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Linguistics

The Binary Opposition of "Sky" and "Earth" in Structuralism

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(Presented by Academy Member Inesa Merabishvili)

Abstract. The paper presents a cross-cultural study of the structural and semantic aspects of binary oppositions not merely as a linguistic feature but also as a fundamental cognitive mechanism of the human world perception. It analyzes the structuralist approaches of Ferdinand de Saussure and Roman Jakobson related to the principle of difference and markedness – the asymmetrical features of binary oppositions, the function of the oppositional discourse in the social construction of truth and reality. The multidisciplinarity is illustrated through cross-cultural examples from English and Georgian literature and digital media.The goal of this paper is to show the significant role of binary oppositions in various aspects of life and language, to discuss the linguistic characteristics of binary oppositions in language and literature and to reveal different categories of binary oppositions from the perspectives of various writers', including antonyms, dichotomies, complements, and other forms. © *2026 Bull. Georg. Natl. Acad. Sci.*

Keywords: antonyms, oppositions, binarity, semantics, structuralists

Introduction

The perception and categorization of reality and the world around us through binary oppositions remains one of the most fundamental questions in linguistics and social discourse. Those oppositional pairs are symbolic to demonstrate how people perceive the world and how it really is. The most noticeable oppositional pairs are as follows:

- Sky/earth
- Male/female
- Self/other
- Individual/society
- Black/white
- Dead/alive
- [ca da dedamiča]
- [siqvaruli/sidzulvili]
- [buneba/k'ulṭura]
- [cesrigi/qaosi]
- [saġi azri/sigiže]

The opposition still remains the main subject of thorough debates among structuralists or cognitive linguists. The analysis of linguistic and literary facts suggests that, as binary structures seem to be a universal cognitive feature, their semantic perception and pragmatic application often result in complex socio-cultural implications.

Semantic value of binary oppositions. According to the Cambridge Dictionary, the term "binary oppositions" is defined as a noun **UK:** /ˌbaɪ.nər.i ɒp.əˈzɪʃ.ən/ – denoting "a relationship that exists between two things that are opposites, and in which if one of the things is true, the other cannot also be true, for example, alive and dead."

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The conceptual field of binary oppositions in English, as evidenced by lexical analysis, may be presented as follows:

- Binary – /ˈbaɪ.nər.i/ – using a system of numbers that uses only 0 and 1.
- Opposition – /ˌɒp.əˈzɪʃ.ən/ – strong disagreement; contrast between two things.
- Biform – /ˈbʌɪfɔːm/ – having or combining the characteristics of two forms, as a centaur.
- Double – /ˈdʌb.əl/ – twice size, amount, price, or consisting of two similar things together.
- Dual – /ˈdʒuː.əl/ – with two parts, or combining two things.a
- Duple – /doo-puhl/ – having two parts; double; twofold.a
- Duplicate – /ˈdʒuː.plɪ.keɪt/ – something that is an exact copy of something.
- Twofold – /ˈtuː.fəʊld/ – by two times.
- Bipartite – /ˌbaɪˈpɑː.taɪt/ – involving two people or organizations, or existing in two parts.
- Bisect – /baɪˈsekt/ – to divide something into two, usually equal, parts.
- Bilateral – /ˌbaɪˈlæt.ər.əl/ – involving or affecting two different organizations, countries, etc.
- Dichotomy – /daɪˈkɒt.ə.mi/ – a difference between two completely opposite ideas or things.
- Polarity – /pəˈlær.ə.ti/ – the quality of being opposite.

The lexical elements that form the conceptual field of binary opposition demonstrate the encoding of duality as a fundamental cognitive and semiotic principle according to structuralists.

Methodology

This paper presents a cross-cultural theoretical and analytical study of the structural, semantic, and stylistic peculiarities of binary oppositions. The empirical data were collected from the works in structural linguistics (Jakobson, 1968), the philosophy of language (Pos, 1922), semantics (Lyons, 1977), and cognitive linguistics (Croft & Cruse, 2004) form the theoretical basis of the study. The conceptual framework is further enriched by the stylistic theories of (Ghlonti, 1988).

The empirical data embrace some samples of English and Georgian literary works (both spoken and written), dictionary data, with primary infor-mation gathered from social networking sites. Special emphasis lies upon oppositional pair of the sky and the earth.

The research employs a qualitative, comparative analysis and theoretical approaches developed within the field of structuralist linguistics and constructivist theories based on the works of Ferdinand de Saussure and Roman Jakobson, with particular emphasis on the principles of difference and markedness. A comparative and discourse – analytical approach is applied to selected examples from English and Georgian languages.

The significance of binary oppositions in everyday life. Binary oppositions or dichotomies are often viewed as pairs of categories with opposite meanings. It's important to understand that these structures are a vital part of our daily lives that we use in conversation without realizing their significant influence.

Binary oppositions are deeply rooted in human life. They help people express “radical thoughts” clearly. Moreover, in different contexts, concepts that seem opposing often reflect the same situation from various viewpoints. They complement each other as a whole. For example, when someone feels tired, they often need the “opposite pole” – mental relaxation. The human brain is designed to seek variety, different perspectives, and a change from its current state. People often find relief by switching to an opposing state: from sober to intoxicated, or from awake to asleep, and the other way around. For mental refreshment, individuals usually look for more than just a minor change; they often want a complete transformation – a 180-degree shift in state.

Discussion

Structuralists’ statements are the basis or the conceptual origin of binary oppositions. Their main focus was on the meaning. Ferdinand de Saussure

argued that in language, there are only differences without positive terms, assuming that the identity of a concept is determined by what it is. Binary oppositions clearly show these kinds of connections, and they are considered the basic part of how language and culture work.

"Binary oppositions are not just abstract parts of language, but also closely connected to how humans develop and use speech" – Roman Jakobson states. His influential writings and publications have been useful in learning about the beginnings of binary oppositions in structuralism, especially his studies on phonological differences and the idea of "marking" – markedness. (Jakobson, 1968).

His work offers an interesting structural framework for binary oppositions. In particular, his idea that phonological development follows a strict hierarchy of binary oppositions – from simple to complex – offers an ideal starting point. In his study Jakobson argued that children acquire language by mastering a hierarchical succession of phonemic contrasts, such as the opposition between vowels and consonants, grave and acute sounds – he uses examples of patients losing the ability to distinguish between "grave" (back) and "acute" (front) sounds, showing that the most complex binaries are the first to be lost in brain injury. He claims that in the mind, complex information is organized into the simplest possible units of contrast. Roman Jakobson considers these oppositions to be easy to understand, clear, straightforward, and consistent; they offer the required structure for remembering, recognizing, and clearly sharing meaning.

The most effective method to analyze how social hierarchies are embedded in language can be considered Jakobson's concept of markedness. It shows that binary terms are rarely balanced. In any particular pair of terms, one is usually the general or more common one, called "unmarked", and the other is more specific or has a more complicated meaning, called "marked" (Table 1).

Table 1. Marked and unmarked terms in binary appositions

Binary pair	Unmarked	Marked	Social / linguistic implication
Man / woman	Man (often used for mankind	Women	The male is often treated as the universal human norm.
Happy / unhappy	happy	unhappy	Happy is the base of scale; even if someone is sad, we ask: how happy are you?
Right / left	Right	Left	Historically, "right" is associated with correctness, "left" with the sinister.

The Dutch philosopher Hendrik Josphuss Pos had a significant impact on the foundations of structuralism. In his publication "On the Logic of the Language Sciences," he showed how we know things about language, and he noted that seeing things as either one thing or its opposite is the basic way our minds think logically. His research laid the foundation for the ideas that later became the main part of R. Jakobson's theories about how sounds work in language. Jakobson realized Pos's impact, emphasizing that the binary opposition constitutes a distinct logical relationship since it necessitates both parts to be present in the subject's mind at the same time.

Pos contended that an opposition is defined by an essential duality. Based on his observation, some words in language are always connected to their opposite meanings, hence talking about the idea of 'greatness' without right away thinking about 'scarcity' (Pos, 1922).

As Pos observed: *"This is the simplest logical operation, differing from all other relations in that case of opposition we necessarily take into account both its members. For example, …the concept of cheapness is inconceivable without expensiveness*". (Pos, 1922).

This approach shows how we see the world is shaped by these connected pairs. We realize that one part of the binary group "cheap" can't exist without the other part "expensive". This shows that these groups aren't separate facts, but instead ideas that rely on each other to make sense.

"Cognitive Linguistics" by Croft and Cruse is a perfect example of how binary oppositions are structured. His central argument that oppositeness is a "construal" (a way we choose to perceive relationships) is essentially a constructivist claim. Accordingly, they suggest that we create binary oppositions through our cognitive and social processes (Cruse 2004).

Cruse also provides a very useful taxonomy:

- Complementaries – **dead/alive** – rigid, mutually exclusive. You can not be both, and there is no middle ground.
- Antonyms – **hot/cold** – gradable scales.
- Converses – **buy/sell** – different perspectives on the same relationship.

These examples clearly demonstrate how different social binaries are formed.

Jakobson's linguistic theories are widely applied by **Claud Levi-Strauss** to study anthropology, saying that all human cultures understand the world through basic opposites like male/female, raw/cooked, nature/culture. These were common patterns in the human mind. Since these binaries appear "universal", they are socially maintained and can be deconstructed (Lévi-Strauss, 1963).

Table 2 shows the primary theoretical contributions from structuralism.

Table 2. Core structuralist concepts of binary oppositions

Concept	Author	Description
Phonemic contrast	Roman Jakobson	The idea that language is built on minimal pairs of sound that derive meaning only through their opposition to one another.
Markedness	Roman Jakobson	The asymmetrical relationship where one term is "unmarked" (general or default) and the other is "marked" (specific or complex.
Relational identity	Ferdinand de Saussure	Signs do not have inherent meaning; they only value through their difference from other signs in the system.
Universal structures	Claud Levi-Strauss	The belief that human mind is hardwired to organize all cultural phenomena (myths, kinship) into binary pairs.

Saussure divided the common things people see in human language into two parts – langue and parole. These two linguistic signs are essential to be further studied from the perspective of opposite relations.

In linguistics, binary oppositions are often linked to antonyms. Antonyms are the most clear example of these oppositions. "Binary oppositions of which antonyms are the most salient expression, play a significant role in both language and thought" (Lyons, 1977, p. 281). opposition in language is fundamentally essential to structuring a language; moreover, as mentioned earlier, antonyms represent the clearest example of oppositional pairs (Croft and Cruse, 2004, p. 166).

The function of antonymy in language is significant. According to Georgian scholar Aleksandre Ghlonti – using antonyms helps express the results of thought – the right conclusions made by comparing objects – in a way that is clearer, more distinct, easier to understand, and more vivid. The higher the level of thought and abstraction of general phenomena, the greater the scope for the use of antonymic expression in speech.

Sky and earth as a structural binary opposition. Through an examination of Structuralist theory, meaning is derived from the relationships and oppositions in a system, not from individual elements. In structuralist thinking, 'sky and earth' work as two sides of a relationship; they show a basic way of thinking. Their meaning is understood because it contrasts with the other. Sky stands for being lifted up, thinking about big ideas, going beyond what's right here, and feeling free. Earth stands for being connected to the real world, dealing with physical things, being close and present, and holding things together. Their semantic meaning depends on this structural differentiation.

The binary oppositions – sky and earth – may be analysed through three structural aspects, and may also be interpreted as a semiotic duality that reflects the structural organization of meaning.

Three structural aspects of the binary oppositions are the following:

The contrast between the particular executive function and general directive function. The Earth can be understood as it is concrete, physical, and tangible. It shows up in a real way and directly connected to human action, what people do on earth. It operates at the level of actualization. The sky's different since it is abstract, covers everythng and helps you know which way to face. It establishes the horizon and the symbolic order within which earthly events take place. The sky shapes possibility. Thus, earth is a specific example of life experiences.

The conflict between the coherence of discourse and the ranking of structural components. Earth symbolizes coherence in discourse. Human existence happens all the time on earth, making a series of events, stories, and actions that follow one after another in time. Conversely, the sky presents a clear, organized order – hierarchy. It consists of various layers, like the atmosphere, the sky, and the heavens, as well as different levels of thoughts, such as the divine, the cosmic, and the transcendent. Unlike the ongoing flow of life on Earth, the sky shows a structured and organized system that goes up and down.

Moreover, the "units" of earth – such as events, actions, and movements – are limited and changing constantly, while the conceptual "units" associated with the sky – such as cosmic laws and symbolic meanings – are limited and repetitive.

The contrast between contextual dependence and contextual separation. Earth is inseparable from context: it is bound to space – time, locality, and material circumstance. Earthly phenomena are considered by events, environments, and specific conditions. Earth is purposeful and evaluative because it serves as the setting for human daily existence.

Table 3. Structural characteristics of sky and earth

Sky	VS	Earth
universality		particularity
abstraction		materiality
ideality		reality
spirituality		groundedness
permannce		changeability
elevation		groundedness
lightnesss		density
freedom		constraint
vision		experience
potentiality		actuality
eternity		temporalty
movement		stability
exploration		settlement
possibility		limitations
imagination		pragmatism
inner growth		physical necessity

On the other hand, the sky seems to be everywhere, it is not localized, not tied to any particular place, and not influenced by personal choices. It remains independent of specific earthly situations. In this sense, the sky is presented as a social and supra-individual structure.

Results

From the structuralist perspective, the opposition between sky and earth can be interpreted as a symbolic binary structure that organizes human perception of reality. Similar to the structural distinction between langue and parole, the sky tends to represent the domain of abstraction, universality, and potentiality, while the earth corresponds to the sphere of materiality, particularity, and concrete realization. In this sense, the sky functions as a conceptual and symbolic framework, whereas the earth embodies the empirical and experiential manifestation of that framework. This binary opposition reflects the structural principle that meaning emerges through contrast between two complementary poles. Their disagreement shows the difference between how people express themselves in situations and how systems are organized.

Conclusion

This work has demonstrated that binary oppositions are essential cognitive and linguistic concepts, reinforcing their role in shaping human perception, identity, and discourse across linguistic and cultural contexts.

To demonstrate the widespread influence of binary oppositions on linguistic awareness and social identity, this study examined the function of oppositional discourse in the social construction of truth using cross-cultural examples from English and Georgian literature, as well as digital media by analyzing the oppositional pairs of "sky and earth". The conclusions are drawn from observing the works in structural linguistics (Jakobson 1968), philosophy of language (Pos 1922), semantics (Lyons 1977), cognitive linguistics (Croft & Cruse 2004), and stylistic theory (Ghlonti 1988).

ლინგვისტიკა

ბინარული ოპოზიციები „ცა“ და „დედამიწა“ სტრუქტურალიზმში

ლელა ჭარელაშვილი

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(წარმოდგენილია აკადემიის წევრის ინესა მერაბიშვილის მიერ)

წინამდებარე ნაშრომში განხილულია ბინარული ოპოზიციების ფუნქციონირება სტრუქტურული და სემანტიკური მიდგომის ანალიზის საფუძველზე. განსაკუთრებული ყურადღება ეთმობა მათ როლს როგორც ენობრივ, ისე ადამიანის მიერ სამყაროს აღქმის კოგნიტურ ფუნქციონირებაში. სტატიაში ასევე განხილულია ფერდინანდ დე სოსიურისა და რომან იაკობსონის სტრუქტურალისტური მიდგომა, რომელიც დაკავშირებულია განსხვავებისა და ნიშნობრიობის პრინციპთან – ბინარული ოპოზიციების უმნიშვნელოვანეს მახასიათებლებთან. კვლევაში ყურადღება ეთმობა ოპოზიციური დისკურსის გამოყენებას ჭეშმარიტებისა და რეალობის აღსაწერად, ხოლო მულტიდისციპლინარულობის საილუსტრაციოდ გამოყენებულია ინგლისური და ქართული ლიტერატურისა და ციფრული მედიის მაგალითები. კვლევის მიზანია ბინარული ოპოზიციების მნიშვნელობისა და როლის ჩვენება ცხოვრებისა და ენის სხვადასხვა ასპექტში; ენასა და ლიტერატურაში ბინარული ოპოზიციების ენობრივი მახასიათებლების განხილვა; ბინარული ოპოზიციების სხვადასხვა კატეგორიების გამოვლენა სხვადასხვა მწერლის პერსპექტივიდან, როგორიცაა ანტონიმები, დიქოტომიები, და ა.შ.

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