaced by the theory of relativity – not engage our logical filters when perceiving works of art?

The daytime, logically structured state of consciousness is not the only state of consciousness available to us. In his already frequently mentioned book, V. Nalimov devotes almost an entire chapter to altered states of consciousness. Here is an incomplete list of altered states that Nalimov describes: mystical, hypnotic, dream-like, and narcotic. In all these states, our logical filters are turned off. It appears that this absence of logical filters was characteristic of mythological consciousness – that is, the consciousness of humans in the epoch of myth birth. What mechanisms activate one state of consciousness or another, we do not know. However, the mechanism for activating the hypnotic state of consciousness is clearly connected with repetition and symmetry – that is, those phenomena present at the “output” of mythological consciousness.

An artwork must contain a “switch” within itself that activates the hypnotic state of consciousness. From this follows a curious conclusion: the space of artistic images proves to be akin to the space of mythological consciousness's representations. This can be demonstrated by the schema shown in Fig. 2.

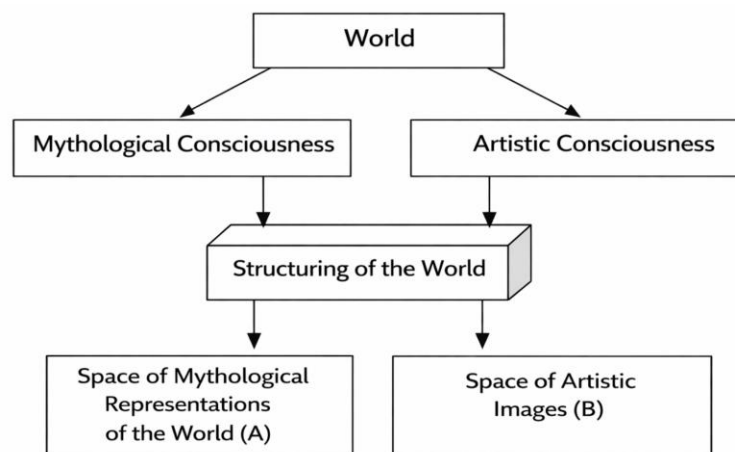


Figure 2. Schema of World Structuring by Mythological and Artistic Consciousness

In the above schema, the space of mythological representations of images and the space of artistic images, arising from the act of world perception, do not coincide but are structured identically. Spaces A and B may coincide in cases where the artist's consciousness is of mythological nature. *But if we acknowledge that the structuring of mythic space and artistic space is one and the same, should we not acknowledge that some traces of myth must be preserved in artwork?* Especially since art, generally speaking, developed from syncretic ritual action. If rudiments of myth have been preserved in works of art, then we must seek them, it seems, at the level of semantic series, at the level of the *third plane*. This follows from the function of the third plane – the suggestion of emotion – and from our earlier hypothesis that emotions determined the stratification of the world into semantic series as early as in the Mousterian period. Since logically structured consciousness does not recognize the existence of semantic series, the rudiments of myth existing at this level are most likely not recognized either. We will attempt to apply the analytical method presented in the first two chapters to identify mythologems dissolved in the text of literary works.

Before analyzing specific texts, we should address one more point: do we really know what myth is? After all, all myths that have reached us have been altered, perhaps beyond recognition. Yes, this is so. But V. Ya. Propp, in his study “Historical Roots of the Wondertale”,⁴⁶ showed the connection between the wonder tale and the complex of myths associated with initiation rites. So, we do have some reference point, and this is the wonder tale.

ANALYSIS 1

*An elongated and hard oval,
Black dress's bell-like flares.
Young grandmother! Who kissed
Your haughty lips?*

*Hands that in palace halls
Played Chopin's waltzes,
Along the sides of the icy face
Spiral curls like metal coils.*

*Dark, straight and demanding gaze,
A gaze ready for defense.
Young women do not gaze thus.
Young grandmother, who are you?*

*How many possibilities you carried away
And how many impossibilities.
Into the insatiable abyss of earth,
Twenty-year-old Polish woman.*

*The day was innocent, and the wind was fresh,
Dark stars went out.*

⁴⁶ Propp, Vladimir Ya. *Historical Roots of the Wondertale*. Transl. by Miriam Shrager, Sibelan Forrester and Russel Scott Valentino, Afterword by Sergei Nekliudov. Indiana University Press, 2025.

*Grandmother! This cruel rebellion
In my heart – is it not from you?*

This is M. Tsvetaeva's well-known poem "To Grandmother" (1914). The sensation it evokes is difficult to express in discrete linguistic terms – so vague and unfamiliar it is.

The same poet wrote lines at approximately the same time as the poem above (Requiem, 1913):

*"How many of them have fallen into this abyss
Gaping in the distance
The day will come when I too will vanish
From the surface of earth".*

These lines evoke a clear and definite sensation – sorrow and fear.

In "To Grandmother", we find both "the insatiable abyss of earth" and youth disappearing into this abyss – that is, the poems seem to be about essentially the same thing. Yet their suggestion formulas are distinctly different. Let us begin the analysis of "To Grandmother".

"An elongated and hard oval" – the hardness series. "Black dress's bell-like flares" – the hardness series, since the keyword – bell-shape – evokes association with metal. The dress is evidently starched – hardness, stiffness, unyieldingness. "Young grandmother" – inversion symmetry. It evokes a sense of impossibility – it is impossible to be young and be a grandmother (note that where *inversion symmetry* appears, not only *premonition of loss* but also *sense of impossibility* can arise). "Who kissed your haughty lips?" – the image is highly saturated with the seme of impossibility. A kiss of such haughty lips is impossible. But here too is present the seme of hardness – in the expression of haughty lips. More precisely, not hardness but inaccessibility.

Thus, we clarify: those images that we have already identified as belonging to the hardness series belong to the inaccessibility series (the inaccessibility series being part of the hardness series). So far, we have identified two series, whose identifiers are inaccessibility and impossibility. However, the seme "inaccessibility" itself turns out to be an element of the series with the identifier "impossibility" (it is impossible for a woman to be so inaccessible). Not vice versa, since "impossibility" is a more abstract seme. "Hands that in palace halls // Played Chopin's waltzes" – to play Chopin's waltzes in palace halls was an impossibility for Tsvetaeva (we know that she never became a musician, although in childhood she was predicted a great future as a pianist). This is impossible for us too, dear reader – to play *thus* and in *those* halls of *those* palaces.

"Along the sides of the icy face // Spiral curls like metal coils" – here again is the same hardness, inaccessibility, reducing to the impossibility series. The spiral, like the bell shape, leads back to the notion of chilly metal. But here, another seme emerges – the seme of cold purity. And emerges another seme connected with cold, purity, inaccessibility – sharpness. The spiral is sharp, and incidentally, so is the bell's edge.

“Dark, straight and demanding gaze, // A gaze ready for defense” – the gaze is dark because it is open (one can see the eyes are dark).

“Defense” and “gaze” gravitate toward sharpness and “inaccessibility”, “straight and demanding” – toward “hardness”. “Young women do not gaze thus” – impossibility, young women cannot gaze this way. “Young grandmother, who are you?” – women in Tsvetaeva's poetry are always very sinful, passionate, earthly – very feminine. But with the grandmother is associated the following complex of qualities: sharpness, inaccessibility, impossibility, cold, purity. All these qualities are completely unthinkable for a typical Tsvetaeva lyrical heroine.

The heroine of the poem is definitely not a woman. What kind of being is it? Tsvetaeva does not know, or rather, Tsvetaeva's reason does not know. But the subconscious suggests an answer: “How many possibilities you carried away, // And how many impossibilities.” – incidentally, here the word “impossibility” is exposed – the identifier of one of the poem's semantic series.

*Into the insatiable abyss of earth
Twenty-year-old Polish woman.*

This is the answer. *Death* is the world to which this being belongs. The grandmother's inherent qualities are instantly explained: cold, purity – the cold of the grave, purification through death.

Hardness, inaccessibility – the impassivity of the deceased, immunity to earthly passions. Sharpness – generally a seme of the death series: the point of a weapon bringing death, the piercing quality of grave cold. And all these qualities merge into one: the impossibility of being so hard, so impassive, so firm and inaccessible – for an earthly woman, a human; *impossible for the living to be – dead*.

“The day was innocent, and the wind was fresh.” It is clear why the day was innocent: day is light, light is purity, and purity – in that model of the world the verse presents – is death.

Thus, the day was innocent because it was the day of death. The wind's freshness stems from the same reason. The seme of freshness associates with the seme of cold, purity, and purification – therefore, with the death series. But here, an interesting cyclical pattern emerges: generally, the seme of freshness is connected with the seme of life. Suppose freshness becomes associated with the world of death in this model of the world. In that case, this means that life within death receives affirmation. Death's vitality is a different form of existence that alone proves to be life, and which grandmother represents in the analyzed verse.

“Dark stars went out” – this phrase can be interpreted thus: when the day of genuine pure existence dawns, the night of sin and life dissipates like smoke. Death comes as liberation from the chains of passion.

*Grandmother! This cruel rebellion
In my heart – is it not from you?*

Rebellion is an uprisal against the conventional. The conventional is – to live. The poet speaks of her connection to the world of death, of how a Visitor from another world left a particle of another being in the poet's heart. (Note that the word “cruel” is also from the death series.)

It may seem that such an interpretation of the word “rebellion” is contrived. However, here is what M. I. Tsvetaeva herself writes about her understanding of the word “rebellion” in her book “My Pushkin” (1937): “...how could Pushkin not be enchanted by Pugachev, he who had said and proclaimed:

*There is rapture in battle
And on the edge of the dark abyss,
And in the raging ocean,
Amid threatening waters and stormy darkness,
And in Arabian hurricane,
And in the breath of Plague!*

There is a phenomenon that gives all these phenomena at once. It is called – rebellion, in which we can count also blizzard, and ice-break, and earthquake, and fire, and so much more, not enumerated by Pushkin! and concluded by him in the twice-repeated:

*All, all that threatens with destruction,
For mortal heart conceals
Inexplicable delights –
Perhaps a pledge of immortality!
And blessed is one who amid turmoil
Could find and know them.*

Pushkin was denied such blessing. The December revolt was a pale reflex of Pugachev revolt. Senate Square was order and in the name of order, whereas Pushkin speaks of destruction for destruction's sake and its bliss”.⁴⁷

For Tsvetaeva, *rebellion* is to be “on the edge of the dark abyss”. The reader may not believe that Marina Tsvetaeva wrote a poem about the striving for the possibility of a living being to be dead simultaneously – this borders on pathology. Yes, it borders on it. And with Tsvetaeva, it apparently did border on it. Here is what she wrote in her book “The Living about the Living” about Cherubina de Gabriak:

“And the last thing I remember:

*O, is it fated that I should know
Love and death at thirteen!*

– magically and naturally interlocking with my own:

*You gave me childhood better than a fairy tale
And give me death – at seventeen!*

With the difference that she has *fated* (death), while I have – *give*”.⁴⁸

Mandelstam, with his intuition for semantic series, must have sensed this peculiarity of Tsvetaeva. This explains why, in the poem dedicated to Tsvetaeva (1916), he wrote about her:

⁴⁷ Tsvetaeva, Marina. *Sochineniya v dvukh tomakh*, vol. 2, p. 379.

⁴⁸ *Ibid.*, p. 309.

*Not believing in resurrection's miracle,
We walked in the cemetery.
You know, everywhere earth
Reminds me of those hills*

.....
.....

<...>

*From monastery slopes
A wide meadow runs away.
From Vladimir's expanses
I so did not want to go south.
But in this dark, wooden
And God-foolish settlement,
To stay here with this misty nun
Would mean trouble.*

.....

Commentary, we think, is unnecessary.

Let us sum up. A certain inhabitant of the world of the dead comes to the poet and transforms their nature. The consequence of transformation – an uncontrollable striving toward death, longing for the space of Hades. Significant in every respect is that the poet is connected to the Visitor by blood ties, hence initially ambivalent.

Do we know of any myth with a similar content? Yes, and this is a whole corpus of myths. Dead ancestors appeared to shamans of all known tribes and peoples and helped them travel through three worlds. All knowledge in mythology comes from the world of ancestors (the world of the dead).

Amusingly, if we look at the Christian narrative where a righteous person tells of the kingdom of God, after which the listener strives to get there, then our theme is clearly discernible within it as well.

Strictly speaking, the analysis is complete – we have identified the mythologeme.

ANALYSIS 2

(Mikhail Svetlov, "Grenada", 1926)

*1. We walked at pace,
We galloped in battles,
And the "Yablochko" song
We held in our teeth
Ah, this little song
Is still preserved
By young grass –
Steppe malachite.*

*2. But another song
About a distant land*

*My comrade carried
With him in the saddle.
He sang, gazing around
At native lands:
"Grenada, Grenada,
Grenada my own!"*

*3. He knew this song
By heart...
Where did the young man get
This Spanish sadness?
Answer, Aleksandrovsk,
And Kharkov, answer:
When did you begin
To sing in Spanish?*

*4. Tell me, Ukraine,
Is it not in this rye
That Taras Shevchenko's
Papakha lies?
Where then, comrade,
Did your song come from:
"Grenada, Grenada,
Grenada my own"?*

*5. He hesitates to answer,
The dreamy Ukrainian:
Brother! Grenada
I found in a book.
Beautiful name,
High honor –
Grenada province
In Spain exists!*

*6. I left my hut,
Went off to war,
To give the land in Grenada
To peasants there.
Farewell, my dear ones,
Farewell, my friends
"Grenada, Grenada,
Grenada my own!"*

*7. We galloped, dreaming
To grasp quickly
Grammar of battle –
Language of batteries.
The sunrise kept rising
And falling again*

*And the horse grew tired
Of galloping through steppes.*

*8. But the "Yablochko" song
Was played by the squadron
With bows of suffering
On violins of time.
Where then, comrade,
Is your song:
"Grenada, Grenada,
Grenada my own"?*

*9. The pierced body
Slid to the ground,
A comrade for the first time
Left his saddle.
I saw, over the corpse
The moon bent down,
And dead lips
Whispered "Grena...".*

*10. Yes, to a distant region,
To the expanse beyond the clouds
My comrade departed
And took his song.
Since then native lands
Have not heard:
"Grenada, Grenada,
Grenada my own!"*

*11. The unit did not notice
The loss of a fighter
And the "Yablochko" song
Sang to the end.
Only across the sky quietly
Slid afterward
Onto velvet sunset
A teardrop of rain.*

*12. New songs
Life has invented.
No need, fellows,
To grieve for the song,
No need, no need,
No need, friends.
"Grenada, Grenada,
Grenada my own!"*

Let us proceed with our analysis.

*1. We walked at pace,
We galloped in battles,
And the "Yablochko" song
We held in our teeth...*

Each of these lines repeats the seme of tension. Moreover, the saturation with this seme increases in each subsequent line until it reaches its apex in the image of the song clenched in teeth. The seme of tension is colored by the seme of death implied in the word "battles". The image of the "Yablochko" song thereby also becomes colored by the seme of death (through context). We know that unprecedented tension must inevitably end in destruction. And it immediately manifests in the form of an inversely symmetric image.

*Ah, this little song
Is still preserved
By young grass –
Steppe malachite.*

No trace remains of the tension that grated teeth in the previous quatrain – it has destroyed itself. Only fading memory (its fading indicated by the word "still") is preserved by young grass. But it, too, will soon wither and disappear.

The dominant seme of this quatrain is fading, death. We saw that tension was likewise connected with death in the previous quatrain. There – the death of people, here – the death of memory. The seme of hardness present in the grass image (grass – steppe malachite) is not realized in this context. But the seme of greenness and fragility of both malachite and grass inevitably enters the series of images united by the seme of transience.

*2. But another song
About a distant land...*

Remember the loneliness series from which we constructed quatrains in Chapter 2? All words in these two lines are taken from that series. In this context, they constitute a series whose seme is alienness.

*...My comrade carried
With him in the saddle.
He sang, gazing around
At native lands:
"Grenada, Grenada,
Grenada my own!"*

Again, the seme of tension arises. This time, however, it is connected with life rather than death. This occurs partly because native lands are mentioned,⁴⁹ carrying deep archetypal

⁴⁹ Probably everything connected with the word "rod" [family/kin/genus] evokes a strong sense of life's fullness at the level of archetypal consciousness. Later, in Chapter 7, we will return to this problem. Here we will only note that for humans of the Mousterian and Neolithic periods, "Native land" meant life in the direct sense – this was the land where the animals that Mousterian humans hunted bred, and where the millet that Neolithic humans gathered grew. Loss of native land meant starvation death at that time. We focus on Neolithic humans because this period likely gave rise to the thought archetypes that correspond to the mythologemes we seek.

associations with sustenance and survival. With the seme of life we associate the saddle (horse) too. The image of the song “Grenada” also becomes saturated here with the seme of life. (The seme of life also appears connected with the seme of contemplation contained in the words “gazing around”.) At the same time, emotionally, the entire life series is also colored by the seme of alienness to a world where people bleed to death (let us not forget that the tension-death series is inversely symmetric to the tension-life series).

*3. He knew this song
By heart...
Where did the young man get
This Spanish sadness?
Answer, Aleksandrovsk,
And Kharkov answer:
When did you begin
To sing in Spanish?*

The leading seme of this octave is the seme of alienness, foreignness of that cluster of sensations associated with the image of the song “Grenada”. Perhaps it will seem contrived to remind that this image is saturated with the seme of life, *but*:

*4. Tell me, Ukraine,
Is it not in this rye
That Taras Shevchenko's
Papakha lies?
Where then, comrade,
Did your song come from:
“Grenada, Grenada,
Grenada my own”?*

Not only does Svetlov mention Taras Shevchenko's name, but he emphasizes his death here, in these same steppes, which, in this model, are literally overwhelmed by the element of death and destruction. The song “Grenada” stands alien to the world of death – this is distinctly felt in the quoted lines.

*5. He hesitates to answer,
The dreamy Ukrainian:
Brother! Grenada
I found in a book
Beautiful name,
High honor –
Grenada province
In Spain exists!*

Let us break the grammatical connections and simply look at the list of words. Hesitates, answer, dreamy, book, beauty, high, honor, brother, find, Spain, Grenada, province. A series of silence, leisure, and contemplation emerges. The series of spiritual meditation. Slowness in the words “province”, “hesitates”, and “contemplation” in the words “dreamer”, “book”, “beauty”,

“high”, “name”, “honor”, and “found”. Of course, as we noted earlier, the contemplation series is part of the life series (meditation is closely connected with spiritual life).

*6. I left my hut,
Went off to war...*

Hut – life series, all other words – death series.

*...To give the land in Grenada
To peasants there.*

Life series.

*...Farewell, my dear ones,
Farewell, my friends
“Grenada, Grenada,
Grenada my own!”*

The dynamics of the alternation of life and death series intensifies, like flashes of black and white colors. “Farewell” – death series, “dear ones”, “friends” – life series. The image of the song “Grenada” belongs to the life series.

In this octave the seme of life overwhelms the seme of death – saturation with the seme of life is clearly greater than with the seme of death.

*7. We galloped, dreaming
To grasp quickly
Grammar of battle –
Language of batteries.
The sunrise kept rising
And falling again
And the horse grew tired
Of galloping through steppes.*

Here, however, all images are maximally saturated with the seme of death: both the soldiers' striving to conduct battle better, and the impressive image of the sunrise that refuses to die (sunrise – element of the life series), and the horse's weariness (the image of horse, saddle is connected with life), and the steppes which associates with the element of death, as we saw earlier.

*8. But the “Yablochko” song
Was played by the squadron
With bows of suffering
On violins of time.*

“Yablochko”, as shown above, is the song of death. “Squadron”, “bows of suffering”, “violin”, “time” – here too, the text is overwhelmed by waves of decay and death. Moreover, the saturation with this seme reaches its peak here: playing the violin creates music, the act of which is saturated with the seme of life (this will be discussed in Chapter 8). Here, however, what is born is not life-music but essentially death – a chilling permutation, the picture of the

world takes on mythological features, unfolds into phantasmagoria. The pendulum must swing back. Its movement toward the world of non-being has reached its limit.

*...Where then, comrade,
Is your song:
"Grenada, Grenada,
Grenada my own"?*

Again the life series emerges, but not for long.

*9. The pierced body
Slid to the ground,
A comrade for the first time
Left his saddle.*

The triumph of the death element. The image of the horse appears for the third time: the saddle was mentioned in octave 2 – as a word of the life series. Horse, tired of galloping through steppes of death – octave 9, and now – the orphaned saddle, the pendulum must begin swinging back.

*I saw, over the corpse
The moon bent down,
And dead lips
Whispered "Grena..."*

The moon is often used as a personification of death, the world of darkness, the element of night. (Recall, for example, Lorca's "Ballad of the Moon, Moon"). The moon represents the world of death where a person dissolves. But the world of death emerging in these lines is quite unlike that world of death – steppes which we saw earlier – there, death was associated with gnashing of teeth, with fury, with tension destroying everything – including itself. Here – pacification, tranquility. And moreover, this world of death becomes connected with life: "Dead lips whispered 'Grena...'" Corporeal passions remained in the steppes. Here is something else.

*10. Yes, to a distant region,
To the expanse beyond the clouds
My comrade departed
And took his song.
Since then native lands
Have not heard:
"Grenada, Grenada,
Grenada my own!"*

Deep peace emanates from the first two lines. They are composed of words saturated with the sense of silence. But we have already encountered the sense of silence. Recall our identification of the sense in octave 5 ("Grenada I found in a book" etc.). The song "Grenada" emerges from the world of silence (we have seen that it is alien to the world of steppes) – and to the world of silence it returns taking the person with it. And in the verse, images of the life series emerge again – "native lands", "Grenada", but they evoke a different emotion, the already familiar emotion of luminous sorrow. We saw earlier that where the sensation of luminous sorrow

arose, loss was always the theme. Loss is spoken of here too – native lands do not hear the song “Grenada”. The life series has lost some of its constituent elements.

Thus, let us sum up: in the song “Grenada” we find the following group of sensations: sadness, life, alienness (distance), contemplation (silence). And this same group of sensations now characterizes the world of “expanse beyond the clouds”. Complexity arises here, however: the song “Grenada” in Svetlov's work is saturated with the seme of life, yet belongs to the world of silence, alien to the lyrical hero's world. And when it departs for the world of silence, that world reveals itself as the world of death. Moreover, at the very moment of departure, the song again emerges in the movement of dead lips. Is this the song's extinction or its birth? Isn't the world it is going to the same world it came from? And is this the world of death or of some other, non-human existence?

Here, we have identified a mythologeme: a substance from the world of death that temporarily exists in the human world and returns to its medium. But this mythologeme is not unique in Svetlov's poem.

*11. ...The unit did not notice
The loss of a fighter
And the “Yablochko” song
Sang to the end.
Only across the sky quietly
Slid afterward
Onto velvet sunset
A teardrop of rain.*

“Yablochko” – the song of death displaces the life song “Grenada”. But the “Yablochko” song itself goes into non-being – it was sung to the end. Not a trace remained of it, only fading memory, as we saw earlier. The dissolution is complete: Death has destroyed itself. And this absolute triumph in the corporeal world – the world of the lyrical hero – ends with an image that interests us: again the seme of silence, of quiet sadness, emerges (remember: “Where did the young man get this Spanish sadness?”). Quiet sadness is connected with the expanse beyond the clouds, and we are again convinced of this.

Very important for us is that precisely here appears the image of rain – rain that brings life to all living things, washing away dirt and blood. Ancient ritual vessels of Trypillia show the image of falling streams of rain – heavenly water, symbol of fertility and pledge of grain's resurrection – symbol of life.

But in the analyzed verse – a self-enclosed model of the world – both emotionally (through the seme of sadness) and through its heavenly, cloudy origin, this symbol of life is connected with the world of death, the world to which the song “Grenada” belongs. This rain, washing the velvet of sunset with tears is a harbinger that there will be sunrise. This is the beginning, the birth of the life series. Rain – and this will be discussed in Chapter 8 – must occupy an important place in the system of archetypal representations.

*12. New songs
Life has invented.*

*No need, fellows,
To grieve for the song...*

“No need to grieve” means, essentially, no need to remember. We again come to the theme of memory's extinction, the death of memory, the theme that first sounded at the very beginning of the verse. (“Ah, this little song still preserves/ Young grass.”, etc.).

Moreover: new songs are born, but as we have seen, both songs of the life series and songs of the death series – equally go into non-being. Song is destined for birth and non-being in this model of the world. And a sense of the cyclical nature of being emerges. This sense is reinforced by the poem's ending:

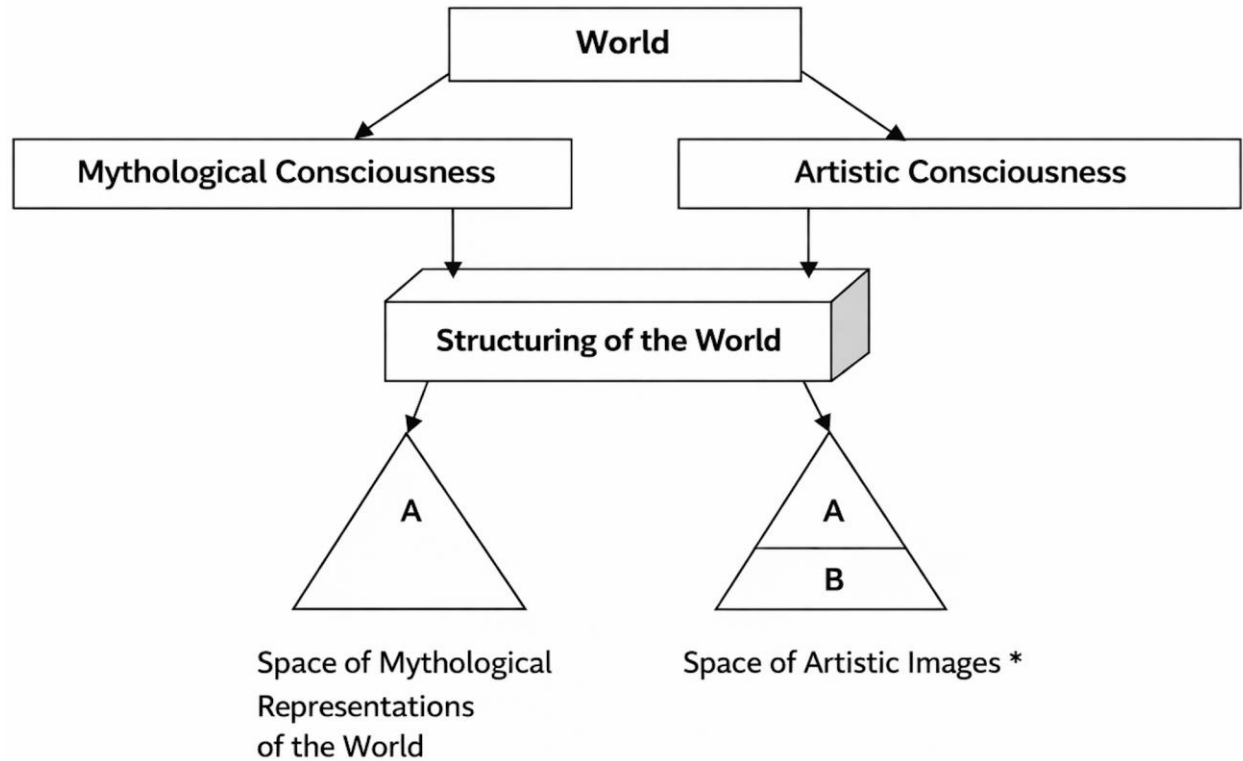
*...No need, no need,
No need, friends.
“Grenada, Grenada,
Grenada my own!”*

No need to remember, but the author reminds. The fate of “Grenada” is superimposed on the fate of new songs, on our fate. Did ancient humans remember their tribesmen who had gone beyond the horizon? Does grain remember the grain of last year's harvest? Both yes and no. It remembers in categories of myth. It remembers about the fate of universal grain, universal human. The image of the song “Grenada” in this verse seems to grow into a universal symbol of life. And the cyclical nature of birth and death reveals yet another mythologeme: birth, death and resurrection of vegetative demons of harvest.

Our analysis is complete.

We deliberately applied the method of semantic series identification to analyze such dissimilar poems: Tsvetaeva's intimate “To Grandmother” and the well-known poem “Grenada” by Svetlov, celebrated for its civic themes. Our aim was to show that regardless of the social orientation a poem or the objectives its author had in mind, any poem – if it evokes emotions in the reader – must be structured into semantic series and must obey the laws of symmetry examined earlier.

We will propose one more supposition: each emotion must correspond to its own mythologeme. If this supposition is true, then the diagram we presented in Fig. 2 should look somewhat different:



* The Space of Artistic Images (SAI) B contains in its deepest part the Space of Mythological Representations of the World A (SAI faces the reader with its base).

Figure 3. Schema of World Structuring

If different artworks evoke the same emotion, they appeal to the same mythologeme.

Since our analysis was directed at uncovering the peak triangle A – a part of the artistic image space – many layers of the artwork designated in Fig. 3 as trapezoid B, including layers connected with social problems, remained inaccessible to it. This is to be expected. Semantic series characterized the state of prehistoric humans, to whom social contradictions were simply unknown: they lived in the pre-class period of history.

To analyze the layers of a work of art, designated in Figure 3 as the space of trapezoid B, there are traditional, proven methods of literary and art criticism. These methods are not discussed in this paper, as they are sufficiently well known.

In Fig. 3, the space of artistic images is presented as a triangle whose peak corresponds to the primary myth, most likely already inaccessible to researchers. The space of triangle A is the development of mythological plot constructions, the result of fragmentation and development of the primary myth.

However, one might object: the same artwork evokes different emotions in different people. What kind of connection between mythologeme and emotion can we speak of then? We would answer as follows. One artwork may contain multiple mythologemes. However, a specific reader likely perceives only a few of these. In the poem “Grenada” we identified two

mythologemes, but we cannot assert that we have exhausted the mythologeme layer of this verse.

Mythological levels of artworks undoubtedly require further careful investigation. It seems that our two analyses already show what a rewarding yet unfortunately unsolved task the investigation of mythological content is, and how much deeper and richer the content of these works is perceived when understood at this level as well. Nevertheless, the inclusion of mythologemes in the analytical method significantly enriches and deepens the understanding of artworks' contents.

As for our diagram of artistic space, in light of the revealed facts, it will take the following form:

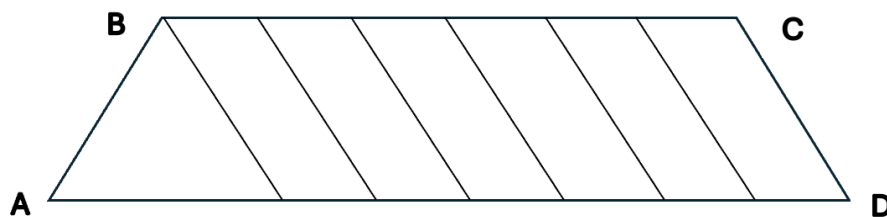


Figure 4. Space of Artistic Images (SAI)

The space of artistic images may be represented as a trapezoid ABCD, containing multiple triangles similar to that shown in Fig. 3. This implies that each perceiver simultaneously perceives one or several mythologemes, but not necessarily the entire set. However, we do not exclude the possibility that the multiple mythologemes contained in one artwork are the result of the splitting of one proto-mythologeme, still inaccessible to investigation.

Let us start from answering the question that may arise in the reader's mind: was the poets' work with semes and mythologemes conscious? No, neither Tsvetaeva nor Svetlov were aware that mythologemes were present in their poems, just as they were unaware of the law of semantic series. Clearly, we are dealing with a fundamental property of human thinking, a property that begins to govern consciousness when the mechanisms of logical evaluation of information are disrupted, or when the process of perception occurs without their participation.

Notably, thinking in the logically structured state of consciousness is also connected with grouping concepts into semantic series. However, these semantic series are fundamentally different. Their identifiers comprise not only emotions but also any qualities, concepts and processes, as well as any regularities of the surrounding world. For example, selecting a subset of even numbers from the set of natural numbers means creating a semantic series/row based on the seme of evenness.

Altered states of consciousness, at least one of them, stem from primary mythological consciousness, from which logically structured consciousness also stems.

However, it seems only "logical" consciousness acquired the property of building semantic series according to semes containing no emotions, which leads to the ability to recognize cause-

and-effect relationships and to be surprised by contradictions. In the world of clear, logical representations, there is no place for that deep unity of point symmetry and symmetry of repetition, which is observed in the world of semantic series created by altered states of consciousness.

But if logical consciousness operates with semantic series, then even in a world dominated by logic, consciousness's capacity for suggestion plays an important role: wherever semantic series exist, semes are repeated, and thus the symmetry of repetition persists. And this likely corresponds to reality.

Imagine you are home sick. A coworker who has decided to play a joke on you comes by and tells you that you've received a raise. You have no reason not to believe them: you are in good standing with administration; you complete all tasks on time. Logical filters let the information through. And you are excited by the message, you experience the suggested reality as true.

In other words, you believe. All psychological states connected with belief turn out to be ultimately the result of suggestion, and consequently – the result of structuring ideas of the world into semantic series. Thus, everyday life's logical state of consciousness frequently transitions into a hypnotic state of consciousness. This occurs in cases when logical filters let through received “false” information.

Moreover, the logical state of consciousness can increase the power of the suggestion formula through its ability to establish cause-and-effect relationships, which transform into an element of the semantic series forming this very formula. In other words, the logical state of consciousness can be used to intensify the experiencing of suggested reality.

Chapter 6

THE ART OF DREAMS

For a long time, scholars of sleep-related problems noticed a phenomenon of the sleeping person's innate tendency toward poetic wording. It is known that people often dream of writing poetry, or simply dream poems, and this happens to individuals who would never consider writing poetry while awake. As a rule, the content is nonsense, but nonsense that rhymes. This phenomenon even received a name – the Kubla Khan effect, named after the poem that came to Coleridge in a dream.

We have already mentioned that C. Jung managed to identify motifs of ancient myths in the dreams of modern people. As was shown in our model (Chapter 5), motifs of ancient myths are found in works of art. The space of mythological images and images of art is similarly structured into semantic series. The mechanism of semantic series' impact on consciousness was examined in previous chapters. Couldn't we try to reconcile the mechanism of dream effects and the space of dream images with the space of world representations realized in myth, as well as the space of artistic images realized in artwork, and the mechanism of semantic series' impact?

The dream model that we will build in this chapter is based on the concept of the poetic nature of dreams. We must immediately stipulate that our model will not cover all types of dreams. During dreams, logical filters are always turned off, while some dreams can generate new connections and lead to discoveries: recall the famous dream of D. I. Mendeleev, in which this chemistry genius first saw his table.

We are not trying to analyze such dreams. Our model will concern only those dreams from which we, for example, wake up at night in a cold sweat. And we proceed from the premise that if a dream, that is, a change of montage pieces, evokes emotions in us, then this emotion is *suggested* by the dream. But first – once again – let's give the floor to V. Nalimov:

Sleep as a manifestation of an altered state of consciousness.

The works of S. Freud apparently gave the first impetus to scientific study of the sleep nature. A significantly broader and deeper approach to solving this problem we find in A. Adler.⁵⁰ His interpretation of the dreams nature is briefly outlined by D. Foulkes:⁵¹

“1. Sleeping and waking thoughts are not completely incompatible with one another; we must recognize the essential continuity of all forms of thought. <...>

2. The instigation of dreams is not always, or even often, due to sexual or hostile motives, any more than waking thought is generally dominated by such motives. <...> Adler insists that the dream cannot be a contradiction of waking life; it is always consonant with one's waking style of life.

⁵⁰ Adler A. *What Life Should Mean to You*. New York: Capricorn, 1958.

⁵¹ Foulkes D. “Theories of Dream Formation.” In Charles T. Tart, ed. *Altered States of Consciousness: A Book of Readings*. New York: John Wiley & Sons, 1963, p. 121.

In common with Freud, Adler feels that we dream when we are troubled by something. We dream only when unresolved problems of waking life, which Ullman (1962, p.20)⁵² characterizes as the “sore spots” of one’s existence, press upon us during sleep. It is the task of the dream to meet and to try to solve such problems. The troublesome “something” that instigates the dream is, then, a problem from conscious experience, not a problem which has been repressed and of whose existence the waking organism is totally unaware. <...>

3. The raw material of the manifest dream content comes from memories of prior perceptual experience, particularly from day residues. But, in Adlerian theory, the day residues are important in themselves, as representations of waking concerns. <...>

4. <...> In dreaming, we make use of those images and incidents which best agree with our style of life and which best express the present problem”.

Adler's concept seems very realistic. And, what is especially important here for us, it emphasizes the connection and continuity that exists between daytime, logically structured consciousness and freely flowing night consciousness.⁵³

The last quote needs some brief commentary.

1. It is currently established that dreaming occurs during the phase of so-called “rapid eye movement sleep” (REM sleep). This phase is accompanied by twitching of the lips, hands, legs, and movements of the eyeball, and lasts very briefly – only a few seconds. During an 8-hour sleep period, a person enters this state three to four times, with these episodes occurring at approximately equal intervals in all people every time they sleep.

Dreams are remembered only if a person wakes up during or immediately after the REM phase. Otherwise, the dream will be inaccessible to daytime consciousness. All people dream, every night. Those who are convinced that they sleep without dreams actually do dream, and they admit this if awakened during REM sleep. Such experiments have been conducted repeatedly and with the same result.

If an electroencephalogram (EEG) of the sleeping person is recorded during dreaming, the periods of REM sleep will correspond to a special rhythm of EEG oscillations (so-called alpha rhythms). Therefore, the EEG can accurately tell when a person is dreaming. If the body is deprived of REM periods (waking a person every time alpha rhythms appear on the EEG), then within a week, the person will be on the verge of physical death.

Therefore, Adler's assertion that dreams only occur when we are oppressed by unresolved problems of daytime life seems doubtful: either these problems oppress us always – then it is unprovable, or it is incorrect – after all, we dream every night.

2. All the content of previous chapters points to night consciousness in our dream model not being freely flowing: like the logical state of consciousness, it will turn out to be structured, but structured semantically, into semantic series. However, we are getting ahead of ourselves. Adler claims that fragments of memories serve as raw material for dreams. However, these pieces do

⁵² Ullman, M. “Dreaming, Life Style, and Physiology: A Comment on Adler's View of the Dream”. *Journal of Individual Psychology*, 18(1), 1962: 18–25.

⁵³ Nalimov, V. *Veroyatnostnaya Model' Yazyka*, pp. 233-234.

not enter the dream randomly but undergo some selection: they must best express existing problems. These problems come into the dream from daytime consciousness, since thinking is continuous.

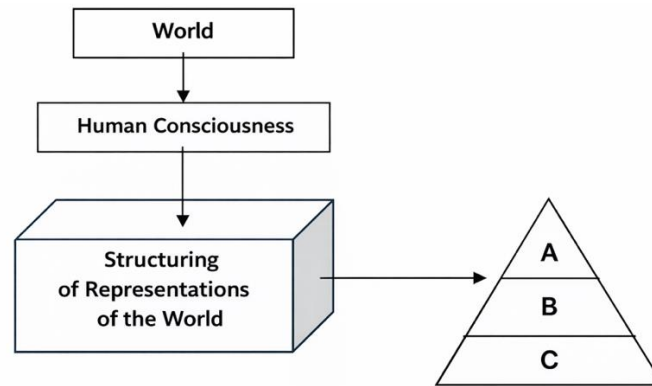
Now let's try to express Adler's thoughts in the terms and concepts that we use: there is a genetically predetermined mechanism for selecting memories for dreams. We know that some mechanism also exists for evaluating and selecting words for a poem according to the criterion of word saturation with the needed seme. It is this evaluation mechanism that determines the quality of the poem.

The mechanism of selecting memory fragments into dreams in our model is analogous to the mechanism of selecting words into a poem. We enter the night state of consciousness with some emotion carried over from the day. The selection mechanism performs a search through all memories forming a semantic series whose identifier is the seme (emotion) carried over from daytime consciousness. One of the mandatory selection criteria is obtaining the optimal content of the needed seme in the dream as a result, and, consequently, quality realization of the suggestion formula.

With this approach, the structure of dream space turns out to be identical to the structure of artworks and myth. It becomes clear why contradictions are not recognized in the dream state of consciousness – for the same reason as in shamanic verse. It is also clear that the logic of dreams is the logic of the semantic series. If in a dream we need to move from place to place, then movement will be performed on anything – from a broomstick to a rocket, and we will not be surprised by the unusual mode of transportation, even if we only needed to move to the next room. What matters is the seme of movement itself, and the image of movement is determined neither by logic, nor by expediency but by how saturated it is with the needed seme and by how much an image with this saturation fits into the saturation gap that needs to be filled to optimally realize the suggestion formula.

And here, we cannot help but notice that, after all, a word is essentially nothing other than a memory (when we hear a word, its meaning must be recalled). It is simply a memory that is common to all. But if we consider the word as memory, then our algorithm for creating dreams includes, as a special case, the algorithm for creating poems. The mechanism for selecting words for a poem and images for a dream turns out to be the same.

The space of dream images appears to be structured in the same way as the space of images in shamanic verse. This can be illustrated with a drawing (Fig. 5):



Triangle A – Space of Mythological Representations of the World.

Trapezoid B – Space of semantic series, directly adjoining myth and affecting human consciousness by bypassing logical filters.

Trapezoid C – Space affecting emotions through reason.

Figure 5. Space of Artistic Images in a Work of Art

Space of dreams and space of shamanic verse are represented by triangle A and trapezoid B.

This is why C. Jung managed to identify motifs of ancient myths in the dreams of modern people. Thus, in our model, human dreaming functions as genuine creative activity, which essentially does not differ from the process of creating a poem, or more broadly – a work of art.

We know that the mechanism of word selection and evaluation works differently in different people: in some, more precisely, and in others, worse. Consequently, the quality of dreams in different people should be uneven as well. In relation to the sphere of dreams, we can say that just as there are brilliant poets and brilliant poems, brilliant dreamers who see brilliant dreams also walk among us. (Recall the attitude of the ancients to prophetic dreams.) From this, it also follows that some laws, already identified in artworks, can be applied to dreams. In our view, dreaming can be rightfully evaluated as a genre, unfortunately accessible only to the dreamers themselves, since memories that mean a great deal to them mean nothing to others.⁵⁴

However, from this, it also follows that some laws already identified in dreams can be transferred to artworks.

To explain what is meant, let's quote extensively from J. P. Sartre's novel "Nausea" (1938):

This is what I thought: for the most banal event to become an adventure, you must (and this is enough) begin to recount it. This is what fools people: a man is always a teller of tales, he lives surrounded by his stories and the stories of others, he sees everything that happens to him through them; and he tries to live his own life as if he were telling a story.

<...>

Nothing happens while you live. The scenery changes, people come in and go out, that's all. There are no beginnings. Days are tacked on to days without rhyme or reason, an interminable, monotonous addition.

⁵⁴ This especially applies to childhood memories, which most often appear in dreams, since in childhood everything is remembered much more emotionally. Childhood memories are simply more saturated with emotional semes.

<...>

That's living. But everything changes when you tell about life; it's a change no one notices: the proof is that people talk about true stories. As if there could possibly be true stories; things happen one way and we tell about them in the opposite sense. You seem to start at the beginning: "It was a fine autumn evening in 1922. I was a notary's clerk in Marommes". And in reality you have started at the end. It was there, invisible and present, it is the one which gives to words the pomp and value of a beginning. "I was out walking, I had left the town without realizing it, I was thinking about my money troubles". This sentence, taken simply for what it is, means that the man was absorbed, morose, a hundred leagues from an adventure, exactly in the mood to let things happen without noticing them. But the end is there, transforming everything. For us, the man is already the hero of the story. His moroseness, his money troubles are much more precious than ours, they are all gilded by the light of future passions. And the story goes on in the reverse: instants have stopped piling themselves in a lighthearted way one on top of the other, they are snapped up by the end of the story which draws them and each one of them in turn, draws out the preceding instant: "It was night, the street was deserted". The phrase is cast out negligently, it seems superfluous; but we do not let ourselves be caught and we put it aside: this is a piece of information whose value we shall subsequently appreciate. And we feel that the hero has lived all the details of this night like annunciations, promises, or even that he lived only those that were promises, blind and deaf to all that did not herald adventure. We forget that the future was not yet there; the man was walking in a night without forethought, a night which offered him a choice of dull rich prizes, and he did not make his choice.

I wanted the moments of my life to follow and order themselves like those of a life remembered. You might as well try and catch time by the tail.⁵⁵

This excerpt from Sartre is closely connected with the range of problems that interest us. In essence, Sartre says the following:

1. Events in a story must be ordered, while in life they are not ordered (that is, the space of the story is structured).
2. The end in the process of creating a story precedes the beginning and determines the selection of words (that is, a semantic series of words-images can be composed only when the identifier sense of the series is known).
3. Images, while meaning nothing special in the context of their semantic series, build up tension (are remembered for later), that is, their identifier sense is perceived by the reader long before the actual end of the story.
4. It is impossible to truthfully recount a real event since, in speaking, we inevitably structure the space of images of the story, thereby distorting the space in which the particular event took place and which was not structured the way it turned out in the story.

⁵⁵ Sartre, Jean-Paul. *Nausea*. Transl. from the French by Lloyd Alexander. Norfolk CT: New Directions, 1949, pp. 56-58.

5. The presence of semantic series inevitably leads to a reverse flow of time in the space of artistic images (for creating a semantic series requires knowing the identifier some first – making the identifier primary and the semantic series secondary).

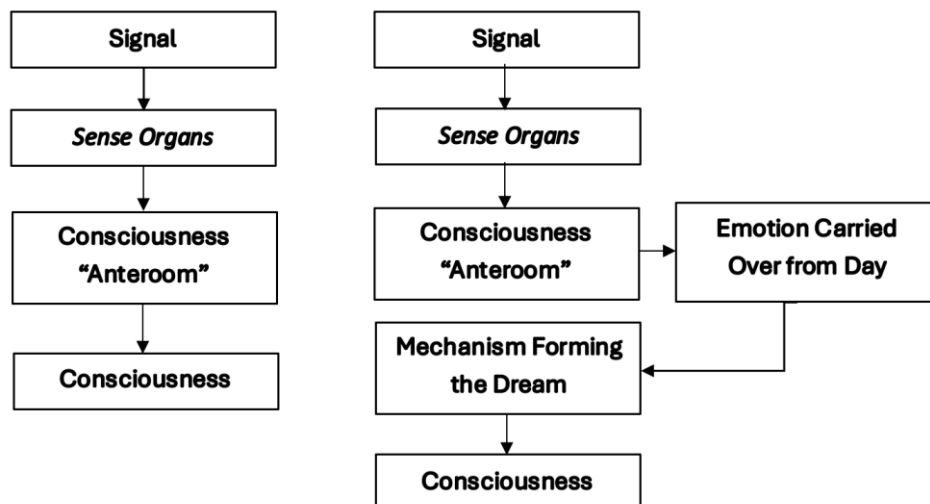
The first three of Sartre's conclusions repeat principles already set forth by us in the chapters of Part One. The fourth conclusion follows from the concepts about the space of images in artworks developed in the previous chapter. We are interested in the fifth, and the general conclusion the reverse flow of time. Let's try to transfer this conclusion to the sphere of dreams: imagine you are having a dream. An alarm clock rings into your dream. In the dream, it transforms into the toll of a bell. But before you hear it, you will see a series of episodes that will connect the plot of your dream, already unfolded by the time the alarm clock rang, with the bell toll into which the dream transformed the alarm clock ring.

In reality, you first perceived the ring, and your night consciousness created the connecting episodes after the ring was perceived. That is, in your dream, time also flows backward. Scientists have noted this phenomenon repeatedly. We should probably talk about time flowing backward not constantly, but in jumps. We mean the following: if after the alarm clock rings, someone pats you on the hand, this will also somehow enter the dream, possibly after the connecting episodes, but both the connecting episodes and the transformed pat itself will still follow after the “alarm clock” set of episodes.

We will try to build a signal processing model that takes into account all the listed factors and explains them from the positions of semantic series generation.

Obviously, between the moment a signal is registered by the sense organs and the moment it becomes accessible to “night” consciousness (enters the dream and is viewed by the dreamer), some interval of time passes, during which the signal undergoes processing and is prepared for perception by consciousness. Obviously, this processing differs significantly during “daytime” perception of the signal: at night we do not perceive the signal itself, but only its dream transformation. Schematically the process of signal perception in our model is depicted in Figures 6a and 6b.

Figure 6a. Daytime signal perception **Figure 6b. Signal perception by night consciousness**



During the day, the signal enters consciousness practically in the same form in which sense organs perceived it (Fig. 6a).⁵⁶ During sleep, the signal enters consciousness in a form transformed sometimes beyond recognition by dreaming (Fig. 6b). Having entered the “anteroom”, the signal does not immediately enter consciousness, since access to consciousness is blocked. Instead of entering consciousness, the signal enters the “dream generator”, where it is processed. The “dream generator” is already tuned to a certain emotion. The incoming signal is connected with some memory according to one of the main semes associated with the signal (alarm clock ring with bell toll, for example, according to the seme “ringing”). Saturation with this emotion is extracted from memories as well.

We remember that in our model, the optimal realization of the dream's suggestion formula depends on the optimal saturation of the dream space with an optimally oscillating seme. But by the moment of signal perception, part of the sleep space had already been filled. Therefore, the place in the dream that will be occupied by the memory evoked by the perceived signal depends on whether the seme had oscillated earlier.

We cannot say whether this signal alters the course of the dream by canceling its ending and replacing it with a new one that features the transformed signal, or all the prepared episodes are viewed first and then the dream is extended by several montage pieces. But one thing is clear: the memory generated by the signal can “fit” into the dream directly after a ready montage piece-memory (naturally, the montage piece must complete the syntagm of the dream “phrase” at this point, if it is permissible to apply linguistic terms to night consciousness).

In all other cases, between the previously ready set of montage pieces and the signal transformed into memory, an additional set of montage image memories will be placed, generated later than the memory evoked by the signal. But both with and without connecting episodes entering the dream, time flows backward, since the end (emotion) precedes the beginning (determines the selection of episodes).

Thus, the analogy between the mechanisms of creating shamanic poetry and dreaming in our model turns out to be quite deep and convincing. The model we have built allows us to make a rather interesting assumption, repeatedly declared, however, by the artists themselves: creative

⁵⁶ But not necessarily at the moment when the signal is fixed by the sense organs. Psychologists Fodor, Bever, and Garrett from Massachusetts Institute of Technology tried to identify the boundaries of syntagms (a syntagm is a set of words grammatically connected with each other and forming a semantic unity. The set of words forming a phrase can always be grouped into factor sets of words (syntagms) when perceiving a sentence. In doing this, they based their work on the Gestalt psychology assumption that units of perception maintain their integrity, resist breaks (in other words, perception has inertia). In Fodor and Bever's experiment, subjects listened to a sentence, during which at some point a click would sound. Immediately after listening, subjects had to write down the sentence they heard and indicate where they heard the click. If any syntagm was a unit of perception, subjects usually claimed they heard the click at the boundary between parts of the sentence, although it was actually given within this syntagm (Cited from: Slobin D. *Psycholinguistics*, p. 25). Important for us is the conclusion that follows from the described experiment: between the perception of a signal by sense organs and its processing by consciousness, a certain period of time elapses, during which the processing of the previous signal is completed. Whether the delayed information undergoes any processing before becoming accessible, we do not know. But we know that if it does undergo processing, this processing does not transform the signal beyond recognition.

activity, in fact, satisfies some vitally necessary need (recall that an organism deprived of REM sleep phases finds itself on the brink of death from nervous exhaustion within just a week).

However, this assumption holds true only if we consider the main purpose of REM sleep to be the creation of dreams and the realization of the suggestion formula – that is, precisely what brings sleep close to artistic creativity. We know so little about the nature of dreams that we cannot reject another possibility: the true significance of REM phase is quite different, while components of artistic creativity are accidental and only accompany certain factors that satisfy vital needs.

Then the birth of art will be viewed not as the emergence of an ability necessary for humans, but as a result of the ancients' failure to understand cause-and-effect relationships. It represents an attempt to satisfy some intuitively vital needs using one of the subsidiary phenomena that accompany the satisfaction of these needs. In this scenario, the accompanying factors like dreaming are mistakenly taken for the root cause.

In our view, something similar led to the emergence of initiation rituals. This will be discussed in depth in Chapter 9.

In conclusion, we emphasize that the material concerning the nature of sleep presented in this chapter in no way claims to provide complete information, and that all conclusions and assumptions we made pertained to the limited poetic model of dreaming, in which we tried to identify some common properties of altered states of consciousness.

Chapter 7

REVERSE FLOW OF TIME AND MYTHOLOGICAL CONSCIOUSNESS

In Chapter 5, we discussed the relationship between mythological and artistic states of consciousness. In Chapter 6, we put forward the thesis of the reverse flow of time in the space of artistic and dream images in cases where this space is structured by semantic series.

In our model, the space of artistic images and dreams is always structured by semantic series, and mythological space and the space of mythological visions of the world are also always structured by semantic series. The conclusion suggests itself: in our model, humans of the mythological era must have perceived time as flowing from future to past. As paradoxical as it may seem, orientalists have reconstructed traces of precisely such an attitude toward time in Ancient Sumer and Babylon. Here is what Igor S. Klochkov, who dedicated a special essay to the study of ancient Babylonian concepts of time, writes about this:

“The past in everything served as an example for imitation, constantly remained before the mental gaze of ancient man. Psychologically, the Babylonians, like the Sumerians, were oriented in time toward the past. If for modern man 'to look to the future' means 'to look forward', then a Sumerian or Babylonian, looking forward, saw the past; the future lay behind his back. Language data confirms such an orientation, although, of course, one should remember that purely verbal formulas of already overcome concepts can be preserved in language. The past in Akkadian is UM PANI (lit. 'days of the face/front'); the future is AHRATU (formed from the root HR meaning 'to be behind'). AHRATU also means 'offspring'.

Interesting are formations from the root WRK with the general meaning 'to be/move behind': W(ARKU) – 'reverse side', 'back', 'later', 'future', 'behind', 'after'; ARKA – 'henceforth', ARKIS – 'backward'. Two more examples: PANA – 'before' (lit. 'at the face'), INAVAHAR – 'before' (lit. 'in front')” (pp. 28-29).

Having discovered the correspondence '*past*' – '*that which is in front*', '*future*' – '*that which is behind*', it is difficult to resist the temptation to place the time vector in a spatial coordinate grid, that is, to try to understand the connection between the concepts of '*past*' and '*future*' with the concepts of 'up', 'down', 'north', 'south', 'east', 'west'. The construction of such a model is the most artificial and controversial part of our reconstruction; however, it is still justified: the existence of certain connections between direction in space and time among the Babylonians is beyond doubt.

'*The past – that which is before the face – in front*' we connect with the concept of 'east' (Akkadian: SADU; common Semitic: QDV ('ancient/eastern'), cf. Akkadian 'last year' – SADDAQDI/A(M) <SATTU + QDM>) and through it with the concept of 'up'; it is also possible that formations from the root HR in addition to the meanings of '*to be behind*', '*future*' also have the meaning 'west'. In graphic form, our reconstruction can be presented as follows (Fig. 7):

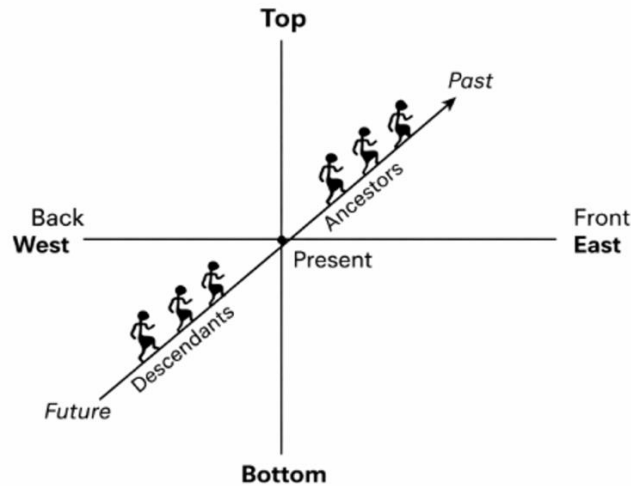


Figure 7. Model of time-spatial orientation in Ancient Sumer and Babylon

Of course, such a model is highly hypothetical".⁵⁷

Thus, movement in time in Klochkov's model is an ascent from future to past. His hypothesis is indirectly confirmed by the perception of time in dreams. I. S. Klochkov draws attention to the fact that orientation toward the past was characteristic of ancient and medieval cultures and suggests that the psychological turn "facing the future" began, evidently, in the middle of the 1st millennium BCE under the influence of messianic teachings and eschatological expectations, which led to the transfer of attention to the future. This turn was completed in modern times.

It seems to us that the process of reorientation in time is connected not so much with messianic teachings as with the emergence (discovery?) of other forms of consciousness, different from the mythological and possessing logical filters (in fact, messianic teachings are a consequence of the emergence of logical thinking). This process did not end in modern times, since even today, as soon as we plunge into the world of dreams or artistic fiction, we again, without realizing it, perceive time as flowing backward.

We can speak of the temporal reorientation of "logical consciousness". It probably ended at the turn of the 2nd-3rd centuries CE. This period, as we shall see later, was generally a period of global changes: it was by the 3rd century that eloquence died out, the magic of the word was forgotten, and the era that we will call in the next chapter the "era of the initial impulse" came to an end.

⁵⁷ Klochkov, Igor S. *Dukhovnaya kul'tura Vavilonii: chelovek, sud'ba, vremya* (Spiritual culture of Babylonia: man, fate, time). Moscow: Nauka, 1983, pp. 162-163.

Chapter 8

THE ERA OF INITIAL IMPULSE

The outstanding Russian traveler and scientist Nicholas Miklouho-Maclay studied customs and habits of Papuans, among whom he lived a long time. He was among the first to draw attention to a strange phenomenon: the natives perceived words quite differently from Europeans. For a European, a word is just a word. For a Papuan, a word was equivalent to action. Even in cases where the information carried by the words was knowingly false, it evoked an intense experience of the sensations associated with it. Moreover, as a rule, the Papuans were very sparse with words. Their speech phrases often consisted of a single word.

Today, a researcher can confidently assert that everything above applies to all known tribes at a primitive stage of development. The taciturnity of Native Americans has become proverbial. We remember the Europeans' surprise when encountering the phenomenon of Native American eloquence, accompanied by a very serious, almost superstitious attitude toward the word. It seems that for modern primitive people, a word means much more than it does for a European.

We remember that in the ancient culture, eloquence was valued very highly. History has preserved the names of great orators of Athens and Rome, whose speeches affected listeners almost as strongly as the speech of an Indian chief affected his tribesmen. However, the sophisticated speeches of ancient declaimers were already constructed taking into account the requirements of rhetoric and knowledge of sophistry. We know when eloquence died. We know this thanks to the sage Tacitus, before whose eyes orators were disappearing without waiting for a replacement. Tacitus felt that the death of eloquence indicated the beginning of a new era. We will call this era the era of lost initial impulse.

So, let us reconstruct the line of development of the phenomenon of eloquence, or rather, that segment of this line that is accessible to the historian:

1. The word evokes intense experience, and it is perceived as reality. Logical filters are turned off.
2. To evoke intense experience in listeners, one needs to construct speech skillfully. The ability to deliver speeches is rated so highly that the names of the best orators end up on the tablets of history.
3. The art of eloquence dies along with the world of antiquity.

In previous chapters, we said that if a person experiences illusory reality as true, it means that the illusory reality has been suggested to the person.⁵⁸ Suggestion? But for suggestion to occur, repetition, rhythm, semantic series are necessary.

If a word causes a powerful hypnotic state in a Papuan, then the very act of pronouncing the word must contain a hidden repetition of the mental state being suggested. We think that repetition does take place. It should be realized in the set of sounds (the Expression Plane of

⁵⁸ More precisely, the experience of illusory reality is suggested.

the word) evoking the same mental state as the seme that is fixed behind this set of sounds (the Content Plane of the word).⁵⁹

But here we find ourselves on very slippery ground. It is currently accepted in linguistics and philosophy that the content plane and the expression plane of a word (the field of word meanings and the set of sounds identifying that meaning field) are linked arbitrarily, and therefore the same concept is denoted by different sets of sounds in different languages. Moreover, the same set of sounds can denote completely different concepts in different languages. Yes, all this is true, and this position is valid. But it is valid for languages that have undergone a long process of development. And even then, with some caveats, which we will discuss below.

Outstanding thinkers of antiquity, belonging to different epochs and living in different places, unanimously declared that the connection between word and concept cannot be arbitrary. Let us listen to their voices. They lived closer to the era of initial impulse, and perhaps the properties that allowed humanity to create language were not yet completely lost by the 2nd-3rd century BCE, the boundary that separates the epochs of living and dead eloquence.⁶⁰

1. The Old Testament:

“So God formed from the dirt of the ground all the animals of the field and all the birds of the air. He brought them to the Man to see what he would name them. Whatever the Man called each living creature, that was its name. The Man named the cattle, named the birds of the air, named the wild animals; but he didn’t find a suitable companion”.

Genesis, Book 2, 19-20⁶¹

2. Sayings of Confucius:

The Master said, “A transmitter and not a maker” ... [7-1]

The Master said, “I would prefer not speaking”. Zi Gong said, “If you, Master, do not speak, what shall we, your disciples, have to record?” The Master said, “Does Heaven speak? The four seasons pursue their courses, and all things are continually being produced, but does Heaven say anything?” [17-19]

If names be not correct, language is not in accordance with the truth of things. If language be not in accordance with the truth of things, affairs cannot be carried on to success. [13-3]

The Analects (Lun Yu)^{62, 63}

⁵⁹ Similar thoughts were expressed in the 19th century by a German linguist and were supported by Charles Darwin.

⁶⁰ We have used some statements about language cited in Nalimov V. *Psikholingvistika*, p. 10.

⁶¹ Cited from <https://www.bible.com/bible/97/GEN.2.20-22.MSG>

⁶² English translation: James Legge. Source: www.ctext.org Edited by Cambridge Chinese Classics www.camcc.org

⁶³ As E. V. Zavadskaya writes, “The philosophical-ethical nature of the word is postulated in the 'Lun Yu' with all definiteness. At the word level, chaos is ordered into cosmos, for in the word resides the thing”. <...> “...The word in the philosophical context of 'Lun Yu' appears as a constant, primordial property of being.” <...> The theory of “correcting names”, developed later by Confucians, in its fundamental principles is laid down in the “Lun Yu”

3. Plato:

“Socrates: ...Names must be given as, in accordance with nature, they should be given and received, and with that which is by nature intended for this purpose, and not as we please... Thus, not every person, Hermogenes, is given to establish names, but only such as we called the Creator of Names. He, it seems, is also the Lawgiver. ... Thus, my most precious one, the Lawgiver we speak of must also be able to embody in sounds the name that is in each case designated by nature”.

... Socrates: Names ought to be given according to a natural process, and with a proper instrument, and not at our pleasure: in this and no other way shall we name with success ...

... Then, Hermogenes, not every man is able to give a name, but only a maker of names; and this is the legislator, who of all skilled artisans in the world is the rarest.

... Ought not our legislator also to know how to put the true natural names of each thing into sounds and syllables and to make and give all names with a view to the ideal name, if he is to be a namer in any true sense? ⁶⁴

We have quoted from three classical books, each representing its own historical culture. First, the Old Testament, behind which stands the world of steppe nomads; next, Plato's “Dialogues”, born in the depths of the priceless ancient culture; and finally, the canonical book of ancient China “Lun Yu”. A similar view of the dependence of word and concept existed in ancient India.⁶⁵

The Judean steppe, ancient India, China, Athens. Four great spiritual sources of antiquity. And the same understanding of the connection between word and world. Confucius's followers even created a school of name correction. Following their teacher, they believed that once, the word unambiguously embodied the thing. But since then, the connection has been distorted and lost, and it needs to be restored to harmony. The words need to be corrected so that they again correspond to things.

The words needed to be corrected because “if names be not correct, language is not in accordance with the truth of things. If language be not in accordance with the truth of things, affairs cannot be carried on to success. When affairs cannot be carried on to success, proprieties and music will not flourish”.⁶⁶

Thus, we see that the very idea of a rigid connection between the expression plane and the content plane is, to put it mildly, not new.

primarily in the philosophy of the word, presented in this monument. See Zavadskaya, E. V. “Missiya slova v ‘Lun'-Yue’” (The Mission of the Word in “Lun Yu”). In *Konfutsianstvo v Kitae* (Confucianism in China). Moscow: Nauka, 1982, pp. 38-41.

⁶⁴ Plato. *Cratylus*. Translated by Benjamin Jowett, <http://classics.mit.edu/Plato/cratylus.html>.

⁶⁵ In the ancient Indian tradition, it is said that names were given to things as a result of the act of creation by the lord of speech – the Universal Craftsman.

⁶⁶ English translation: James Legge. Source: <https://www.international.ucla.edu/ccs/article/18488#:~:text=%22If%20names%20be%20not%20correct,and%20music%20do%20not%20flourish.>

This old concept is gaining unexpected confirmation today thanks to research by St. Petersburg neurophysiologists at the Bekhterev Institute. We have already mentioned that they managed to establish a fact whose importance for linguistics and philosophy is difficult to overestimate: the same brain cell responds to stimulation by sound, seme, and drawing. This confirms our assumption that a repetition of the seme can be concealed within a single act of word pronunciation. Obviously, due to some reasons (possibly due to less informational noise in brain cells), the consciousness of a person who stood at a primitive stage of development was more receptive to repetitions of semes than the consciousness of civilized man.

We will attempt to put forward a model of language origin and development. This model is based on two key insights. First, language emerged as a form of creative activity, which, as we saw above, operates through semantic series. Second, at a very early developmental stage – the stage where Papuan tribes' development halted – when one person created (pronounced) a word, it produced a powerful hypnotic effect on their listener: the word became equivalent to action itself. In our model, this effect was achieved because both sound and seme acted on the same nerve centers, as shown in Fig. 8.

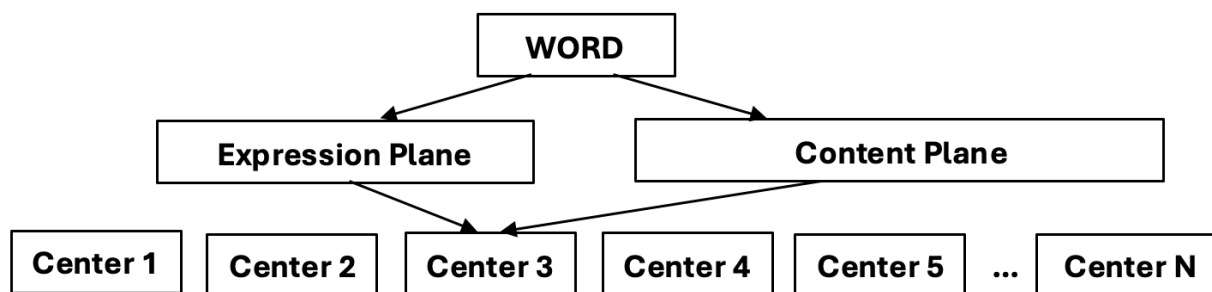


Figure 8. Stimulation of one and the same brain center by different levels of the word

Most likely, those centers that were synchronously activated by both planes of the word were centers of emotional stimulation. Naturally, besides the center of a certain emotion, the word could stimulate other centers, but in our model, it is still precisely the emotion centers that should be stimulated synchronously. We emphasize synchronously of all levels of the word – that is, those centers that can be affected by different sound combinations carrying no semantic load except emotional. As a result, a suggested mental state and the experience of the suggested reality emerged.

Thus, in our model of language formation, not just any set of sounds should have become associated with a particular phenomenon of reality, but only one, or one of several, causing in a person the same emotion and mental state as the named phenomenon of reality. It is precisely emotion that performs the function of a rigid connection between the expression and content planes.⁶⁷

⁶⁷ Vowel sounds are carriers of emotion. In modern languages, there are fewer vowel sounds than consonants. However, languages have been preserved (Japanese and Polynesian) in which vowel sounds constitute the majority. Moreover, the acoustic structure of Japanese vowel sounds strikingly resembles, as Japanese psychologists

But, in principle, any phenomenon of reality can evoke opposite emotions, and opposite emotions transition into one another (inverse symmetry, again). The representation of each object corresponds to its own emotional field, and one can speak of contextual realization of emotion and of a priori meanings of the image, just as we did earlier when analyzing words.

Obviously, it was precisely the a priori emotional representation of a given phenomenon that determined the choice of sounds for its identification. However, what about the fact that different people may a priori associate an opposite spectrum of emotions with the same object? From this, a conclusion follows: for a set of sounds to correspond to the emotion evoked by a given object, more than just accurate sound selection is needed (and likely not all people were equally skilled at matching sounds to emotions). Some stimulus is also required – a factor preventing listeners from simply substituting their own a priori representation of an object when they experience the emotion evoked by hearing a particular sound combination. In other words, some motivating factor is needed that would compel a person to actively seek to understand the actual meaning behind a sound combination pronounced by another person rather than simply projecting their own associations onto it. We will talk about this stimulus later.

For now, let us note only that, in our model, the correspondence of the expression and content planes' emotion-link of the word is a necessary but insufficient condition for the birth of the word. What is crucial for us is that we are again dealing with emotion, essentially with a semantic series, since the expression and content planes of the word form a series with an

discovered, natural sounds – cicada chirping, wind noise, etc. Japanese scientists managed to discover a connection between features of the native language and the distribution of brain hemisphere functions.

Speakers of Japanese and Polynesian languages perceive all natural sounds, as well as sounds associated with emotions, with the left hemisphere, and all unnatural sounds with the right. Thus, for Japanese and Polynesians, the left hemisphere handles playing the qin, kan, other Japanese and Chinese instruments, natural sounds, vowel sounds. The right hemisphere perceives consonant sounds, unnatural sounds (explosions, metal hitting metal, playing European musical instruments). Europeans, however, do not have such a clear division of natural and unnatural sounds by hemispheres. The European's left hemisphere perceives both vowels and consonants intermixed.

However, this difference in hemisphere operation is not hereditary. For a European born in Japan who considers Japanese their native language, the hemispheres work according to the "Japanese" type.

Information about these studies can be found in Howard Brabyn's article "Native Language and the Brain," *UNESCO Courier*, No. 3, 1982, pp. 10-12.

For us this information is important because languages consisting predominantly of vowels have been preserved. These are island languages, probably preserving the sound structure of languages from the pre-Aryan, Austronesian period.

European languages, in our opinion, gradually changed their linguistic structure under the influence of the course toward industrialization taken by the Aryan tribes, tribes of conquerors conquering the world thanks to their chariots. To have chariots, one had to possess metallurgy skills: without a bronze bushing, a chariot could not be made. The Aryans, who created the religious cult of chariots, must have attached enormous importance to the art of metal processing. This is reflected in Aryan myths about Hephaestus. The role of natural sounds in their lives must have steadily decreased, while the role of unnatural, industrial noises increased.

identifier – the seme-emotion. In principle, the act of word birth represents a process of creating a suggestion formula. In our model, the main criterion applied to the word's suggestion formula is the optimal saturation of the word with emotion. The expression plane of the word and its content plane form a semantic series. The ability to build an optimal suggestion formula from seme and sound combination must have been one of the necessary qualities of the “Master of Names”, the “Universal Craftsman”.

The birth of language in this model is conditioned, particularly, by our consciousness's ability to build semantic series and be subject to suggestion. However, while this ability could lead to the emergence of the word, it could not preserve the emotion-link. Any reaction to any object changes a person's mental state. Significantly, not all objects and phenomena of the surrounding world in our model had to evoke a reaction from humans of the language birth era.

Remember that when a tourist begins to admire the beauty of some cliff, the local resident merely shrugs their shoulders: they neither perceive the special qualities of the cliff that fascinate the tourist, nor do they even register the cliff itself as noteworthy. Something similar to the effect of semantic saturation occurs.

Probably, humans reacted to objects and phenomena of the surrounding world that somehow influenced their lives, in whatever way that may have been, and did not react to neutral objects. Hence, it follows that at the moment of language birth, words must have emerged to designate precisely those objects and phenomena of the habitat that somehow influenced the tribe's survival. We are inclined to think that the same emotion, experienced with different intensities, causes different mental states because the more strongly a center of nervous activity is stimulated, the more extensive inhibition around it arises. Consequently, the intensity of stimulation in neighboring centers is suppressed. This means that mental states caused by strong and weak experiences of emotion are different. Since there are no two objects or phenomena of reality causing an identical mental state, in our model, a corresponding set of sounds had to be selected to designate each of them. Initially, the number of words in the language was probably limited by the number of experienced mental states.

Language emerging in this way was closely connected with the world and conditioned by it, reflecting connections between objects of the world as Mousterian humans understood them. This was an emotional model of the world generated by the consciousness of Mousterian humans. In this period of language emergence, all words must have been unambiguous, with each set of sounds corresponding to one undivided seme. The word carried within itself a powerful suggestive charge. It is difficult for us to imagine the power of words at that time. After all, our words are no more than worn shadows of those that appeared at the very beginning. Probably, words were used only on special occasions. Perhaps it was during that period that the custom of forbidden words arose, traces of which survive to this day both in explicit form (the prohibition on swearing) and in implicit, unconscious form – “medved” (bear) literally means “honey-knower”, which is not the genuine name of the animal but a veiled designation. The true tabooed name is preserved in the word “berloga” (lair of the *ber*). This word – *ber* – corresponds to the English *bear*, the German *Bär*, and the Latin *barbus*. The euphemistic nickname entered the language, as B. Rybakov noted, while the original forbidden

name was not preserved.⁶⁸ It is known that in primitive hunting collectives, mockery and cursing were perceived as very severe punishment.⁶⁹

It is also known what role curses and blessings played in much later times. The world hypnotized ancient humans. This is how their consciousness functioned.

Sartre in his novel “Nausea”, an extensive quote from which was given in the previous chapter, writes about how as soon as one begins to structure the world into semantic series – immediately there appears a sense of adventure (naturally, Sartre expresses this idea somewhat differently, not using the term “semantic series”). Many have described the mental state in which random events are perceived as proper, natural, and necessary (one tends to see a reflection of their emotions in all external things). This is precisely the structuring of the world into semantic series, usually arising under the influence of strong experience. Ancient humans must have lived in a fascinating world.

But within the very nature of language, according to our model, lurked the seed of its own mortification. As we noted earlier, the semantic unity of sound and sense is a necessary but insufficient condition for language birth. It is insufficient because people perceive the world differently, and what serves as an ideal suggestion formula for one person might not affect another with the same intensity. Therefore, some additional component was needed, some stimulus that would compel people to establish connections between sound and sense. In our model, this very component ultimately caused language's mortification.

To explain what is meant, we will have to digress and move to a topic that, at first glance, is quite far from language and related problems. Throughout all historical epochs, humans have faced situations that offer a choice between life and death. In every age of human existence, people have chosen death in certain circumstances. If we look closely at the diversity of situations leading humans to conscious self-sacrifice, we will see some common sense in all such situations.

Humans chose death:

- 1) obtaining or defending food (without it, they were doomed to starvation);
- 2) defending the interests of the clan (without the clan, they were doomed to physical death in a world where a loner could not survive);
- 3) protecting their children or family (which goes back to defending clan interests);
- 4) defending their abstract ideas (the death of Giordano Bruno).

⁶⁸ Translators' note. This is similar to how in English, the word “deer” was originally a general term for any animal (from Old English “*deor*” meaning “animal, beast”), but became a euphemism for a specific forest creature whose true name was taboo and eventually lost.

⁶⁹ “Attempts at slacking off and carelessness were severely punished by contempt and mockery, which was a very severe sanction in a collective where prestige is valued above all”. Vasiliev L. S. *Problemy genezisa kitayskogo gosudarstva* (Problems of the genesis of the Chinese State). Moscow: Nauka, 1983, p. 15.

The first three reasons can be united into a semantic series of life. They are understandable and naturally go back to the problem of biological survival. The fourth point stands apart. What connection do abstract mental constructions, artificial connections, or any ordering and structuring of our mental representations of the world have to human biological survival? How does this creative mental activity relate to our survival as a species? S. Freud believed that creative activity is a sublimation of the sexual act. We are inclined to think that he was both right and wrong. Freud was right about one thing: creative activity does indeed evoke in humans sensations remarkably similar to those experienced during orgasm.

More convincing than any references to scientific authorities, in our view, is a reference to the testimony of a person who possessed enormous creative potential – to A. S. Pushkin.

Here is how he describes his sensations during the creative process (1833):

X

*And I forget the world – and in sweet silence
I am sweetly lulled by my imagination,
And poetry awakens in me:
The soul constricts with lyrical excitement,
Trembles and sounds, and seeks as if in sleep,
To pour forth, finally, in free manifestation –
And then to me comes an invisible swarm of guests,
Old acquaintances, fruits of my dream.*

XI

*And thoughts in the head surge in daring,
And light rhymes run to meet them,
And fingers beg for the pen, pen for paper,
A minute – and verses will freely flow...⁷⁰*

If we identify the semantic series of images in this excerpt, we get the following complex of sensations: 1) concentration on one's sensations, 2) sweetness, 3) trembling, surging substance, unconsciously (as in sleep, that is, without the participation of reason) striving to pour forth, 4) freedom and lightness connected with the pouring forth of the trembling substance (rhymes, words).

From this point forward, we will refer to the complex of sensations connected with creativity as the complex of fertility (in the initial period of writing emergence in Sumer, the goddess of harvest and fertility Nisaba was considered to be the patron of scribes).⁷¹ Language reflects a feature of human thinking that is very important for our analysis: the word “birth” is applicable to all products of mental activity, as well as to all human emotions. We believe that the association of the word “birth” with terms like “thought” is not coincidental. Rather, in the era when language itself was emerging, thought (the process of structuring one's mental representation of the world) was conceived as something living – something that is born and

⁷⁰ Translated by AI.

⁷¹ Dandamaev, M. A. *Vavilonskie pistsy* (Babylonian scribes). Moscow: Nauka, 1983, p. 7.

requires protection, just like living children. The outcomes of all creative processes were conceived as living beings.⁷² From our perspective, this is precisely why Freud was mistaken in viewing art merely as a sublimation of the sexual act. Art and the sexual act in our model are equal: art led to the birth of a living organism, like any creative (mental) activity.

In our model, creative activity existed initially at the level of dreams and at the level of structuring representations of the world into semantic series according to emotions. We already know that without sleep, humans die. We already know that creative activity brings pleasure. But pleasure must inevitably stimulate the development of thinking (by thinking we understand the process of establishing connections between previously unconnected entities).

In our model, this pleasure must have become the stimulus that could prompt humans to recognize the connection between sound and sense in the newborn word. Having established some connection between objects, humans experienced pleasure and, for it to repeat, a stimulus was required. This stimulus could be the word. It is precisely the pleasure that humans experienced from the process of thinking that could stimulate the development of logical thinking and ultimately – the recognition of cause-and-effect relationships.

But that moment when humans learned to comprehend the world became the beginning of the end of the era of initial impulse. As applied to language, this meant the beginning of the process of sense fragmentation. As soon as humans began to discover new properties in objects and phenomena of the surrounding world, the emotions that these objects and phenomena had previously evoked changed. The link between sound and sense ceased to exist.

All further development of language can be likened to the “development” of a corpse in a sealed chamber – language ceased to be a model of world reflection, turned into a monstrous hierarchical system, very conservative, and, most importantly, far from universal. The point is that the more qualities humans discovered in an object, the more the meaning that stood behind the expression plane in the word naming this object fragmented into components. Recall that initially, this meaning was undivided. The fragmentation of primary meaning can be likened to the fall of an avalanche – this is an unstoppable process, continuing to this day.

For newly emerging meanings, one would need to find a sound identifier: create a new word. However, language follows the law of economy – introducing too many words would exceed human memory capacity. Therefore, new meanings become attached to old words. This creates

⁷² The view of the hieroglyph as a thought embodied in bodily structure, possessing skeleton, muscles, beautiful flesh, body movements, its tension, has long been established in Chinese calligraphy theory and was partly transferred to painting theory for the historical designation of strokes and other technical elements of writing: “meat”, “blood”, “arteries”, “breathing”, etc.

“... As a consequence of likening the structure of the hieroglyph to the human body came the use of such concepts as ‘meat’, ‘innards’, ‘blood’, ‘arteries’ in artistic analysis of calligraphy. Later Jiang Kui (1155-1221), the greatest theorist of calligraphy, in his treatise *Xu Shu Pu* (‘Introduction to Calligraphy’) would strengthen this physiologism in the perception of art even further. He would write, for example, about prose that has violations of artistic form as about a person without an eye”. Zavadskaya, E. V. *Mudroe vdokhnovenie* (Wise inspiration). Moscow: Nauka, 1983, pp. 105-106.

the polymorphism of words; with it, the living connection between sound and meaning finally dies.

However, it's clear that for a new meaning to become attached to a word, this new meaning must be firmly recognized by all members of the speech community. In other words, a significant period of time must elapse between when a new meaning first separates from the disintegrating semantic nucleus and when that meaning becomes established in the language. Meanings fragment much faster than they are assimilated by language. As a result, language can only express the meanings that have already become established, not the full spectrum of possible semantic content. A huge number of fragmenting meanings turns out to be inaccessible to language. About these “invisible” meanings we can assert only that they exist, and that they relate hierarchically. But we cannot isolate them – we have no apparatus for this.

However, precisely these invisible hierarchies determine language's future, guiding the development of its semantics. To operate with them, it is necessary to create a special new language, which is impossible and meaningless, since it will instantly become obsolete and cease to perform its functions. Hence, the gap between the fragmentation of meaning and the polymorphism of language constantly widens. Perhaps when this disparity reaches a critical point, language will die – we do not know.

Thus, language is not able to adequately express all the diversity of existing meanings. Isn't this the source of that awareness of the word's imperfection that haunted Tyutchev?⁷³

However, it turns out that words are unable to express not only the smallest particles of meaning. Those primary meanings from which everything began, meanings that were once undivided, have also become inexpressible. Thus, the developmental scale of each word's meanings, figuratively speaking, takes this form (Fig. 9):

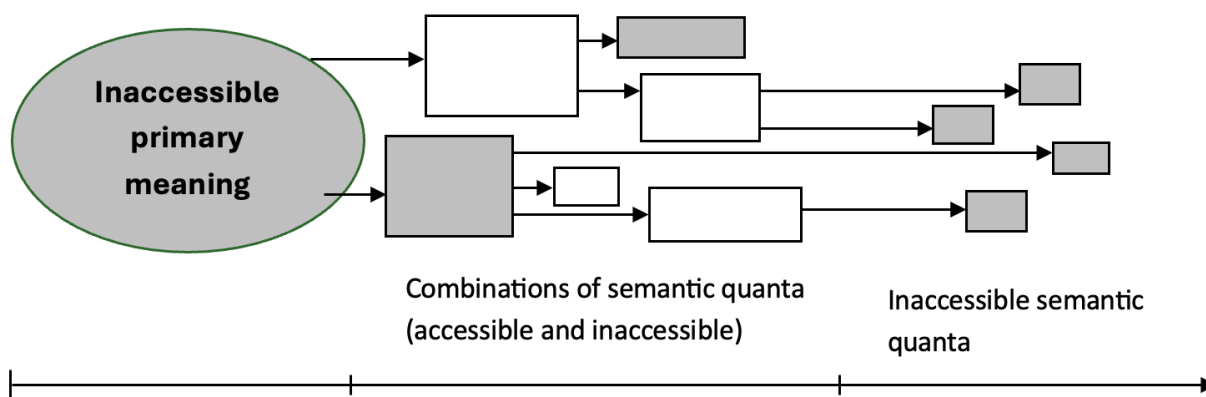


Figure 9. Scale of development of word meanings

The semantic scale is limited, on one side, by the primary seme, on the other – by semantic quanta. By primary seme, we understand the word's primary meaning, and by semantic quantum – the smallest, at a given moment indivisible further meaning of the word (approximately the same thing that Heidegger called “absolute meaning”). We emphasize that

⁷³ Fyodor Tyutchev (1803-1873).

a semantic quantum is not indivisible by its nature. It is a meaning that cannot be further divided at the present moment, though it inherently possesses the potential for divisibility. Both inaccessible and accessible meanings form the meaning field of a given word. As stated in the beginning of the study, the part of the meaning field realized in a phrase we call a seme. Every seme is a combination of semantic quanta. The expression plane is only an identifier of the meaning field of the word.

Our model allows us to explain the reasons that led to the rejection of the word as a means of communication in several Eastern teachings. We have already spoken about the school of name correction. The Taoists were skeptical of the word: “Those who know do not talk. Those who talk do not know”, states one of their maxims.⁷⁴ Zhuangzi said: “The Tao, manifesting itself in words, is no longer the Tao, words, becoming logically derived judgments, do not reach the truth of the unthinkable”.⁷⁵ “Words exist because of meaning; once you’ve gotten the meaning, you can forget the words. Where can I find a man who has forgotten words so I can have a word with him?”⁷⁶ Zhuangzi sought to find the absolute word that would evoke a representation of the Tao in undivided consciousness.

It is known that the followers of Chan Buddhism denied the word as a means of communication: they believed that reality should not be told about but experienced. But the crucial point is that language, at the moment of its emergence, precisely fulfilled this function – it allowed people to experience a suggested reality that didn't exist in the present moment, thanks to the suggestive function of language's main instrument: the word.

Thus, our model to some extent removes the contradiction between the culture of the Word and the culture of Silence. We discover that the goals pursued by the culture of the Word at its moment of emergence and those pursued by numerous cultures of Silence – from Hesychasm to Chan Buddhism – turn out to be remarkably similar. Words evoked the experience of undivided mental states – those fundamental states through which early humans structured their world, where all objects evoking a particular mental state became part of one semantic series. The personification of the seme-identifier of such a series, i.e. the seme of emotion, the seme of undivided mental state, as we have said previously, meant the birth of God (and endowing God with attributes chosen from objects entering into the semantic series of this seme meant the birth of myth).

Thus, if there existed a word denoting this mental state – an undivided seme of emotion, then from this inevitably follows that *the word was immanent to God*⁷⁷ (the complex of fertility in our model additionally strengthened this immanence, leading to the word being conceived as

⁷⁴ Tao Te Ching, Verse 56.

⁷⁵ Cited from: Malyavin, V. V. “Filosofiya Chzhuan-tszy: zabyt'e probuzhdeniya, nemoe slovo” (Philosophy of Zhuangzi: forgetting of awakening, silent word). In Eds L. S. Vasiliev and E. B. Porshneva, *Dao i Daosizm v Kitae* (Tao and Taoism in China). Moscow: Nauka, 1982, p. 43. (available in https://www.abirus.ru/user/files/Ebooks/dao_i_daosizm_v_kitae.pdf).

⁷⁶ Ibid.

⁷⁷ The opening phrase of the Gospel of St. John (1:1-18) is “In the beginning was the Word”.

living). In any case, Myth turns out to be closely connected with the Word, which precedes it. Together they can form a single whole, with the Word functioning as a hypostasis of Myth.

But if this is so, then mythologemes encoded in a work of art should reveal to us the very primary semes, that is, mental states close to states experienced by humans of the era of initial impulse. As the word's suggestive power began to fade due to the fragmentation of primary semes and the broken link between expression and content planes, people turned to poetry to evoke specific mental states during rituals, warfare, and hunting. The mythologemes embedded within semantic series could still produce effects on the human psyche that isolated words had lost the power to create.

“In those times when hyangga dominated,⁷⁸ the attitude toward the poetic word in Korean culture was special. Poetic works were magical. The composition, writing, performance of hyangga presupposed influence on the world as a whole or on its individual phenomena. Hyangga were incorporated into funeral rituals, prayers to avert national disasters, shamanic healing incantations, and other Buddhist ceremonies. Hyangga were composed and performed in critical situations in the fate of individuals and in the fate of the state. Appeal to the poetic word was a matter of responsibility. A person who composed and performed hyangga had to possess the moral right to its composition and performance. He specially prepared for this act <...> chose the appropriate time”.⁷⁹

And now we realize that the creation of an artwork (in particular music and verses, and initially, obviously, even the mere use of words) was such an important and responsible matter also because composition itself was conceived as a form of birth. A genie was practically being released from the bottle into the world.

“We recall that in the legendary China of the Old Kings, music was accorded a dominant place in state and court. It was held that if music thrived, all was well with culture and morality and with the kingdom itself. The music masters were required to be the strictest guardians of the original purity of the “venerable keys”. If music decayed, that was taken as a sure sign of the downfall of the regime and the state. The poets told horrific fables about the forbidden, diabolic, heaven-offending keys, such as the Tsing Shang key, and Tsing Tse, the “music of decline”; no sooner were these wicked notes struck in the Royal Palace than the sky darkened, the walls trembled and collapsed, and kingdom and sovereign went to their doom”.⁸⁰

“Music is founded on the harmony between heaven and earth, on the concord of obscurity and brightness.

Decaying states and men ripe for doom do not, of course, lack music either, but their music is not serene. Therefore, the more tempestuous the music, the more doleful are the people, the

⁷⁸ Hyangga – “songs of the east” or “songs of the native land” – the first written poetic works in Korean language. They originated in the ancient state of Silla (4th-7th centuries). They flourished in the epoch of United Silla (7th-9th centuries).

⁷⁹ Nikitina, M. Preface to the collection of Korean lyrics of the 8th-9th centuries *Bambuk v snegu* (Bamboo in snow). Moscow: Nauka, 1978, pp. 7-8.

⁸⁰ Cited from <https://ia800302.us.archive.org/21/items/MagisterLudi-TheGlassBeadGame-HermanHesse/hesseludi.pdf> (Translated from the German *Das Glasperlenspiel* by Richard and Clard Winston), p. 19.

more imperiled the country, the more the sovereign declines. In this way the essence of music is lost.

What all sacred sovereigns have loved in music was its serenity. The tyrants Giae and Jou Sin made tempestuous music. They thought loud sounds beautiful and massed effects interesting. They strove for new and rare tonal effects, for notes which no ear had ever heard hitherto. They sought to surpass each other, and overstepped all bounds.

The cause of the degeneration of the Chu state was its invention of magic music. Such music is indeed tempestuous enough, but in truth it has departed from the essence of music. Because it has departed from the essence of real music, this music is not serene. If music is not serene, the people grumble and life is deranged. All this arises from mistaking the nature of music and seeking only tempestuous tonal effects.

Therefore the music of a well-ordered age is calm and cheerful, and so is its government. The music of a restive age is excited and fierce, and its government is perverted. The music of a decaying state is sentimental and sad, and its government is imperiled".⁸¹

⁸¹ Ibid., pp. 19-20.

Chapter 9

IN ALTERED WORLDS

In this chapter, we will attempt to trace the range of phenomena with which art was associated among primitive peoples. We will begin our journey with initiation rites – a topic we've mentioned several times and one that has generated extensive literature. We will rely mainly on the above-mentioned fundamental research of V. Ya. Propp's *Historical Roots of the Wondertale*.

Initiation rites were known to practically all peoples of the world during the period of hunting ideology's dominance. This ritual was undergone by girls and boys who had reached a certain age. Initiation was performed in the forest, in a ritual house of zoomorphic appearance: the door of the house was associated with the mouth of the animal which symbolized the house. The boy's entry into the house was understood as his being swallowed by the totem. When he emerged into the world again, it was as a man – a qualitatively different being born during the ritual and expelled by the house-animal. The stay in the house was conceived as a metamorphosis in the totem's womb. The man was supposed to remember nothing about his former existence as a child. Even his name was changed to a different one, a man's name. The boy's former identity was considered dead, and relatives mourned him as if he had truly died.

During initiation, boys endured terrible tortures. These practices might include cutting strips from the back, removing a finger, beatings with sticks, fire torture, or placing a raw sheepskin on the head, which, as it dried, caused excruciating pain (Chinghiz Aitmatov described this exotic torture in the novel "And the Day Lasts Longer Than a Century", preserving the motif of memory loss but detaching the action from the initiation rite). Many boys did not withstand the tortures and perished.

"To account for the meaning of these atrocities, researchers have noted that they were meant to train young people in absolute obedience to their elders, that future warriors were tempered in this way, and so on. The natives themselves have sometimes explained them as a desire to reduce the population, because a certain percentage of children would perished as a result of these "dedications". None of these explanations seem convincing. Apparently, these atrocities were supposed to 'paralyze the brain', so to speak. Their long duration (sometimes weeks) and the hunger, thirst, darkness, and horror that accompanied them were together supposed to call forth a state the initiate would consider death. They cause temporary insanity (facilitated by consumption of various poisonous drinks) so that the initiate forgot everything in the world. He suffered such memory loss that after his return he did not remember his name, did not recognize his parents, and so on; and perhaps he really believed it when he was told that he had died and come back as a new, different person".⁸²

However, the meaning of memory loss and temporary insanity is much broader and immeasurably more important. It was during this state of mental dissolution that initiates established their critical connection with the world of spirits. Schurtz believed that the moment of insanity was the moment of acquiring corresponding abilities. Frobenius understood the

⁸² Propp, V. Ya. *Historical Roots of the Wondertale*, p. 23. <https://publish.iupress.indiana.edu/read/historical-roots-of-the-wondertale/section/81340a0a-40bb-4822-a4ba-bf096263a136#rch3>

meaning of this phenomenon in the same way. It is precisely in a state of insanity that the boy undergoing the rite meets with the spirit and receives gifts from it. Gifts from the world of spirits – this is the meaning and purpose of the initiation rite.

For instance, in one very interesting tale in Boas's collection, the hero gets to the wolves. All the wolves, bears, and otters are summoned, and every honor is shown to the visitor.

“Then the wolves suddenly brought in a corpse. They wrapped it in a wolf skin, put it by the fire and began to dance around it and beat time. Then the dead man got up and started to stagger. But the more they sang, the more confidently he began to move, and finally he started running exactly like a wolf. And the leader of the wolves said, 'Now you see what happens to the dead, we turn them into wolves. ' These wolves teach him the dance of the wolves. 'When you return home, teach the people our dance'”. They give him a magic arrow whose mere aim is enough to kill the game without firing a shot.⁸³ This example, among other things, provides an explanation of Yaga's magic gifts.

This myth also explains the ritual. We now understand the purpose of leaving for the realm of the dead to meet the totemic ancestor-master”.⁸⁴

The state of insanity represented a journey to the death realm to acquire magical gifts. And these gifts are power over animals and... art. In this case, the art of dance is the most ancient of arts. Considering that during this developmental stage, art represented the sole form of creative activity, we must recognize that creativity itself was understood as a gift bestowed from the world of spirits – the realm of death. The magic flute or self-playing gusli in fairy tales are always gifted by a being from the otherworld. In fairy tales, playing these otherworldly instruments invariably produces one of four effects:

1. Everyone sleeps.
2. Everyone cries.
3. Everyone laughs.
4. Everyone dances.

This strongly resembles mass hypnosis.

“The prince began to walk along the bridge, tapping with his cane, a jug jumped out and began to dance before him; he gazed at it and fell into a deep sleep” – says the fairy tale. Not only music but also dance and movement possess this sleep-inducing power. Rhythm induces sleep states (suggesting that rhythm itself – the capacity to construct semantic series – was regarded as a spirit-bestowed gift).

Shamanism is the most ancient form of religion, closely linked with totemism. Shamans perceived the spirits with whom they “entered into connection” as evil spirits. The fact that a spirit serves the shaman spoke only of the shaman's strength, not of the spirit's kindness. And poetic inspiration among many primitive peoples was considered to come from evil spirits.

⁸³ Propp cites the work by Boas F. *Indianische sagen von der nord-Pacifischen kuste Americas*. Berlin, 1895, p. 111.

⁸⁴ Propp, V. Ya. *Historical Roots of the Wondertale*, p. 67.

According to Massé, among the Bedouins – a nomadic people who created remarkable poetry,⁸⁵ there were people called “kahin” (soothsayer), who composed verses called “saj”. Saj consisted of short, choppy lines, characterized by jagged rhythm. Judging by the description, they were generally incoherent, typical shamanic verses. And the Bedouins firmly knew that it were evil spirits that inspired saj in poets. According to Massé, saj was composed in a state of frenzy, often by women.

When Muhammad first received prophetic revelation and encountered the angel Jibril, his immediate reaction was fear that he faced an evil spirit. The presence of saj-form verses in the Quran provided Muhammad's detractors grounds to question the divine origin of his revelations.⁸⁶

The creative arts – poetry, music, and dance – were thus understood as gifts bestowed from the world of spirits (moreover, the world of evil spirits), and to master them, it was necessary to go to the realm of death. By the way, the famous Castalian spring, according to Greek beliefs, was located at the entrance to the underworld. And the Scandinavians called poetry the mead of Odin. The transition to the realm of death could only occur in a state of insanity. To achieve this, boys during the initiation period were subjected to horrifying tortures, which, among different peoples, were generally the same. The idea that one could make a journey to the realm of death by means of a persistent pain ordeal did not arise accidentally. The following excerpt can perhaps shed some light on the emergence of this phenomenon.

“The chopping and tearing apart of the human body play a huge role in many religions and myths; they also play a big role in wondertales. <...> N. P. Dyrenkova’s work “Reception of the Shamanic Gift According to the Views of the Turkish Tribes” provides excerpts from a vast body of material showing that the experience of chopping and slicing up the body and sorting the insides is a necessary condition of shamanism, and it precedes the moment when a person becomes a shaman. Among the Turkic tribes of Siberia,⁸⁷ the procedure of hewing the body was exactly the same: it is performed in a state of hallucination. Here are a few excerpts from such materials. The Yakut shaman Gerasimov told the ethnographer A. A. Popov how he became a shaman. Suddenly (while searching for a lost deer) he saw three ravens in the sky; he felt a blow on his back and lost consciousness. Then “spirits” came to him and began to torture him. “He was beaten with ropes and straps; reptiles dug into his body. He was dipped in blood clots, he choked on blood, he had to suck the breast of a terrible old woman, his eyes were poked out⁸⁸

⁸⁵ Tradition states that any Bedouin understood poetry better than a civilized poet. The education of an Arab poet was considered incomplete if the poet did not make a “hajj” to some tribe. Even the incomparable Abu Nuwas considered it necessary to spend some time among the Bedouins. For more details see: Shidfar, B. Ya. *Abu Nuwas* (Abu Nuwas). Moscow: Nauka, 1978.

⁸⁶ Massé, Henry. *Islam*. Whitefish MT: Kessinger Publishing, 2007.

⁸⁷ Dyrenkova N. P. “Poluchenie shamanskogo dara po vozzreniyam turetskikh plemen Sibiri” (Receiving the shamanic gift according to the views of Siberian Turkic tribes). In *Sbornik Muzeya Etnografii i Antropologii AN SSSR* (Collection of the Museum of Ethnography and Anthropology at the USSR Academy of Sciences), IX. 1930, pp. 267-293.

⁸⁸ According to Propp, the blindness of Baba Yaga in fairy tales goes back to invisibility and of the hero himself. Propp explains this by the fact that beings of the world of death cannot see the living just as the living cannot see inhabitants of the world of death. Propp noticed that prophets and soothsayers (Tiresias), liberators of the people

[see above on blindness], his ears were drilled into, his body was cut into pieces and placed in an iron cradle”, and so on. According to the records of many researchers and observers, the future shaman of the Yakuts “experiences all the tortures of having his head cut off and his body sliced up and cooked”.⁸⁹ The Teleut shaman Koyon (rabbit) began her shamanic practice after having a vision. “Several people were cutting her body into pieces at the joints and putting these pieces in a pot to cook. Then two more people arrived. They again cut her flesh, gutted her body, and cooked it”. This is a typical picture of the shaman’s visions prior to taking up his shamanistic functions. One may ask why all the shamans hallucinate in the same way and why the images of these visions sometimes correspond in the smallest detail (being cooked in a pot, etc.) to the practice of the rite in America, Africa, Polynesia, and Australia on the one hand and to the material found in wondertales on the other.⁹⁰

Thus, there exists a certain mental state, steadily accompanied by a powerful pain ordeal.⁹¹ This represents a distinct altered state of consciousness – precisely the state that endows the shamans with their “supernatural” abilities.

Shamanism emerged alongside initiation rites, seemingly at a time when these rites were beginning to lose their original significance. Here dismemberment is replaced by finger cutting, “dying” is replaced by the portrayal of dying, etc. And the state that was previously accessible to all now becomes accessible only to shamans. This particular state – perceived as insanity by observers – became linked in collective consciousness with the origins of dance, music, and poetry. It seems that this is precisely the state of consciousness that we call mythological.

In our model, the Japanese samurai ritual of hara-kiri also goes back to the pain ordeal of the initiation rite and is associated with an altered state of consciousness. Chan (Zen) meditation played a significant role in the upbringing and spiritual life of samurai (we will later talk about the connection between Chan and the martial arts of Wu-Shu, as well as about the connection between Chan practice and the pain ordeal of the initiation rite).

Only samurai had the privilege of leaving life through hara-kiri. If we recall that vital force, according to the teachings of Chan masters, is located in the abdominal cavity, with its concentration being the navel, which Chan-Buddhist adepts contemplate during seated meditations, if we recall that it is precisely the stomach that samurai cut open, if we recall that cutting, dismemberment, extraction of entrails was widely used in initiation rites, and that according to some conceptions widespread in the East, what the soul is concentrated on before death is what it will incarnate into in the next birth,⁹² then the picture acquires certain completeness.

(Samson), forefathers (Jacob, Isaac), poets (Homer) are represented as blind. Before their eyes are opened, they must be blinded.

⁸⁹ Ibid.

⁹⁰ Propp V. Ya. *Historical Roots of the Wondertale*, p. 27.

⁹¹ It is curious that an exact description of the sensations of one being initiated as a shaman is contained in A. S. Pushkin's famous poem “The Prophet”.

⁹² Somadeva. *Ocean of the Streams of Story*, Chapter 69, p. 143. The adventures of Pushkaráksha and Vinayavatí in a former life. “There was in old time a merchant in Támraliptí, named Dharmasena, and he had a beautiful wife named Vidyullekhá. As it happened, he was robbed by bandits and wounded with weapons by them, and longing for death, he went out with his wife to enter the fire. And the two saw suddenly a beautiful couple of swans

In our model, initiation rites appear, however, when the mythological form of consciousness had already ceased to be the only and main one,⁹³ much later than the emergence of language. We can establish language's approximate birth period by identifying the latest possible moment of its emergence. This moment is the emergence of drive hunting (corralling) for mammoths. Such hunting required precise coordination of hunters' actions, and this could not be achieved without the presence of language (the only animals possessing the art of drive hunting (pack hunting) – wolves – acquired the required skills over millennia; wolves have a fairly strongly developed system of sound signaling). Neanderthals lacked mammoth hunting skills. Yet 30,000 years ago, a momentous encounter occurred on Mount Carmel where Neanderthals and humans gathered around a shared fire. And the brain mass of the humans who warmed themselves by this fire, as the latest scientific data show, was no less than that of any of our contemporaries.

Drive hunting for mammoths emerges within a countable number of centuries. Almost simultaneously with the first traces of drive hunting, the first “contracted” burials of skeletons appear.

“...Contracted burials appear as early as Mousterian times and are spread throughout the entire stone and bronze ages. They are not the only form of burial; alongside them there are also burials in the usual position of the deceased – extended, sitting, and even vertically standing (with earth tightly packed around them) skeletons. But contraction continues through many epochs, breaking off rather sharply at the boundary of the bronze and iron ages, when a number of other changes in society were taking place...

Contraction of skeletons in ancient burials has long been linked with the position of the embryo in the mother's womb. We think this is correct. Moreover, the red ocher with which contracted skeletons are usually sprinkled should, we believe, be considered not as a symbol of fire, but as something else. After all, if they wanted to symbolize fire, they could have placed an actual fire near the buried body or sprinkled hot coals on the grave – practices that are sometimes observed. Might this red coloring symbolize blood? After all, the embryo dwells within a crimson womb. Contraction was achieved artificially: the people burying the deceased either tied the limbs of the corpse or cut the joints in order to give it the desired posture of a fetus in the womb.

The idea of turning the deceased into an unborn embryo is connected, obviously, with the notion that the dead person can be born a second time. Therefore, he should be given the posture of readiness for this event. Ethnography gives us many examples of beliefs in the transmigration of the soul, in the rebirth of a person after death into one or another creature living on earth. In this, animistic and totemistic representations of early hunting cultures were closely intertwined. Humans did not distinguish themselves from nature but experienced complete integration with it. A vivid indicator was the preparation of the dead for the second birth in some new form (perhaps, human again).

coming through the air. Then they entered the fire, and died with their minds fixed on those swans, and so the husband and wife were born in the next birth as swans”.

https://en.wikisource.org/wiki/The_Katha_Sarit_Sagara/Chapter_69.

⁹³ Indirect confirmation of this is that the magic of name (language was generated by mythological consciousness) turns out to be more ancient than the magic of sacrifice.

In the abundant fairy tale fund of all peoples, there are many plots related to shapeshifters, half-humans-half-animals, animals speaking in human language, or humans understanding the language of animals. In many fairy tales, the antiquity of time is determined by the indication that 'then people still understood animal speech'. This indirectly connects to the belief that humans could transform into animals and then, after changing form again, return to human shape. Such a cycle of the soul was supposed, obviously, to contribute to the mutual understanding of humans and nature. Speaking animals, trees, birds, fish in the fairy tales of all peoples of the earth, the partial anthropomorphism of different links of nature is the legacy of that long era when humanity believed in reincarnation, in the second birth, after the life left the body of the deceased. This was thought of quite realistically: the deceased continued to live on earth in some other form...

...The Mousterian contracted burials laid the foundation for some semi-conscious representations about the possibility of humans to be reborn again in human or animal form (the ritual of turning the dead into an embryo was supposed to facilitate his second birth)⁹⁴.

Thus, belief in reincarnation emerges concurrently with language during the Mousterian period. This belief is closely linked with totemistic cultures, shamanistic practice, and initiation rites. However, we know that belief in reincarnation is connected with Buddhist beliefs. Buddhist traditions foster meditation practices and psychospiritual training techniques that, according to many scholars, target specific altered consciousness states⁹⁵.

It is noteworthy that the famous Christian thinker of the 3rd century, Origen, put forward the concept of “profane” and “deep” layers of the Gospel teaching. According to this concept, the deep layer of Christ's teaching, open only to the initiated apostles, represented the doctrine of reincarnation. In Origen's opinion, there are indirect indications of this in the text of the Gospel. Origen was accused of heresy. But:

“...the medieval Russian culture of silence... had its deep philosophical foundations, going far back into the depths of history. If we discard terminological peculiarities, we will see a striving to understand human nature and gain knowledge by an inner path. And further – an analogy with the teaching of yogis and Zen... Despite the difference in paths – an amazing deep commonality – where did it come from? This could become the subject of special research. In the historical plane, we see two foci – Buddha and Christ, from which waves of inner knowledge spread through direct penetration into continual streams.”⁹⁶

The state of enlightenment for Buddhists, the state of “descent of the Holy Spirit” among Christians, and shamanic ecstasy. If the state of enlightenment (but not the Chan or Zen state of satori) and the state of “descent of the Holy Spirit” are close mental states (if not one and the same), then the shamanistic state of consciousness is clearly different from them. And primarily in that in the training systems of yogis, Buddhists, and Christian saints, the pain ordeal is explicitly absent. Traces of it remain in the practice of asceticism and exercises, as well as in the piercing sensation experienced by the “enlightened”. Augustine described the ecstasy that

⁹⁴ Rybakov, B. A. *Yazychestvo Drevnikh Slavyan* (Paganism of the Ancient Slavs). Moscow: Nauka, 1981, p. 268.

⁹⁵ See for example: Abaev, I. V. “Arkhaichnye formy religioznoy teorii i praktiki v chan'-buddizme” (Archaic forms of religious theory and practice in Chan Buddhism). In *Buddizm i srednevekovaya kul'tura Tsentral'noy Azii* (Buddhism and Medieval culture of Central Asia). Novosibirsk: Nauka, 1980, p. 164.

⁹⁶ Nalimov, V. V. *Veroyatnostnaya model' yazyka*, p. 237.

seized him during prayer with the words “fiery joy”. Fieriness is a constant characteristic of Christian ecstasy, just as constant as pain for shamans.

During initiation rites, every participant – without exception, regardless of background – experienced ecstasy and spirit communion through tortures; by contrast, yogic or saintly enlightenment comes only to those dedicating their entire lives to preparing for such insight. Christian monks used asceticism and mortification of the flesh, flagellants – also self-flagellation, but this is not the main thing in their preparation, although it is precisely here that traces of the initiation rite are visible, as, indeed, in the crucifixion of Christ. One of the profound differences between Christian and Buddhist practice (we mean traditional Buddhism) from shamanic practice, in our view, is in the role of ethics.

It is unthinkable for Christian sainthood not to be virtuous, just as it is inconceivable for a Buddhist to violate the ethical teachings of Sakyamuni. Buddha's moral teaching reflects the morality of farmers. The God of the New Testament is also an agricultural god. For example, Yuri Frantsev wrote about the connection of the cult of Christ with agrarian cults of vegetative demons.⁹⁷

Thus, the transition to agriculture and the resulting sharp expansion of the ecological niche led to the discovery of a fundamentally new altered state of consciousness – one unattainable through drugs (which were often taken by shamans and soothsayers but never by Christian and Buddhist monks).

The ecstasy of the shaman is combined with insanity, often with aggressiveness. Drugs cause aggressiveness in people intoxicated by them. By contrast, both the Christian “descent of the Holy Spirit” and the Buddhist enlightenment entirely lack aggressiveness or dramatic external manifestations.⁹⁸

Thus, between these two altered states of consciousness (varieties of mystical consciousness), there is an immeasurable qualitative gap. This profound difference is reflected in the relationship between cult practices and art. Shamanism relies on dance and rhythm to achieve ecstasy, just as dances were integral to initiation rites. The practice of shamanic ecstasy is therefore organically connected to external rhythms and the principle of semantic series. This explains the cult of art characteristic of the “shamanic” epoch: art was inseparable from ritual, with dance and poetry believed to originate from the world of spirits.

As for Christian attitudes toward art, we find an example in Saint Augustine, who in his “Confessions” argued that art is sinful. However, in Augustine's opinion, art is not so much sinful in itself as our ability to enjoy it is sinful. Augustine reached this conclusion after observing that the more skillfully actors on stage convey the sufferings of an innocent person, the more pleasant it is for viewers (and for Augustine himself) to watch them, that is, the egoistic desire to empathize turns out to be stronger than love for one's neighbor. Others' sufferings on stage, ultimately, bring joy, and this joy is sinful for Augustine, since not joy, but

⁹⁷ Frantsev, Yu. P. *Nauchnyy Ateizm* (Scientific atheism). Moscow, 1972.

⁹⁸ In our model, visions of monks leading to the beating of dissidents are not the result of the psychological state traditionally called by us “descent of the Holy Spirit”.

pity and only pity should they evoke. However, the essence of the problem of art's sinfulness turns out, in our opinion, to be much deeper than Augustine thought. More fundamentally, art originated from the same altered states of consciousness that shamans and initiates experienced – states that Augustine's framework couldn't accommodate. The ecstasy known to Augustine, in our model, was of a completely different nature.

Somewhere between the shamanic and yogic states of mystical consciousness lies the state of enlightenment achieved by adepts of Chan Buddhism (Zen Buddhism). In connection with the intermediate position of Chan enlightenment, we will examine it in more detail.

Chan Buddhism arose in China in the 5th-6th centuries as a result of the fusion of certain concepts of Mahayana Buddhism and traditional Chinese religious and philosophical teachings. In fact, Chan Buddhism retained almost nothing from Mahayana Buddhism. Instead, it organically incorporated many concepts from Taoism.

Here is how Academician Vasily Alekseev reveals the *Tao* and the person living according to the laws of the *Tao* (the work of E. V. Zavadskaya "Wise Inspiration" is quoted):

"Tao-zero wanders in the realm of the great zero, nests in emptiness... The greatest Tao – in darkness and silence", "Great Tao is fog", "Tao is inexhaustible, all-encompassing", "Tao is mystery, it is hidden, it is the gates of all matter; it can act in the world, but does not dwell in glory, perishes from attachment to the worldly". "To enter Tao in the bondage of the world is impossible, the core of Tao – the highest liberation from worldly logic". "Tao, ridiculed by a fool, is the highest Tao". "Within its depth dwells the Tao-man; to comprehend Tao wash your heart, whiten your Spirit, suppress your human significance: Tao is expressed in foolishness, comparable to insanity; one enlightened in Tao is seemingly dark, one equated with Tao is seemingly in ashes, one entered into Tao is seemingly departed". "Tao-man knows neither good nor evil, neither true nor false, lives joyfully where for an ordinary person to live is painful; he is comparable to a valley (spacious and bright)". "Tao-man does not need human approvals, he is lonely among people, he is opposite to them and is a model to the world, he reduces himself to outward poverty, chooses for himself the last place, he is a holy fool, his being is insanity (for ordinary people); he, like Tao, floats, wanders, seeking nothing, but does not demand back, produces, but does not accumulate, is foolishly simple and primitively unrefined, wildly insane, 'acts little, but walks a great path'".

The most important thing for us in the above statements by Alekseev is the persistent likening of a person who has known the essence of Tao to a holy fool, to a madman. Let us note this: in Taoism, once again, we encounter the state of insanity, already familiar to us from the initiation rite and shamanic ecstasy. A normal person cannot comprehend Tao: the essence of one of the most famous postulates of Taoism boils down to the idea that one cannot talk about Tao with scholars, they are hindered by earthly, false knowledge, while "The Tao that can be told is not the eternal Tao".⁹⁹

Notably, the Tao-man does not know the difference between good and evil. In the system of Taoism, ethical problems exist only at the profane level. And a distinctive feature of a person "enlightened in Tao" is wild-insane behavior, that is, aggressive behavior. Note that in Taoism,

⁹⁹ This is the famous opening line of *Tao Te Ching*.

the aggressiveness of behavior in a state of enlightenment and the ignoring of ethics go hand in hand.

Besides the similarity with Taoism, the emotional-psychological features of Chan reveal a similarity with the folk holiday.

Characterizing the psychological aspects of ancient Chinese festivals, M. Granet writes:

“Winter festivals possessed an intensely dramatic character. A state of extreme excitement prevailed universally. According to eyewitnesses, even in Confucius's time,¹⁰⁰ all participants resembled madmen – suggesting they felt themselves illuminated by divine spirit. Exorcists, literally called 'madmen', played a crucial role in these events. Dances accompanied by clay drums brought participants into states of ecstasy, which they intensified further through intoxication”.¹⁰¹

We've previously noted that the state called “enlightenment” (Wu, Da-Wu, Dun-Wu, Da-Jue) – the core of the “Chan experience” and the primary goal of Chan religious psychotechnology – essentially constituted a transition to an altered state of consciousness (ASC) qualitatively different from “normal” everyday awareness. Psychophysiologically, Chan “enlightenment” manifests as a deeply emotional, ecstatic experience of unified being, transcending oppositions and closely resembling the material-bodily unity experienced during carnival celebrations, as described by M. M. Bakhtin.¹⁰²

It's particularly important to emphasize that during “enlightenment”, a fundamental restructuring of mental processes occurred, awakening both the spontaneity and irrationality of “natural” behavior – elements typically suppressed during socialization – and igniting in the individual the orgiastic frenzy, ecstatic possession, and “madness” characteristic of ancient Chinese festivals.

When the “great enlightenment” (Chinese Da-Jue, Japanese Satori) descends upon Chan Buddhists, they begin performing acts entirely unacceptable by ordinary standards: they erupt into wild laughter which, in Lin-ji's vivid expression,¹⁰³ “shakes heaven and earth”; they emit deafening exclamations that, according to Chan texts, could render listeners “deaf and blind for three days” or even cause them to faint; they use profanity and make indecent sounds; they burn sutras and images of Buddhist deities. Lin-ji himself, upon experiencing “enlightenment”, struck his temporary teacher Da-yu (to whom Huang-bo had sent him for training) three times under the ribs, then returned to his original mentor Huang-bo and slapped him across the face. Such behavior would have been unthinkable among patriarchs of other Buddhist schools.

While Chan “enlightenment” is not pathological – and despite their seemingly “insane” conduct, most Chan mentors maintained sound mental health, as did carnival participants – the methods used in Chan Buddhism to restructure “normal” mental patterns were so radical that they occasionally caused genuine psychological disturbances in students, collectively termed “Chan disease”. This condition bears some resemblance to the professional affliction of shamans – “shamanic disease” or “shamanic hysteria” – common in archaic traditions. It's worth noting,

¹⁰⁰ 6th–5th century BCE.

¹⁰¹ Cited from: Abaev N. V. “Arkhaichnye formy religioznoy teorii i praktiki v chan'-buddizme”.

¹⁰² Bakhtin M. *Rabelais and His World*. Indiana University Press, 2009, p. 344.

¹⁰³ Lin-ji Yixuan (died 867) – outstanding Chan patriarch of the Tang epoch.

however, that in Chan Buddhism such disorders were exceptions rather than the rule, and experienced mentors knew effective treatments when they occurred.

The extreme radicalism of Chan psychotechnology – which differed fundamentally from the Hindu and Buddhist yoga practiced in other schools – connects it to the “shamanic technique of ecstasy” closely associated with ancient Chinese festival traditions which, as Granet's description suggests, incorporated these techniques as essential elements. Historical records indicate that male shamans (nan-wu) specialized in exorcism rituals in ancient China, inducing trance states through rhythmic sounds and exhausting dance.

The “technique of ecstasy” employed by Chinese shamans is characterized by dynamism (sharp bodily movements), radicalism (deliberately breaking down ordinary mental structures), and rapid achievement of the desired consciousness state – all within a single ritual. We've already noted Chan psychotechnology's equally radical nature. What distinguishes Chan practice is its insistence on spontaneous, instant enlightenment – a principle Lin-ji forcefully advocated – setting it apart from schools favoring gradual, sequential approaches to spiritual attainment.

Chan psychotechnology also uniquely combines passive (seated) meditation borrowed from Indo-Buddhist practices with active, dynamic forms of psychophysical influence: monotonous group walking, “meditation” during physical labor (nu-qing), pushing, pinching, striking, and similar techniques. Particularly close in their psychophysical parameters to shamanic ritual dances are the “martial arts” (wu-shu) practiced in Chan monasteries as effective psychotraining methods aligned with the Chan ideal of instantaneous comprehension of ultimate truth through active engagement – wrestling, boxing, fencing, and similar disciplines.¹⁰⁴

Chan Buddhism is an ideology that has exerted and continues to exert a colossal influence on art. Therefore, we allowed ourselves to cite an extensive quote from an article by N. V. Abaev, the author of several works on the theory and practice of Chan Buddhism. This passage shows how Chan practitioners entering altered consciousness exhibit what appears as insanity to outside observers – manifesting as uncontrollable laughter and violent actions.

We saw earlier that in shamanic practice, similar behavior is the result of the influence of external rhythms and is accompanied by a pain ordeal. Shamanic practice neglected ethics.

N. V. Abaev notes that Chan Buddhism employs external rhythms extensively – through wu-shu movements and other dynamic psychophysical techniques. Wu-shu dances inherently embody aggression, reflecting their martial origins. It is interesting that contemplation of wu-shu can lead not only to mystical, but also to creative enlightenment: “The famous artist (Wu Tao-zi) after watching the sword dance of the military leader Pei Min, as soon as the latter finished, grabbed a brush and in an instant completed (his painting) – it was as if he was helped by God”. (Zhu Jin-yuan. *Tan-chao Minghua nu. About famous masters of the Tang period. “Wang Shi Hua Yuan”* vol. 3. Shanghai, 1932).¹⁰⁵

Here is what E. V. Zavadskaya writes about the role of ethical categories in the structure of Chan Buddhism:

¹⁰⁴ Abaev, N. V. “Arkhaichnye formy religioznoy teorii i praktiki v chan'-buddizme”, pp. 163-166.

¹⁰⁵ Zavadskaya, E. V. *Mudroe Vdokhnovenie*, pp. 61-62.

“According to the teaching of the Chan mentor Huang-bo (9th century), there are three stages of ethical behavior. At the lowest, people follow prescriptions hoping for a reward. At the middle, prescriptions are carried out without any calculation for benefit. This is the stage to which many Christians aspire, thinking that nothing higher exists. But Chan recognizes a third stage: the absence of any thought about the moral and immoral.”¹⁰⁶

“A special group of philosophical categories in Hui-neng's system¹⁰⁷ consists of ethical concepts: good and evil, enlightenment and ignorance, enlightenedness and unenlightenedness, etc. Such a series of oppositions is considered by the author of 'The Platform Sutra of the Sixth Patriarch' (Hui-neng) only at the profane level. Virtue and merit, transgressions and delusions are attributes of the phenomenal world and all of them are neutralized at the level of the Absolute.”¹⁰⁸

We see that the role of ethics in the preparation of Chan Buddhist adepts is not comparable to the role of ethics in Mahayana Buddhism and even more so in Christianity. This follows inevitably from the concept of “sudden enlightenment” – a state potentially accessible to anyone, adept or novice alike – just as initiation rites granted all participants “communion with spirits” through tortures, regardless of individual disposition.

As for torture and the pain ordeal, here is what I. V. Abaev writes in the already mentioned article:

“...paradoxical dialogues, which revived the archaic form of verbal dueling in Chan Buddhism, acquire exceptionally important significance. The main goal of dialogues between Chan 'mentors' and their students was to cause a 'breakthrough to enlightenment' in the student by driving him into a desperately hopeless situation. Therefore, the dialogues had a sharply dramatic character, pouring out into veritable duels, in terms of the intensity of the struggle not inferior, according to Chan authors, to 'fencing with real swords'. There is no exaggeration in this comparison and, moreover, in relation to some cases, it can be understood not figuratively, but literally. For example, the 'mentor' Shi-gong tested his students 'at the point of an arrow': he aimed at them with a bow and demanded an immediate answer. If we consider that various martial arts were cultivated in Chan monasteries – particularly the famous 'Shaolin school of wrestling' that originated in the Shaolin-si monastery and included training with various cold weapons – it becomes quite plausible that real swords might have been used in these teaching interactions. In Lin-ji's school, at least, 'mentors' very often used wooden monastic staffs, and their students tried to block the blow and even sometimes fought back, if, of course, they dared”.¹⁰⁹

“It has already been noted that in the psychophysiological aspect, Chan practice in some ways returns to the culture of the primitive, to initiation rites.”¹¹⁰ It is also important to note that in

¹⁰⁶ Zavadskaya, E. V. *Kul'tura Vostoka v sovremennom Zapadnom mire* (Culture of the East in the Modern Western World). Moscow: Nauka, 1977.

¹⁰⁷ Huineng – initially an illiterate woodcutter, then the Thirty-Third Buddhist, Sixth Chan and First Patriarch of the Chan school. Central figure in Chan history. Put forward the concept of “sudden enlightenment”.

¹⁰⁸ Zavadskaya E. V. *Kul'tura Vostoka*.

¹⁰⁹ Abaev I. V. “Arkhaichnye formy religioznoy teorii i praktiki v chan'-buddizme”. pp. 170-172.

¹¹⁰ Pomerants, G. S. “Traditsiya i neposredstvennost' v buddizme chan' (dzen)” (Tradition and Immediacy in Chan (Zen) Buddhism). In *Rol' traditsii v istorii i kul'ture Kitaya* (Role of tradition in history and culture of China). Moscow, 1972, p. 83.

Chan Buddhism, the symbolism of ancient mysteries was recreated in the most general schematic features. Each Chan adept before his 'breakthrough to enlightenment' – which meant his transition to a qualitatively different level – had to experience a symbolic death, the sign of which was chaotic mental states ('great doubt'). 'Great death' (da-si) was followed by 'great awakening' (da-zi) to a new life, when the order of things destroyed by 'great doubt' was restored.”¹¹¹

Thus, in the psychophysiological practice of Zen, one can find three significant elements: first, the custom of tortures (both verbal and physical); second, the practice of shocking (where 'mentors' grabbed students by the chest, stunned them with a cry of 'hē!', stealthily crept up and beat them with sticks, or suddenly asked absurd questions that students had to answer under threat of beating);¹¹² and third, traces of ideas about the death and resurrection of the adept undergoing training. Let us recall that in the initiation rite, the initiate who entered the building where the ritual of initiation took place was thought to be swallowed by the animal ancestor and came out of the building only after reaching ecstasy, a state of “communion with spirits” which was presented as an act of birth of a qualitatively new being with a new name, new memory, etc.

It is very interesting that, generally speaking, Chan “mentors” did not reject seated meditation. The founder of Chan Buddhism, Bodhidharma, understood spiritual practice only as seated meditation, devoid of visual images. In our model, all elements linking Chan “enlightenment” with shamanic ecstasy share one key feature: the use of external rhythms to influence the practitioner. And it can be observed that in the systems known to us that induce altered states of consciousness, those that employ external rhythms typically disregard ethics. Conversely, ethics holds paramount importance in systems that produce altered states without using dynamic forms of psychophysical influence – that is, without relying on external rhythms. Yet it is precisely the first group of systems – those using external rhythms – that fosters the rapid development of art.

The poetry of peoples at a primitive stage of development still enchants us to this day – it was then that myths and songs were formed, which Homer summarized,¹¹³ it is to those forgotten times that the origin of epic cycles dates back. The teaching of Chan gave such a powerful impetus to the development of painting, poetry, and calligraphy that echoes of it can be found in the most unexpected places: in the prose of the prominent American prose writer J. Salinger, the German prose writer H. Hesse, in the philosophy of the forerunner of existentialism Kierkegaard, in Matisse's painting, in Mahler's music, in A. Schweitzer's philosophy of life.¹¹⁴

¹¹¹ Abaev I. V. “Arkhaichnye formy religioznoy teorii i praktiki v chan'-buddizme”, p. 170.

¹¹² Ibid., p. 174.

¹¹³ E. V. Zavadskaya in the article “Daoskaya Poetika Stranstviy” (Taoist poetics of wandering) speaks about the deep dissimilarity between the “Iliad”, where almost every line is confirmed by archaeological excavations, and the “Odyssey”, full of fanciful fiction. The wanderings of Odysseus, Zavadskaya believes, are spiritual wanderings, travels through the depths of one's own consciousness, i.e., a phenomenon of the same kind as Tao Yuanming's journeys to the “Peach Spring” or the landscapes of Wang Wei, Mi Fu, Fan Kuan. See the collection *Dao i Daosizm v Kitae* (Tao and Taoism in China). Moscow: Nauka, 1982.

¹¹⁴ For more details see: Zavadskaya E. V. *Kul'tura Vostoka*.

Interestingly, in recent decades in the West, a sharp increase in drug consumption (drugs are connected, as we have already mentioned, with shamanic practice) was accompanied by a surge of increased interest in Chan Buddhism in the Japanese variant (Zen), as well as the emergence of psychedelic art, that is, art generated by drugs. Psychedelic music, with its heavy, dominant rhythms, appears to be a “secondary wave of spirit-world gifts” – echoing those bestowed upon humanity in pre-shamanic eras. This music's aggressive, psychologically disruptive qualities and its relationship to specific altered consciousness states are unmistakable. It is known that psychedelic art emerged following the appearance of the drug LSD.

Seventeen centuries ago in China, something similar was happening. In connection with the Taoist teaching on longevity, a fashion for hallucinogenic potions (yao) appeared. The most famous of them are the “cold food powder” (another name – “powder of five stones” and “magic mushroom” (lingzhi). Adherents of the “Wind and Flow” (Fengliu) style – famous poets, artists, and calligraphers (Xie Lingyun, Wang Xi Zhi, Bao Zhao, Gu Kaizhi, and other “celebrities”, as adherents of the “fengliu” style were called), constantly used elixirs. This had a detrimental effect on their psyche. According to L. E. Bezhin, celebrities were often visited by painful visions, with which the thought of suicide was not infrequently connected.¹¹⁵

Scholars reasonably interpret the fantastic landscapes in Chinese “wandering poems” of that period as hallucination-induced visions. Cao Zhi wrote:

*Having thrown away
The earthly husk
Piercing the fog,
I rushed into the sky.
I fly
Over Lake Dinghu...*

(interlinear translation from Russian poetic translation by L. Cherkassky)

“...and it seems this is not just a product of creative fantasy – this flight, like those described by his fellows, he saw more clearly than simple imagination would allow”.¹¹⁶

E. V. Zavadskaya, who dedicated a special work to the study of the aesthetics of the “magic mushroom” (Lingzhi),¹¹⁷ believes that the hallucinogenic effect of the mushroom was perceived as spiritual enlightenment, and that engagement with this stimulant was akin to the psycho-physical practice of Chan Buddhism.

¹¹⁵ Bezhin, L. E. *Pod znakom “Vetra i Potoka”* (Under the sign of “Wind and Stream”). Moscow: Nauka, 1982, p. 101.

¹¹⁶ Lisevich, I. S. *Literaturnaya mysl' Kitaya na rubezhe drevnosti i Srednikh Vekov* (Literary Thought of China at the Turn of Antiquity and the Middle Ages). Moscow: Nauka, 1979, p. 55.

¹¹⁷ Zavadskaya, E. V. “Filosofsko-esteticheskiy smysl tak nazyvaemogo ‘bozhestvennogo griba’ (‘Linchzhi’) v iskusstve Kitaya” (Philosophical and aesthetic meaning of the so-called ‘Divine Mushroom’ (‘Lingzhi’) in Chinese art). In *Nauchnye soobshcheniya Gosudarstvennogo Muzeya Iskusstva Narodov Vostoka* (Scientific reports of the State Museum of Art of the Peoples of the East). Moscow: USSR Academy of Sciences Publishing, 1971.

Thus, the “enlightenment” achieved by Chan-Buddhist adepts was akin to the effect of hallucinogenic stimulants. In our model, this is another confirmation of the intermediate nature of Chan practice.

We have already said that both shamanic ecstasy and the enlightenment of Chan adepts were accompanied by insane laughter and violent aggressive outbursts (“enlightenment” of a Buddhist hermit is accompanied by a smile, as is the “enlightenment” of a Christian saint). Folk holidays (carnival) were also accompanied by the element of laughter. Many researchers have spoken about the sacred nature of this laughter (Bakhtin, Propp, Abaev, Sofronova, and others). In one of his most impressive stories, the writer, Nobel Prize laureate Pär Lagerkvist turned to the cult of Apollo (the novel *Sibyllan*, “The Sibyl”). He recreates the picture of the process of divination and draws attention to the fact that in some frescoes Apollo was depicted with an idiotic smile. A drunken idiotic smile is also found in some depictions of Dionysus. The cult of Dionysus is associated with carnival, with bacchanalia, sometimes turning into bloody frenzied orgies (according to myth, it was the bacchantes in a state of “sacred madness” who tore Orpheus apart).

The cult of Apollo is associated with soothsayers. Apollo is the god of art. Earlier, we cited A. F. Losev's work stating that Apollo was specifically associated with everything structured and ordered in the world – which, in our model, includes semantic series.

Thus, aggressiveness, “sacred insanity” and intoxicants share a surprising kinship with semantic structuring of reality, prophetic abilities, and artistic creation. And with this same complex, the laughing principle is connected: laughter or a smile. We are interested in the connection between laughter and the rapid breaking of mental structures.

As Abaev's analysis demonstrates, shamanism employs techniques for radical disruption of established mental patterns. It also uses laughter – wild, insane laughter accompanies the shaman's ecstasy. We have already mentioned that a Chan-Buddhist adept laughs insanely and commits aggressive acts in a state of enlightenment. The state of insanity, accompanied by wild laughter, was associated with death during the time of initiation rites – with death and new birth.

In the system of autotraining, published by Vladimir Levi in the book “The Art of Being Yourself”,¹¹⁸ one can find exercises for relaxing the facial muscles. Those who have achieved relaxation of the facial muscles know that in a relaxed state, the face stretches into a smile. Thus, the expressionless smile on the face of Buddha turns out to be connected with the technique of meditation. The result of using the technique of meditation in Mahayana Buddhism is a gradual transition to an altered state of consciousness. And the gradual transition is accompanied not by wild laughter, but by a smile.

In Chapter 2, we suggested that the comic effect in literary parody is associated with a sudden disruption of the hypnotizing rhythm, that is, with a sharp transition from a hypnotic state of consciousness to an ordinary one. Judging by the behavior of shamans and Chan adepts, not

¹¹⁸ Levi, V. *Iskusstvo byt' soboy* (The Art of being yourself). Moscow, 1977. English version is *In Touch & In Tune*, trans. by Michelle MacGrath, https://levi.ru/article.php?id_catalog=41.

only a sharp transition from an altered state of consciousness to an ordinary one is accompanied by laughter, but also the transition from an ordinary state of consciousness to an altered one. Only in the latter case, laughter is characterized by observers as “insane”. “Insane laughter” means essentially that the connection between laughter and mental illnesses has been recognized since ancient times.

Mental illnesses lead to an altered state of consciousness. It is known that holy fools often suffered from epilepsy. In Russia, holy fools were treated as “God's” people. In the Chinese tradition, epilepsy appears as a “high disease” associated with the state of “enlightenment”.¹¹⁹ And some forms of epilepsy known to medicine turn out to be connected with bursts of causeless laughter.

It is known that laughter accompanies other types of mental disorders as well. The relationship between religious-mystical consciousness and pathological mental states warrants dedicated investigation. Another worthy subject for special research would be the connection between altered states of consciousness induced by religious practices and those states we term “poetic inspiration”.

We have seen that various methods of mental reorganization, adopted by followers of different teachings, lead to different altered states of consciousness. In the Chinese tradition, it was customary to compare not just the texts of works of art, but the very nature of the corresponding inspirations. “The inspiration of Li Gonglin is not very elevated” – this is how the outstanding artist, calligrapher and art historian Mi Fu spoke about a major contemporary artist.¹²⁰ So, Mi Fu believed that there are different types of inspirations.

Inspiration yields a complete world-model where everything interconnects, pulses with life, every element serving a purpose, nothing extraneous. And the essence of this model is determined by the nature of inspiration, by the myth which, like a hidden spring, drives the model.

In chapter 5, models created in a state of “shamanic” inspiration were presented (this applies to a greater extent to M. Tsvetaeva and to a lesser extent to M. Svetlov). The mythological level of these models is the level of fairly primitive shamanic representations.

Now we will try to identify other types of inspiration that generate models whose mythological level has a more, so to speak, Christian-Buddhist character.

ANALYSIS 1

*O sky, sky, you will appear in my dreams!
It cannot be that you have gone completely blind,
And the day burned out like a white page:
A little smoke and a little ash!*

¹¹⁹ “In combination with the hieroglyph 'xian', when written in connection with illness, 'dian' means convulsive state, epilepsy, 'high illness'. An illness of this kind is, of course, a great misfortune, but in aesthetic literature it appears as a symbolic form of alienation of the spirit from its environment, it opens access to another world.”

¹²⁰ Zavadskaya E. V. *Mudroe vdokhnovenie*, p. 62.

(O. E. Mandelstam, 1917)

We have already mentioned earlier that according to V. Ya. Propp, blindness goes back to invisibility, inaccessibility. An inhabitant of the earthly world becomes blind in the world of spirits. Conversely, spirits from the otherworld become blind when entering our earthly realm. The sky does not see the human in the world of Mandelstam's verse. But the human also sees the sky only in dreams. The sky is inaccessible to humans, therefore it does not see them. The sky represents a lost realm, accessible solely through dreams, only during night. The sky connects to night through blindness's darkness.

But the sky is also expanse, it is Light. And this light turns out to be *inaccessible – during the day*. Consequently, in this model, day and light are not the same thing. Light is inherent in the sky, and therefore inherent to sleep and to Night (“Light – as the ancients conceived it – is not completely identified with the sun. Therefore, in the mythology of different peoples, there is a known duality: along with the deity of sun and light, there can exist a special god of the Sun, as a celestial body”)...¹²¹

Day without Light is mere emptiness. It consumes itself, paradoxically producing light, as the spent day yields to night – and to true Light. Burning brings light. At the same time, only a little smoke and ash remain from the day itself. Smoke, ash – the opposite of light, as day is opposed to light. The insignificance, transience of smoke and ash is the natural essence of the day deprived of light. The lost sky and the day that burns out to enable its return are incommensurable entities. However, it was not always so. The human cannot believe in the blindness, inaccessibility of the sky. He has not yet become accustomed to its loss. All this is an interpretation of the myth of the lost Paradise.

Mandelstam contrasts two worlds – the real world and the lost world. But if in Tsvetaeva and Svetlov, the world opposed to the real was perceived as the world of death, and it was precisely the inversions of this world, its transformation into the world of life, that evoked a specific mental state in us, then in Mandelstam the world of the sky is not connected with death. It is rather a cradle, forever lost, but not forgotten. There is no juxtaposition of life and death, although the moment of “inversion” is present here too (day turns into darkness, and night – into light). The world set against reality – the world of the sky, the world of the primeval cradle, is also connected with life.

This is a different mythological level, qualitatively different from the level presented in Chapter 5.

ANALYSIS 2

*The reveille sounds... from my hands
Ancient Dante falls,
On my lips the begun verse
Unfinished becomes silent –
The spirit flies far away.
Familiar sound, living sound,*

¹²¹ Rybakov B. A. *Yazychestvo drevnikh slavyan*, p. 368.

*How often you resounded
There, where quietly I developed
In a long-past time.*

(A. S. Pushkin, 1829)

Reveille is the signal for waking up. Reveille sounds on the border between sleep and wakefulness, night and day, darkness and light, active life and night visions. Reveille can sound either in the morning to wake soldiers or in the evening to signal bedtime. We believe that Pushkin means the morning reveille, since in this verse it is a “living sound”. It is unlikely that going to sleep would be associated with a living sound. In addition, the reveille signal causes a sharp, sudden change in psychological state. A loud sound can wake a person up, but is unlikely to instantly put him to sleep. Therefore, in our analysis, we will proceed from the assumption that the reveille in the verse is a signal for awakening.

LEVEL OF SEMANTIC SERIES

The seme of silence saturates the following images: 1) unfinished verse, falling silent on the lips; 2) quiet development; 3) long-past time (something ancient is distant in time, and just as distant sounds reach us faintly if at all, so memories of ancient times come to us quietly); 4) ancient Dante (the word “ancient” contains the seme of oldness, antiquity, and we have already spoken about the connection between antiquity and silence).

The following images of the verse are saturated with the seme of freedom: 1) the spirit, flying away as far as it wants; 2) quiet development. The seme of awakening can be found in the images of reveille, living sound.

The seme of sleep permeates the images of the tome of Dante falling from the hands, the flying away spirit; the quieting verse. The seme of life is contained in the images of quiet development and the sound of reveille, the living sound. The seme of inconspicuousness is contained in the image of quiet development. In it, one can also find the seme of naturalness.

MYTHOLOGEMIC LEVEL 1

The sounds of reveille cause awakening. Waking up is associated with “dawn” – which is one of the most powerful archetypal images, saturated with the seme of life, birth. However, in this model of the world, awakening is very similar to falling asleep, dying, or transitioning to some other mental state, different from wakefulness: the falling tome, the verse interrupted mid-word, the flight of the spirit – a typical set of images saturated with the seme of sleep or death (the birth of verse – as well as music – is saturated with the seme of life, fertility, and the death of music or verse at the archetypal level goes back to cosmic catastrophe, disintegration).

The spirit flies away to a non-existent illusory world, inaccessible to humans in the normal state, to an unreal world. Like the sky in Mandelstam's verse, this unreal world in Pushkin's verse is not the world of death, but the world of the primeval cradle, the primary source, the world of the lost beginning.

The following semes are associated with this world: life, silence, antiquity, naturalness and freedom (the last two semes are connected with the image of quiet development: quiet

development is an inconspicuous and free development, not distorted by external influence and not distorting the natural order of the surrounding world with its course; development in itself, independent, as in the mother's womb).

The seme of naturalness bridges quiet development and the image of reveille: reveille is a natural sound in the world of quiet development; it is familiar and living. The seme of freedom connects the world of quiet development with the flying spirit. Antiquity (remoteness in time) binds the world of the primeval cradle and the ancient tome of Dante. The seme of silence links the world of the primeval cradle with the unfinished verse, frozen on the lips.

In Pushkin's verse, two worlds are depicted: the world before the signal of awakening and the world into which the poet's spirit penetrates after the signal, and the second world sharply replaces the first. However, it is interesting that the world which we will conditionally call "the world before awakening" as opposed to "the world after awakening" manifests itself in the following images: 1) reveille; 2) ancient Dante; 3) unfinished verse. Each of these images is semantically connected with the unreal world of the primeval cradle, as was shown above. Thus, the world before awakening, consisting only of components semantically connected with the unreal world of the primeval cradle, suddenly itself begins to acquire an unreal character.

The free flight of the spirit turns out to be a journey from one illusory world to another, equally illusory. But these worlds differ from each other: only the second world has the seme of freedom.

The only reliable support in that shaky mirage, into which the space of the verse has turned before our eyes, the only familiar ground is the sound of reveille. This sound is saturated with the seme of life, vigor, but this sound's dual nature fundamentally diverges from the duality characterizing other images in the analyzed verse. Reveille is a signal, a border between two worlds, a bridge thrown across the abyss. Reveille is a brief real moment between two non-existent worlds.

The spirit's journeys through illusory worlds transcend temporal constraints. Time itself stops at the moment of return to the world of the primeval cradle.

The sound of reveille, by virtue of being a sound, possesses temporal extension. Behind the sound of reveille emerges a third world in the verse model – one with genuine temporal dimension. This world is merely hinted at in the poem: the real earthly world. We intuitively recognize this third world as ephemeral – inheriting the transitory nature of the reveille sound that serves as its emblem. It exists as a kind of island doomed to disappear in a sea of non-existence, a rhythmically emerging and vanishing bridge between two unreal worlds.

This structure strikingly parallels Buddhist reincarnation doctrine, which portrays earthly existence as a momentary flash within infinite cycles of rebirth.

MYTHOLOGEMIC LEVEL 2

The reveille signal is the boundary between day and night. The moment between day and night is a frontier, insurmountable for inhabitants of the spirit world. And the spirit, hearing this signal, flies far away – to itself, to its world, until the next midnight. The departure of the spirit

naturally entails the death of the verse (the night nature of art was shown earlier, when we discussed poetry being perceived as a gift from spirits).

MYTHOLOGEMIC LEVEL 3

Until now, in the verses we have analyzed, we have inevitably encountered inverse symmetry of real and unreal worlds. Sometimes they switched places before our eyes. But always one of the two worlds remained (or became) the real world.

In Pushkin's poem under analysis, we unexpectedly encounter a fundamentally different construction: what is contrasted is not the real world with the unreal, but one unreal world with another, substantially unreal. One altered state of consciousness is juxtaposed against another, both removed from ordinary awareness. Moreover, the transition to another consciousness in the verse is shown as the death of creativity. It is precisely the death of the verse and the falling from the poet's hands of the tome of Dante that precedes the transition to a state characterized by a feeling of naturalness and freedom.

Why did the poet need to show the death of the verse?

We consider the text as a complete model of the world, a living body in which everything is interconnected. This approach to poetic analysis precludes the possibility of random or accidental imagery. What seems random at the profane surface level should find explanation as we delve deeper into the text. We have already revealed the similarity between the ideas about the world in the model of Pushkin's poem and the Buddhist model of the world. The identification of the next level of the verse is based on the further development of this theme.

Earlier, a brief characterization of Taoism was given – a teaching closely connected with Chan Buddhism. Chinese thought understands Tao as a kind of primary principle permeating the Universe. The form of Tao's activity is non-action.

By non-action is meant activity that does not violate the natural course of events determined by Tao – the primordial principle. If a chip is carried away by a current, then it floats, although it does not do anything itself to float – such is the natural order of things, determined by Tao.

A person who has comprehended Tao is like this chip. His actions do not interfere with anything, they are natural, for they are subordinated to Tao. From the outside, the actions of a Tao-person look like non-actions, for they are dissolved in the natural order of things, and therefore not visible.

“Quiet development” in the world of the primeval cradle is very reminiscent of Taoist non-action. The quietly developing poet develops by himself, not being subjected to influences from outside and not disturbing the natural order of things with his development. Therefore, his development is inconspicuous, quiet. This is how a child grows in the mother's womb.

But only a person who has comprehended Tao can live according to the laws of Tao. In order to comprehend Tao, one must destroy oneself as a personality, erase the boundaries between one's individuality and the world around. Only in this case is it possible to reach Tao. Since creativity is an individual process, comprehending Tao requires suppressing creative potentials.

Taoists and Chan Buddhists highly valued creative inspiration, believing that through creativity the poet expresses Tao.

But poetic enlightenment and mystical enlightenment, though they seemed somewhat close, were not commensurate. Mystical enlightenment was the ultimate goal. Poetic, creative enlightenment was viewed as a step toward mystical enlightenment.

And if we look carefully at the text of Pushkin's verse, we will see in it a mysterious reflection of the described Taoist ideas that penetrated into the Russian Lyceum context. Indeed, the signal of reveille causes the death of the verse, which freezes on the lips, and the poet transitions to a state of "quiet development" so similar to Taoist non-action.

Moreover, in order to immerse oneself in this altered state of consciousness, it was necessary to kill the state of consciousness associated with structuring representations of the world into semantic series – a state associated with creative activity.

It is interesting that in Taoist texts, the moment of enlightenment and comprehension of Tao is often connected with awakening. It is described as awakening in the model under consideration as well. Moreover, awakening becomes possible thanks to a sound from the material world.

Only through phenomena of the world, possessed of a dual nature, can one immerse oneself in the depths of one's "Self".

Bashō had a haiku with similar problematics: "Old pond. A frog jumped in. Splash of water".

The famous researcher of Zen Buddhism, D. T. Suzuki, wrote regarding this haiku that only through the jump of the frog (a phenomenon of the material world) can one enter the realm of timeless time, similar to the old pond, in which nothing happens¹²². And in Pushkin's poem, as mentioned above, time as such does not exist, and awakening is connected with a phenomenon of the material world – the sound of reveille – and turns out to be an entry into the realm of timeless time.

It seems that using the method of semantic series, we were able to identify three types of inspiration, each of which generates remarkable verses and, nevertheless, qualitatively differs from the others. This difference lies in the peculiarities of the altered state of consciousness inherent in a given type of inspiration. Each type of inspiration generates its own mythologemic structures and, consequently, has an analog among mystical altered states of consciousness, with which the corresponding type of inspiration is somehow connected.

We are aware that the three types of inspiration identified by us are equally legitimate and, of course, do not exhaust the entire diversity of types of inspiration. We focused on these three types because, in our opinion, they can form a kind of initial coordinate system in which the

¹²² For more about this analysis by D. T. Suzuki see in the book by Fedorenko, I. S. *Kitayskoe literaturnoe nasledie i sovremennost'* (Chinese literary heritage and modernity). Moscow: Khudozhestvennaya literatura, 1982, pp. 274-276.

subject can then be investigated, taking into account that any poet should in principle have access to all types of inspiration.

The first type of inspiration is Tsvetaeva's. The mythologemic structures here present a clear opposition between the real world and the world of death – a different existence perceived as an attractive and mysterious force connected with enigmatic vitality: dangerous, alluring, and inaccessible. The analog of the first type of inspiration is shamanic ecstasy and initiation rites. These practices gave rise to the idea of an ancestral spirit realm whose inhabitants possess supernatural abilities: they control the elements, ensure hunting success, and regulate human life of people – thereby becoming a source of life themselves.

The second type of inspiration – Christian in nature – we observed in Mandelstam's work. His quatrain also presents a clear opposition between two worlds: real and unreal. However, unlike in Tsvetaeva's work, the unreal world – the sky – connects not with death but with light and life. The very fact of its loss suggests that this world once belonged to the poet, with the sky functioning as a primeval cradle. The analog of Mandelstam's inspiration, in our view, is the altered state of consciousness that gave rise to the concept of afterlife as super-existence. For Mandelstam, the choice lies not between death and life, but between ordinary life and a more luminous, eternal life.

And, finally, in Pushkin's work we discover the third type of inspiration – Chan-Buddhist in nature.

As with Mandelstam, Pushkin's world of the primeval cradle lacks any “mortal” coloring and emerges as a realm of absolute freedom. Yet what opposes it is not the real world, but another unreal one – equally disconnected from the semantics of death.

With Pushkin, we encounter not ordinary consciousness contrasted with altered states, but rather two different altered states in dialogue with each other.

How did Taoist ideology find its way into Pushkin's poem? Is this merely coincidental? We firmly maintain that nothing in a poem can be accidental – all parts and details must interact meaningfully at some level, like cells in a living organism. Verse's structural anatomy remains a largely uncharted territory. While we make no claim to have fully investigated this subject, our analyses clearly demonstrate the profound interconnectedness within the organism of verse. Human consciousness generates an organism-like system with its own internal coherence. Though the exact verse-generating mechanism eludes us, we recognize that when operating correctly, it admits no random elements. Every element subordinates itself to a governing principle.

Have we fully uncovered this principle? We cannot make such a claim, as we cannot be certain that all levels of the verse have been revealed. Readers will observe how each deeper level illuminates the verse's meaning – rendering it tangible and unveiling new semantic dimensions. Future explorations of deeper levels will inevitably yield different interpretations. But just as each level we uncovered enriched rather than invalidated previous readings, future discoveries will likely expand our understanding rather than overturn it.

However, further exploration of verse's depths will require different analytical methods. As for the method of semantic series – whose application and exploration of possibilities has been the focus of this work – we believe that at the stage of creating a typology of inspirational states of consciousness, if not the method, then the authors have (for now) exhausted their capabilities.

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