

Lexical and Corpus-Based Approaches to the Analysis of the Concept of 'Mind': A Comparison of Semantic and Frequency Models Based on the Image of Chatsky in A.S. Griboyedov's Comedy Woe from Wit

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Abstract

The core aim of this research is threefold: (1) to compare the findings derived from traditional lexical/semantic analysis and a modern corpus-statistical analysis of the concept in Chatsky's speech; (2) to identify key points of convergence and divergence between these two distinct methodological approaches; and (3) to determine empirically how computational linguistics and Natural Language Processing (NLP) techniques can systematically augment and refine traditional methods of conceptual research in literary studies. The research methodology is structured in two sequential stages of analysis. Stage One involves a lexical analysis of the concept of *ум* (**mind**), focusing on dictionary definitions and establishing its semantic structure within Chatsky's speech. Stage Two comprises a rigorous corpus-statistical analysis employing NLP technologies. Using the NLTK (Natural Language Toolkit) library, the analysis includes automatic extraction of all relevant word forms, followed by tokenization and lemmatization. Key metrics utilized are frequency analysis (with grouping by semantic categories), collocational analysis using bigram statistics to determine stable word combinations, and concordance analysis to examine the contextual environments of the concept. The primary finding demonstrates that the corpus-statistical model reveals previously latent semantic dominants and associative links, which are often obscured by qualitative reading alone. The study concludes that the objective, frequency-based analysis offers a robust mechanism for uncovering hidden patterns of conceptual functioning within dramatic discourse, ultimately providing a more nuanced and empirical basis for the analysis of Chatsky's much-debated intellectual status.

Keywords: concept, field model, corpus linguistics, collocations, frequency analysis.

Introduction

In contemporary linguistics, one of the most rapidly evolving fields is cognitive linguistics, which explores language as a means of representing human consciousness.

The relevance of this study is determined by several factors. First, the concept of "mind" is one of the fundamental constructs of national culture, reflected in literary texts and offering insight into the author's individual interpretation. Second, in the era of digitalization of the

humanities, the integration of traditional linguistic methods with modern natural language processing (NLP) technologies has gained particular importance, opening new avenues for the objectification of philological observations.

The novelty of this research lies in its application of a comprehensive approach that combines lexical analysis (a semantic model based on dictionary definitions) with corpus-statistical analysis (a frequency model derived from textual data) to examine the concept within a literary work. This synthesis of traditional linguistic analysis and modern NLP technologies not only corroborates the findings of classical philological inquiry but also reveals hidden patterns that may remain unnoticed through manual analysis.

The aim of the study is to compare the results of lexical and corpus-based analyses of the concept of "mind" in Chatsky's speech, to identify points of convergence and divergence between the two methodological approaches, and to determine how computational linguistics can enhance traditional concept research methods.

1. Theoretical Foundations of the Study. The Concept as an Object of Linguistic Inquiry

One of the primary objectives of linguistics is the development of cognitive linguistics as a distinct field. The goal of cognitive linguistics is to understand how processes of perception, categorization, classification, and conceptualization of the world are carried out, as well as how knowledge is accumulated. The central object of study in cognitive linguistics is the concept.

In her dissertation *The Concept of Struggle in the Russian Linguistic Worldview*, V.Ya. Tikhonova identifies several approaches to the study of concepts: the psychological approach (S.A. Askoldov, D.S. Likhachev); the logical approach (N.D. Arutyunova et al.); the philosophical approach (V.V. Kolesov et al.); the linguocultural approach (Yu.S. Stepanov, V.A. Maslova, V.V. Vorobyev, V.N. Telia et al.); the linguistic-anthropological approach (M.P. Odintsova, O.S. Issers, L.B. Nikitina et al.); and the cognitive approach (E.S. Kubryakova, I.A. Sternin, N.N. Boldyrev et al.) (Tikhonova 2005, p. 55).

The main approaches to understanding the concept proposed by various scholars have allowed us to identify a number of common features inherent to the concept:

1. A concept is the minimal unit subject to verbalization and is expressed in human speech through words.
2. Concepts are also regarded as fundamental units for the processing, storage, and transmission of knowledge and information.
3. A concept is social in nature; its associative field determines its pragmatic function.
4. A concept is a cultural element.

Based on these premises, V.A. Maslova offers the following definition of the term *concept*: "A concept is a semantic formation marked by linguistic and cultural specificity and, in one way or another, characterizes the speakers of a particular ethnoculture. It is surrounded by an emotional, expressive, and evaluative aura" (Maslova 2007, p. 47). This definition

emphasizes the multidimensional nature of the concept, which includes not only a notional component but also an imaginative and evaluative one.

Another ongoing debate in linguistics concerns the structure of a concept. According to M.V. Pimenova and O.N. Kondratyeva, the structure of a concept is “a set of generalized features and groups of features that are necessary and sufficient for identifying an object or phenomenon within a fragment of the worldview” (Pimenova and Kondratyeva 2009, p. 75).

According to I.A. Sternin, a concept can be represented as a circle, with its core—the principal meaning—at the center, and all elements shaped by culture, tradition, collective and individual experience forming the periphery (Sternin 2001, p. 61). Explanatory dictionaries offer researchers extensive opportunities for uncovering the content of a concept and identifying the specifics of its linguistic expression. The periphery, in turn, encompasses subjective experience, various pragmatic components of the lexeme, connotations, and associations. Such a structural model enables the systematization of heterogeneous components of a concept and reveals the hierarchy among its constituent elements.

Thus, this mental phenomenon constitutes a complex entity, within which individual features are distinguished and interconnected in specific relational patterns.

2. Materials and Methods

2.1. Research Material

The material for this study is the text of A.S. Griboyedov’s comedy *Woe from Wit* (1833), specifically the lines spoken by the main character, Alexander Andreevich Chatsky. The choice of this character is motivated by the fact that the play is primarily associated with Chatsky, who embodies “the present age” and its evolving understanding of intellectual and moral values (Griboedov 1833).

2.2. Research Stages

The study was conducted in two stages:

Stage One — lexical analysis of the concept of *mind* based on dictionary definitions and the identification of its semantic structure in Chatsky’s speech.

Stage Two — corpus-statistical analysis using NLP technologies, which included:

- Automatic extraction of all word forms related to the concept of mind (Bekkerman and Allan 2004).
- Frequency analysis of the identified lexemes.
- Collocational analysis to determine stable word combinations
- Concordance analysis to examine contextual environments.

2.3. NLP Analysis Toolkit

For the corpus analysis, the NLTK (Natural Language Toolkit) library was used—an optimal tool for linguistic research due to its ease of use and extensive documentation Bird and Loper 2004). The main stages of processing included:

1. Tokenization and lemmatization.
2. Collocation search using bigram analysis with statistical association measures (Bekkerman and Allan 2004).
3. Concordance construction for each significant word form related to the concept.
4. Frequency analysis with grouping by semantic categories (What is Frequency Analysis 2025).

3. Lexicographic Analysis of the Concept of "Mind" in Chatsky's Speech

For many decades, the processes of thinking and knowledge acquisition have been studied by psychologists, philosophers, linguists, and other scholars. In academic discourse, the term *mind* is rarely used; psychologists tend to prefer the term *intellect*. The word *intellect* derives from the Latin verb *intelligere*, meaning: (1) to sense, perceive, notice, observe; (2) to know, recognize; (3) to think; (4) to understand, be knowledgeable. Thus, the notion of *intellect* is associated with the processes of perceiving information from the external world or about oneself, processes of cognition and thinking, and methods of consolidating knowledge in a particular domain, which contribute to a person's education and expertise in that area.

Conceptual analysis in linguoculturology, by contrast, involves turning to lexicographic sources—specifically, the analysis of dictionary definitions of a word's meanings.

The study of the concept of *mind* as an object of lexicographic description in this work is limited to the analysis of the following sources:

1. *Explanatory Dictionary of the Living Great Russian Language* by V.I. Dal (19th century) (Dal 1996);
2. *Explanatory Dictionary of the Russian Language* by S.I. Ozhegov and N.Yu. Shvedova (20th century) (Ozhegov and Shvedova 1992);
3. *Russian Explanatory Dictionary* compiled by V.V. Lopatin and L.E. Lopatina (early 21st century) (Lopatin and Lopatina 2006).

Given the heterogeneity of the proposed lexical-semantic variants, we systematize them as follows:

1. *Mind* is primarily associated with epistemology or the cognitive dimension (the ability to think and comprehend, the capacity to act, and the result of intellectual activity) — forming the conceptual core.
2. *Mind* as abstract knowledge (ideas, reasoning, intellectual development — becoming smarter; mental orientation — interest*) — representing the near periphery of the concept.
3. Human character as defined by intellectual abilities (speed of thought — *slow thinker*; disregard for gender distinctions — *smart guy, smart girl*; boastfulness —

smart guy as an ironic or disapproving remark; giftedness — *smart girl, smart*) — forming the distant periphery.

4. *Mind* from an axiological perspective (spirituality as a sign of intellect; *mind* as an indicator of emotional state — *mind-blowing*) representing the outermost periphery.

Let us now examine the figurative features of the concept of *mind* in the play *Woe from Wit*, using the character of Alexander Chatsky as an example.

«...Остер, умен, красноречив...» (lit. Witty, intelligent, eloquent...) (Griboyedov 1833, p. 21);

- Intelligent — said of a person in terms of their mental and intellectual abilities.
- «...он малый с головой / И славно пишет, переводит. // Нельзя не пожалеть, что с эдаким умом...» (lit. He's a clever young man / And writes and translates with skill. // One can't help but regret that with such a mind) ... (Griboyedov 1833, p. 46);
- Mind — a person's ability to think logically, to comprehend, and to acquire knowledge.

According to Chatsky, members of the nobility should not confine themselves solely to bureaucratic or military service. He believes that an intelligent person may also find fulfillment in creative or scientific pursuits: «Из молодых людей, найдется – враг исканий, // Не требуя ни мест, ни повышения в чин, // В науки он вперит ум, алчущий познаний; // Или в душе его сам бог возбудит жар // К искусствам творческим, высоким и прекрасным...» (lit. Among the younger generation, there may be one — an enemy of ambition, Who seeks neither rank nor promotion, But directs his mind, thirsting for knowledge, toward science; Or in his soul, God Himself may kindle a passion For the creative arts — lofty and sublime) ...) (Griboyedov 1833, p. 48);

- To direct one's mind — to manifest an intention or desire to undertake a particular action.

In high society, Chatsky is regarded as mad due to his freethinking and liberal views:

«Не впрямь ли я сошел с ума?» (lit. Have I truly lost my mind) (Griboyedov 1833, p. 126);

«С ума сошел!» (lit. Gone mad!) (Griboyedov 1833, p. 97);

- To lose one's mind (or go mad, become deranged, etc.) — said of someone who acts irrationally, speaks or behaves absurdly.

«...Безумным вы меня прославили всем хором...» (lit. You have all proclaimed me mad in chorus) (Griboyedov 1833, p. 137);

«Княжны, пожалуйста, скажите ваше мнение, / Безумный Чацкий или нет?» (lit. Ladies, kindly share your opinion: Is Chatsky mad, or not?) (Griboyedov 1833, p. 122);

«Безумный! что он тут за чепуху молот!» (lit. Madman! What nonsense he was spouting here!) (Griboyedov 1833, p. 138);

- Mad (adj.) — 1. To lose one's reason; to become deranged or insane. 2. Said of someone who acts irrationally or speaks absurdly.

«Не образумлюсь... виноват, / И слушаю, не понимаю, / Как будто всё еще мне объяснить хотят, / Растерян мыслями...» (lit. I remain unreasoned... guilty, And I listen,

yet do not understand, As if they still wish to explain it all to me, Confused in thought) (Griboyedov 1833, p. 136);

- To come to one's senses — to become more reasonable and judicious.

Thus, the **core** of the concept *mind* includes the lexical items *mind* and *intelligent*. The **near periphery** consists of the following components: *to come to one's senses*, *to direct one's mind*. The **distant periphery** includes: *mad*, *to lose one's mind* (Fig. 1):

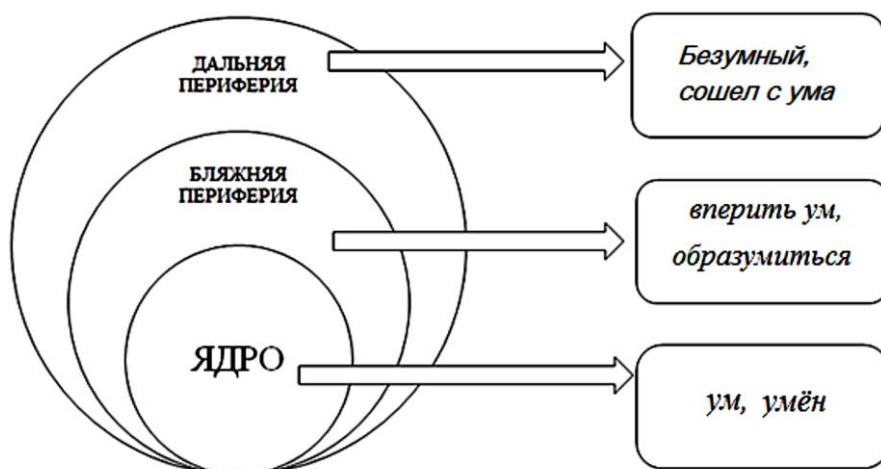


Fig. 1. The Field Model of the Concept of 'Mind' (Um)

The analysis reveals that in the play, the concept of *mind* acquires a multilayered interpretation: as a gift, as punishment, as rebellion, and as personal tragedy. Through the character of Chatsky, it is shown that *mind* becomes a factor of the hero's social isolation and a source of his inner conflict. Through Chatsky's speech and his opposition to other characters, it is revealed that true intellect is perceived by society as a deviation, a challenge to social norms—leading to both internal and external isolation. As a result, *mind* in the play emerges as sorrowful knowledge, as a tragic awareness of one's otherness.

4. Corpus-Statistical Analysis of the Concept of mind in Chatsky's Discourse

The corpus-statistical analysis reveals that Chatsky employs the lexemes of the concept "**ум**" (**mind**) a total of **10** times, with his speech featuring **8** distinct categories and **30** various word forms (Table 1). The **core** of the concept is formed by the basic lexemes "**ум**" (**mind**) (10 occurrences) and "**рассудок**" (**reason/intellect**) (3 occurrences), which indicate that "**ум**" is conceived by the protagonist as a fundamental category of human nature. The **near periphery** includes qualitative characteristics ("**умн-**"; intelligent/clever, 5 occurrences) and cognitive processes ("**дум-/подум-/выдум-**"; think/reflect/invent, 6 occurrences), while the **distant periphery** is shaped by the lexemes "**безум-/сумасшеств-**" (madness/insanity, 2), "**образум-**" (come to one's senses, 1), "**предрассудк-**" (prejudices, 1), and "**учен-/учител-**" (learning/teachers, 2).

Tabel 1. Frequency of Categories of the Concept 'Mind' (Um) in Chatsky's Speech

Category (Stem)	Frequency	Word Form Examples	Semantic Group
ум-	10	ум (3), ума (3), умов, умом, умы, умников	Core – Basic Intellect
рассудк-	3	рассудка, рассудку, рассудок	Core – Basic Intellect
умн-	5	поумнел (2), умны, умнее, умный, умён	Near Periphery – Qualities of Mind
дум-/подум-/выдум-	6	думать, думал, подумаю, подумайте, выдумали, выдумками	Near Periphery – Cognitive Processes
безум-/сумасшеств-	2	безумным, сумасшествия	Distant Periphery – Impairment of Mind
образум-	1	образумлюсь	Distant Periphery – Self-Reflection
предрассудк-	1	предрассудки	Distant Periphery – Bias/Prejudice
учен-/учител-	2	ученья, учителей	Distant Periphery – Education/Knowledge

This distribution underscores the **dual nature (dichotomy)** of Chatsky's mind: on one hand, it is rational and driven towards cognition and free thinking (exemplified by "**ум**" (**mind**), "**рассудок**" (**reason**), and the phrase "*вперить ум, алчущий познаний*" [to fix one's mind, eager for knowledge]); on the other, it constantly reflects on its own thought and its vulnerability within the societal context (phrases like "*сошёл ли я с ума?*" [Have I lost my mind?]) and "*ум с сердцем не в ладу*" [mind and heart are not in harmony]).

The field model of the protagonist's concept of "**ум**" can be visualized in Fig. 2.

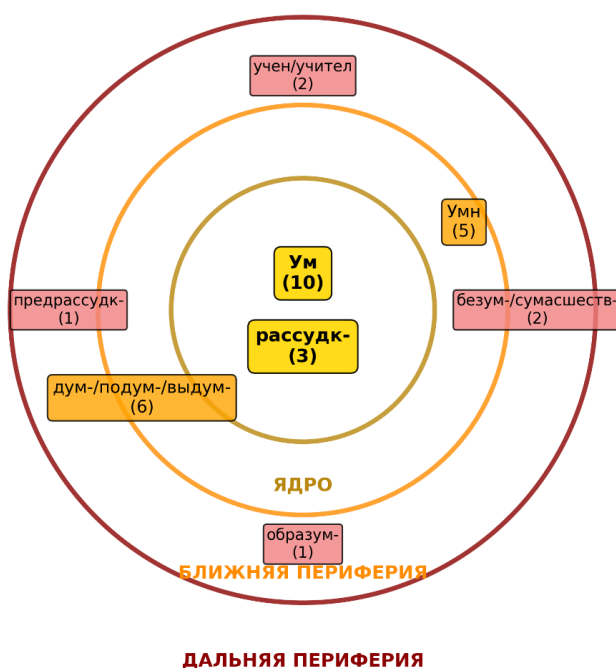


Fig. 2. The Frequency Field Model of the Concept "ум" (Mind) in Chatsky's Discourse (Based on Corpus Analysis)

Within the context of the play, Chatsky's **"ум"** transcends mere cognitive ability, constituting an **intellectual and moral position**. He is not intelligent in the utilitarian sense (unlike Molchalin, whose *"бойкий ум"* [sharp mind] is used for career advancement), but rather in terms of his **critical perspective on social conventions**. His **"ум"** represents a consciousness of freedom and the ability to perceive the contradictions between the new and the old, between personal integrity and public falsehood.

However, this very intellect turns against the protagonist: the society that Chatsky denounces perceives his **"ум"** as **madness**. This accounts for the appearance of the lexemes **"безумие"** (madness), **"сумасшествие"** (insanity), and **"предвзвешенности"** (prejudices) in the concept's periphery. Chatsky's **"ум"** is revealed to be **alien**, incompatible with the **"коллективный рассудок"** (collective reason/judgment) of Moscow society. This is precisely where the main conflict of the play arises: Chatsky's **"ум"** versus society's prejudices.

Thus, the concept of **"ум"** in Chatsky's discourse serves as a marker of **ideological and personal conflict**. His intellect is a tool for critique and the pursuit of truth, but it is simultaneously the cause of his **isolation**, since in Famusov's world, a clever word is equated with impudence, and free thought is deemed madness. This constitutes the **tragic dialectic**: Chatsky's **"ум"** is both his strength and his weakness.

4.1. Collocational and Concordance Analysis of the Concept "ум" (Mind) in Chatsky's Discourse

The analysis is based on the frequency groups (**ум-, рассудк-, умн-, дум-/подум-/выдум-, безум-/сумасшеств-, образум-, предрассудк-, учен-/учител-**) and verified **concordances** extracted from Chatsky's speech. **Collocations** are interpreted **semantically**: as the functions of the **"ум" (mind)** concept within the play's conflicts and in the protagonist's **self-identification**.

Following the text analysis using NLP methods such as **tokenization**, **lemmatization**, collocation search via **bigram analysis** with **statistical association measures**, and the construction of **concordances** for each significant concept word form, the following features of the **"ум" (mind)** concept in Chatsky's discourse were revealed (Table 2).

Table 2. Main Collocations with the Concept **"ум" (Mind)** in Chatsky's Speech

Category	Collocates	Concordance Analysis
ум (mind)	('тревожить', 'ум') — 1 time(s)	Перст указательный, все признаки ученья / Как наши робкие тревожили умы
	('ум', 'сердце') — 1 time(s)	И клонятся к чьему-нибудь вреду? / Но если так: ум с сердцем не в ладу .
	('погрузить', 'ум') — 1 time(s) / ('ум', 'зефира') — 1 time(s)	Сам погружён умом в Зефирах и в Амурах,
	('вперить', 'ум') — 1 time(s) / ('ум', 'алкать') — 1 time(s)	В науки он вперит ум, алчущий познаний;
	('нрав', 'ум') — 2 time(s)	Есть на земле такие превращения / Правлений, климатов, и нравов, и умов ; / Есть люди важные, слыли за дураков:
	('ум', 'бойкий') — 1 time(s)	Пускай в Молчалине ум бойкий , гений смелый,
	('свой', 'ум') — 1 time(s) / ('ум', 'сойти') — 7 time(s)	София Об Чацком. Г. Н. Как его нашли, по возвращеньи? София Он не в своём уме . Г. Н. Ужли с ума сошёл? София (помолчавши) Не то чтобы совсем...
рассудок (reason)	('рассудок', 'нищета') — 1 time(s)	Когда-то укрывал, расшитый и красивый, / Их слабодушие, рассудка нищету ; / И нам за ними в путь счастливый!
	('рассудок', 'вопреки') — 1 time(s)	Хвост сзади, спереди какой-то чудный выем, / Рассудку вопреки , наперекор стихиям;

	('рассудок', 'уцелеть') — 1 time(s)	Подышит воздухом одним, / И в нём рассудок уцелеет .
думать (to think)	('охладеть', 'думать') — 1 time(s) / ('думать', 'любовь') — 1 time(s)	Пушусь подальше — простить, охолодеть, / Не думать о любви , но буду я уметь / Теряться по свету, забыться и развлечься.
	('сказать', 'думать') — 1 time(s)	Сказать вам, что я думал ? Вот: / Старушки все — народ сердитый;
	('думать', 'найти') — 1 time(s)	Надежд, которые мне душу наполняли. / Чего я ждал? что думал здесь найти ?
	('мочь', 'думать') — 1 time(s)	Всё та же гладь, и степь, и пусто, и мёртво... / Досадно, мочи нет, чем больше думать станешь .
	('счастье', 'думать') — 1 time(s) / ('думать', 'близко') — 1 time(s)	Слепец! я в ком искал награду всех трудов! / Спешил!.. летел! дрожал! вот счастье, думал, близко .
безумный (mad)	('вздор', 'безумный') — 1 time(s) / ('безумный', 'прославить') — 1 time(s)	Дряхлеющих над выдумками, вздором, — / Безумным вы меня прославили всем хором. / Вы правы: из огня тот выйдет невредим,
сумасшествие (insanity)	('убедиться', 'сумасшествие') — 1 time(s) / ('сумасшествие', 'мочь') — 1 time(s)	Как другу вашему, как брату, / Мне дайте убедиться в том; / Потом / От сумасшествия могу я остережся ;
предрассудок (prejudice)	('предрассудок', 'старый') — 1 time(s)	Дома новы́, но предрассудки стары . / Порадуйтесь, не истребят / Ни годы их, ни моды, ни пожары.

Interpretation of Collocational Clusters and their Functions

Collocational analysis allows us to identify the following clusters and their functions:

A. Cognitive Aspiration (Epistemic Function)

- Key Collocates: "вперить ум" (to fix one's mind), "алчущий познаний" (eager for knowledge); generalization to society: "нравов и умов" (manners and minds).
- Meaning: "ум" (mind) = energy-directed search for knowledge and a criterion for evaluating "умов" (minds) as a social condition.
- Effect on the Concept: The core ("ум", "рассудок") is imbued with telos—Chatsky's mind is purposeful and normative.

B. Conflict of Reason and Feeling (The "Mind-Heart" Antinomy)

- Collocation: "**ум с сердцем не в ладу**" (**mind and heart are not in harmony**).
- Meaning: The protagonist's **internal rupture** between rational judgment and affect (Sofya's storyline).
- Effect: "**ум**" (**mind**) is marked as a **vulnerable regulator**—it does not suppress feeling but disputes with it.

C. Social Labeling via Rumor/Stigma ("The Go Mad Cluster ")

- Concordance Observation: The majority of uses of "**сойти с ума**" come not from Chatsky but from Sofya, the guests, and others, forming an **external frame** of reference that perceives his "**ум**" (**mind**) as "**безумие**" (**madness**).
- Effect: The **peripheral lexemes** (**безум-**, **сумасшеств-**) are not the protagonist's self-description but a **diagnosis** by the society, destroying his prestige through rumor.

D. Critique of Utilitarian "ум" (Irony towards Molchalin)

- Collocation: "**ум бойкий, гений смелый**" (**sharp mind, bold genius**) (ironic context).
- Meaning: The opposition of Chatsky's **morally oriented mind** to the **careerist "ум"** of the opportunist.
- Effect: An **ethical criterion** is established in the **near periphery** (**умн-**): mind ≠ cleverness; mind = principled stance.

E. Risk of Mind Dissipation (Aesthetic-Erotic Background)

- Collocation: "**погружён умом в Зефирах и Амурах**" (**mind immersed in Zephyrs and Amours**).
- Meaning: The mind, when engaged in a dreamy/aesthetic element, risks losing focus.
- Effect: A **pragmatic modality of self-control** is added—the protagonist must not only possess a mind but also protect it from diffusion.

F. "Думать" (To Think) as the Operational Side of the Concept

- Collocates: "**сказать — думать**" (**to say - to think**), "**думать — найти**" (**to think - to find**), "**думать — близко/счастье**" (**to think - close/happiness**).
- Meaning: The verb "**думать**" (**to think**) fixes the **movement of thought**: from evaluating others ("и думать заставляет") to self-assessment, doubt, and hope.
- Effect: The **periphery** (**дум-/подум-/выдум-**) imbues the concept with **proceduralism**: mind = process (analysis, hypothesis, revision).

4.2. Synthesis with the Field Model (How Collocations "Animate" Frequency Zones)

- Core (**ум-**, **рассудк-**): Collocation clusters A–B set the mind's **normative-conflictual profile**: it measures the world (A) but is itself caught in a conflict with feeling (B).

- Near Periphery (умн-, дум-): Clusters D and F translate "ум" (mind) into the **ethical and procedural planes**: "what kind of mind should be considered clever" and "how the mind operates."
- Distant Periphery (безум-, предрассудк-, учен-/учител-, образум-): Cluster C demonstrates that "безумие" (madness) is an **external label**, while "предрассудок" (prejudice) and "учение" (learning/teaching) are the frameworks through which society attempts to order (or stifle) free thought.

Key Insights from the Comparison of Collocations and Concordance

- Discrepancy between "Objective mind" and "Social Reputation of mind". Strong epistemic collocations (Cluster A) coexist with the external label "безумец" (madman) (Cluster C). This highlights the distinction between cognitive validity and legitimacy within the socium.
- The Moral Vector as a Criterion for "Cleverness" (Umnost'). The irony directed at "ум бойкий" (sharp mind) (Cluster D) reveals Chatsky's criterion: "ум" (mind) without morality is not true "ум". This refines the semantics of the умн- group (it is not 'умный = ловкий' (clever = cunning), but 'умный = принципиальный' (clever = principled)).
- Procedural Nature of the Mind: "Думать" (To Think) ↔ "Переоценивать" (To Re-evaluate). The "думать" (to think) concordance (Cluster F) reveals cycles of hypothesis/disappointment/irony. Chatsky's concept of "ум" (mind) is dynamic (it generates judgment and immediately tests its strength).
- Risk Management of the Intellect. Collocations with the aesthetic-erotic sphere (Cluster E) mark the boundaries of self-control: the "ум" (mind) can escape into dreaminess/reverie, which is dangerous in a conflict-ridden environment.

The updated field model of the concept "ум" (mind) in Chatsky's discourse clearly demonstrates the multi-layered and contradictory nature of this category within the play's structure (Fig. 3).

Обновлённая полевая модель концепта «ум» у Чацкого



Fig. 3. The Updated Field Model of the Concept "ум" (Mind) in Chatsky's Discourse.

The **core** contains the basic lexemes "ум" (mind) and "рассудок-" (reason), which mark Chatsky's intellectual origin: this is the pursuit of rational comprehension of reality and **cognition** as a life philosophy. The protagonist's mind is conceived as the central quality that defines his personality and his conflict with the surrounding world.

The **near periphery** connects two key lines—**moral criteria** ("умн-") and **cognitive processes** ("дум-/подум-/выдум-"). A significant shift is recorded here: Chatsky evaluates the "ум" (mind) not only as an inherent faculty but also as a **moral quality** ("умный" does not mean "хитрый" (cunning), but rather "принципиальный" (principled)), as well as a process of constant doubt, search, and self-irony. This reveals the **dynamic nature** of his intellect: the mind does not become static but continuously operates, testing both its own beliefs and social norms.

The **distant periphery** reflects the **external, socio-cultural layer**: Chatsky's "ум" (mind) clashes with labels ("безумие" (madness), "сумасшествие" (insanity)), is constrained by the frameworks of education and tradition ("учение" (learning), "предрассудки" (prejudices)), and is subjected to internal self-control ("образум-" (come to one's senses)). This zone demonstrates how society reacts to free thought: the critical word is interpreted as **impudence** or **illness**. Consequently, the protagonist's "ум" (mind) turns out to be not only his strength but also the reason for his **alienation**—it does not align with the "коллективный рассудок" (collective reason/judgment) of Moscow society.

Thus, the model underscores the **tragic dialectic** of the image: Chatsky's "**ум**" (**mind**) is simultaneously an **instrument of cognition and critique** and the **source of his isolation**. It elevates the protagonist above his secular environment but makes him an **outsider** in a society where prejudice and conformism are stronger than free thought.

The **diagram of Lexical Dispersion** (Fig. 4) is instrumental in capturing the **positional dynamics** of the concept categories throughout the text. This analysis provides key insights into how the conceptual conflict unfolds across the narrative structure.

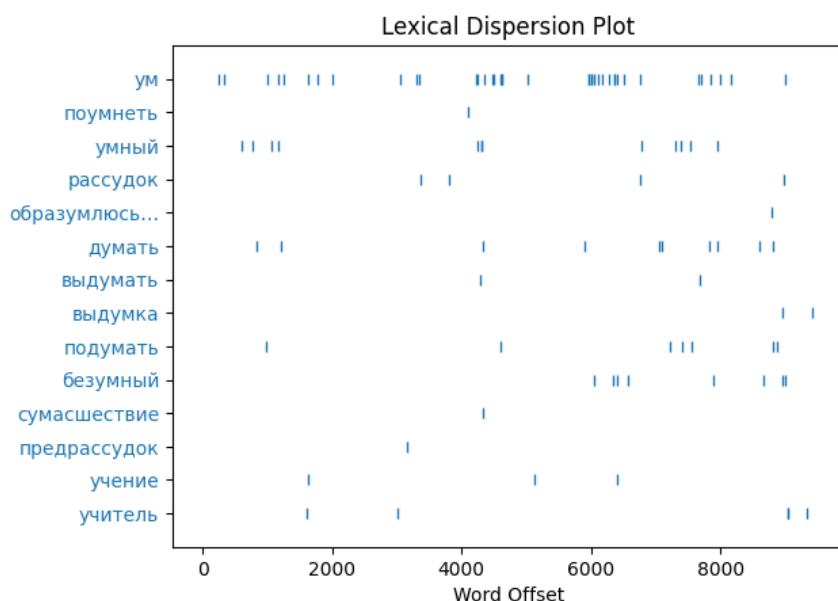


Fig. 4. The Lexical Dispersion Plot of the Concept "ум" (Mind) Categories in Chatsky's Discourse.

The distribution analysis yields the following critical observations regarding the function of the concept categories:

- **Core Lexeme "ум" (Mind):** The core lexeme "**ум**" (**mind**) exhibits a relatively continuous distribution across the play, with noticeable density clusters in the middle and later sections. This finding is crucial, as it demonstrates that the theme of the mind does not dissipate but rather **intensifies** as the narrative approaches its climax, directly correlating with the escalation of Chatsky's central conflict.
- **Rationality vs. Evaluation:** The term "**рассудок**" (**Reason**) appears concentrated in the central zone of the text. This positional clustering is observed primarily within the highly argumentative scenes where the debate transitions to formal, "cold" rationality. In contrast, the evaluative forms, such as "**умн-**" (**smart/clever**) and "**поумнел**" (**become smarter**), exhibit a **bimodal distribution**, with points of prominence at the beginning (serving as the initial labeling of the hero) and again in the final third (reflecting the social reassessment and mutual tagging during the denouement).

- **Peripheral Markers of Conflict:** The analysis of the periphery categories highlights the dramatic progression of the conflict. The cluster of deviations, "безум-/сумасшеств-" (*madness/craziness*), forms a **distinct, late concentration**. This positional lag confirms that the social "**diagnosis**" of the hero as "безумец" (*madman*) is a late **rhetorical maneuver**—a decisive social move that critically intensifies Chatsky's isolation. Similarly, "предрассудок" (*prejudice*) surfaces prominently closer to the end, underscoring that the theme of social clichés and blind norms is strategically brought to the surface in the finale to frame the hero's definitive defeat.
- **Framing and Self-Regulation:** The lexemes "учен-/учител-" (*teaching/teacher*), appearing early and finally, create a significant narrative **frame** centered on the motif of education and "proper guidance." Finally, the singular, late appearance of the willful self-regulatory turn, "образумлюсь" (*I'll come to my senses*), functions as a final gesture of **pseudo-self-regulation** situated specifically within the zone of resolution, marking a moment of internal, albeit ultimately futile, reckoning.

This comprehensive dispersion analysis confirms the **dynamic and performative nature** of the concept "ум" (*mind*), revealing how its shifting position in the text directly mirrors the development and tragic outcome of Chatsky's ideological struggle.

5. Comparative Analysis of Results

Theoretical Framework: "Intellect/Mind" (Um) and Lexicographical Components

In contemporary psychological and philosophical discourse, the term "**intellect**" (from Latin *intellegere*: to perceive → to comprehend → to think → to be able to discern) is often preferred. In contrast, in **lingvocultural studies**, the concept "**ум**" (*mind*) is typically fixed through its lexicographical definitions. Synthesizing the definitions provided by Dahl, Ozhegov–Shvedova, and Lopatin, the following systematic structure of the concept "**ум**" can be established:

- **Epistemological Core:** "Ум" (*mind*) as thinking, "рассудок" (*reason*); the capacity to acquire and construct knowledge; operational products (умозаключение — inference).
- **Near Cognitive-Dynamic Periphery:** Abstract forms of thought (умозрение — speculation), the development and orientation of the mind (умнеть — to grow wiser, умонстроение — disposition/mindset).
- **Distant Evaluative-Social Periphery:** Speed/manner of thought (тугодум — slow-witted person), social evaluation (умничать — to show off one's cleverness, «умник» — smart aleck), and giftedness (умница — clever person).
- **Extreme Axiological/Affective Periphery:** Spirituality/mentality; states of extreme intensity, often involving loss of control (умопомрачительный — mind-blowing, умопомрачение — stunning/stupefaction).

Mapping onto Chatsky's Discourse: Activation of Lexicographical Components

The corpus-statistical model allows for the correlation of these dictionary-based meanings with the actual usage of the lexemes in Chatsky's speech, revealing which semantic clusters are actively involved in the play's dramatic conflict (Table 2).

Table 3. Mapping of Lexicographical Semantic Components of the Concept Mind onto Corpus Usage in Chatsky's Discourse

Lexicographical Component	Corpus Channel in Chatsky's Discourse	Illustrative Contextual Markers	Function in the Protagonist's Image
Cognitive Capacity/Reason (рассудок) (Core)	Frequency groups ум- (10), рассудк- (3)	"В науки он вперит ум, алчущий познаний" (<i>He will fix his mind, eager for knowledge</i>); "...и нравов, и умов" (<i>...and manners, and minds</i>)	Epistemic orientation , criterion for social diagnosis
Development/Orientation of Thought (Near Periphery)	умн- (5), дум-/подум-/выдум- (6)	"Что стали умны..."* (<i>That they have become clever...</i>) (irony); "Что думал здесь найти?" (<i>What did I expect to find here?</i>); "...счастье, думал, близко" (<i>...happiness, I thought, is close</i>)	"Ум" as a process (search/doubt) and as a moral criterion
Social Evaluation/Stigma (Distant Periphery)	безум-/сумасшеств- (2); cluster "сойти с ума" (<i>go mad</i>) (in the speech of others)	"Безумным вы меня прославили..."* (<i>You all glorified me as mad...</i>); "Княжны... Безумный Чацкий или нет?" (<i>Princesses... Is Chatsky mad or not?</i>)	Exo-evaluation: Society "translates" criticism into social pathology
Axiology/Affect (Extreme Periphery)	Conflict "ум—сердце" (<i>mind—heart</i>); self-control	"...ум с сердцем не в ладу" (<i>...mind and heart are not in harmony</i>); "Не образумлюсь..."* (<i>I won't come to my senses...</i>)	Internal antinomy and the protagonist's reflection

Key Analytical Observation: Even lexemes of **low frequency** (*предрассудк*-, *учен-/учител*-) possess high **discursive weight**: they establish the framework for the clash between the Enlightenment-era "**ум**" (**mind**) and the tradition/educational norms of the secular world.

Semantic Clusters and Dramaturgical Functions

The comparison of dictionary components with the **collocational clusters** (Table 2) reveals specific dramaturgical functions of the concept "**ум**":

- **Epistemic Cluster** ("*вперить ум*", "*алчущий познаний*"): Chatsky's "**ум**" constitutes the **telos** of directed cognition: it evaluates not only individual actions but also "*нравы и умы*" (manners and minds) as a systemic object of critique.
- **Antinomy of Reason and Feeling** ("*ум с сердцем не в ладу*"): The "**ум**" (**mind**) **does not eliminate feeling**: the conflict with Sofya demonstrates the boundaries of rationality in the intimate sphere—the semantics of "**ум**" are "**depressed**" at the affective pole.
- **Social Stigma** (cluster "*сойти с ума*"): In the corpus, this is predominantly **heterogeneous speech** (the speech of others): society imposes a label, shifting the perception of "**ум**" towards "**pathology**". Linguistically, this is **external attribution**; dramaturgically, it is the central axis of the hero's conflict with the *socium*.
- **Ethical Differentiation of "Ум"** (irony towards Molchalin's "*ум бойкий*"): Chatsky delineates "**ум**" and "**ловкость**" (**cunning/skill**): "**ум**" without a moral foundation is utilitarian and, consequently, **deficient**.
- **Proceduralism** ("*думать*" as the operational side): Concordances of the verb "**думать**" (**to think**) capture cycles of hypothesis/hope/revision. "**Ум**" is not a static "gift" but the **labor of thought**, including self-irony and re-evaluation.

Synthesis of NLP and Philological Interpretation

The comparative analysis of traditional philological interpretation and corpus-statistical data leads to the following integrated conclusions:

1. **Full Convergence:** Both approaches confirm that Chatsky's "**ум**" is a cognitive force combined with a moral criterion, which enters into conflict with feeling and with the "**свет**" (**society**).
2. **Refinement:** NLP elucidates the distribution of speakers: the stigma of "**безумие**" (**madness**) stems primarily from the **voices of others**, while Chatsky's usage is dominated by reflection and doubt.
3. **Weight Correction: Frequency vs. Discursive Significance:** Lexemes of low frequency ("*предрассудок*", "*ученье*") possess high narrative **impact**: their position is in the distant periphery of the frequency model but near the center of the semantic conflict.

4. **Novel Analytical Lens: "Ум"** is revealed as a **dynamic category** (via the verb "думать"), not merely an attribute. This explains why the protagonist is simultaneously convincing and vulnerable: he thinks **"in process,"** publicly.

Integral Definition and Consequences for the Model

Chatsky's "ум" (mind) is defined as an **ethically charged reason**, aimed at cognition and social diagnosis; it functions as a **process** (thinking, verification, self-irony) and as a **norm** (a criterion for truth and honesty), but is labeled as a **"deviation"** within the social field.

Consequently, "ум" becomes both the **power of critique** and the **source of isolation**: the clash with the **"предрассудки" (prejudices)** of society and the **"ум—сердце" antinomy** transform cognition into the **tragic knowledge** of his own otherness.

Consequences for the Updated Model

- **Core: "ум/рассудок"** = cognition/**rationality** (the hero's backbone).
- **Near Periphery: "умн-" (moral criterion) + "дум-/подум-/выдум-" (proceduralism).**
- **Distant/Extreme Periphery: "безум-/сумасшеств-" (exo-label), "предрассудк-, учен-/учител-" (frameworks of tradition/education), "образум-" (self-control).**
- **Vectors of Semantic Dynamics:** From the core to **"безум-"**—a rupture between cognitive validity and social legitimation; from the core to **"думать"**—a shift from attribute to process.

Brief Conclusions

1. **Dual Nature: "Ум"** = cognition + moral norm.
2. **Conflictual Nature:** The hero's **"ум"** stands against the **"коллективный рассудок" (collective reason/judgment)** and against his own **"сердце" (heart)**.
3. **Social Projection:** The stigma of **"безумие" (madness)** is external, but dramatically decisive.
4. **High Dynamism:** The significant weight of **"думать" (to think)**-contexts fixes **"ум"** as the **labor of thought**, rather than a "status."
5. **Criterion of Authenticity: "Ум"** without morality (Molchalin's model) is a **simulacrum of mind**, not its essence.

6. Conclusion and Future Prospects

The systematization of conceptual features and the identification of the core and periphery based on lexicographical definitions helped us accurately describe the literary text to define the concept of the **"ум" (mind)** within the work, based on the analysis of Chatsky's **"ум"**. Drawing upon A.S. Griboyedov's play *"Woe from Wit"* (Gore ot uma), the concept received its profound disclosure through the character's speech and behavioral characteristics. It has been established that **"ум" (mind)** in this work simultaneously functions as a strength, a

gift, a tragedy, and a means of social critique. Chatsky is presented as the bearer of a true, moral, and reflective mind, which is contrasted with the practical, opportunistic "ум" of Famusov and Molchalin. This very opposition makes the hero's "ум" the source of his personal conflict and isolation, thus justifying the play's title—"Woe from Wit". The conducted research also demonstrates the high effectiveness of a comprehensive approach to concept analysis, one that merges traditional linguistic methods with modern natural language processing technologies.

Complementing these findings with corpus-statistical, collocational, and concordance data, we confirm several key results:

1. **The Two-Component Core of the Concept.** The frequency groups ум- (mind) and рассудк- (reason) establish Chatsky's epistemic orientation and rational judgment; in collocations, this manifests as *"внепуть ум, алчущий познаний"* (to fix one's mind, eager for knowledge) and a diagnostic gaze upon the *"нравы и умы"* (manners and minds) of the entire solum.
2. **Ethical Specification of "Cleverness" (Umnost').** The near periphery (умн-, дум-/подум-/выдум-) reveals that "ум" (mind) for Chatsky is neither cunning nor career shrewdness, but a **morally charged and procedural category**: думать (to think) means to doubt, to test, and to take responsibility for one's judgment.
3. **Social Optics and Stigmatization.** The cluster *"сойти с ума"* (go mad) predominantly belongs to the **voices of others**, transforming the hero's "ум" into an object of an external label. This asymmetry between cognitive validity and social legitimization explains Chatsky's dramatic isolation.
4. **The "Mind-Heart" Antinomy.** The formula *"ум с сердцем не в ладу"* (mind and heart are not in harmony) reveals the boundaries of rationality: the hero's "ум" is potent in social critique but vulnerable in the sphere of affect and personal attachment—hence the internal *"горе"* (woe/grief).
5. **High Discursive Weight of Rare Lexemes.** Although **предрассудк-** (prejudice) and **учен-/учител-** (learning/teacher) are less frequent in the sample, they are precisely what establish the framework for the clash between Enlightenment ideals and tradition/secular norms.

Methodologically, the study demonstrated that the **integration of a lexicographical field model and NLP procedures** (frequency analysis, speaker attribution, collocations, concordances) allows for a transition from descriptive intuition to **operationalized interpretation**. Consequently, Chatsky's "ум" (mind) is revealed as a dynamic, ethically marked cognitive force that simultaneously produces knowledge and generates conflict with the **"коллективный рассудок" (collective reason/judgment)** of Moscow society.

Future prospects include: (a) **positional analysis** by acts (I–IV) to trace the shift from cognition to stigma; (b) **inter-character comparison** of the semantics of "ум" (mind) (Chatsky ↔ Famusov, Sofya, Molchalin); and (c) the use of **vector semantics (embeddings)** for machine verification of the ethico-cognitive profile. These steps will help refine the exact nature of the **"подлинный ум" (authentic mind)** in the play: the capacity for truth, supported by morality, even at the cost of social isolation.

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