Cristina URSU Doctoral School of Humanities Moldova State University crstnurs@gmail.com

#### Abstract

In this article, we intend to illustrate, in an educational setting, the mechanism of crafting a narrative thread by the arrangement of concepts created via a particular mental representation that attempts to represent its components accurately. To accomplish this, the process is formulated by a spectrum of representations that then allow the efficient realization of the desired path to meaning, taking into account the fact that the solution is contained within its data. A concept can be thought of as a single piece of a mental puzzle. Developing a new concept, such as the idea of creating a "narrative thread", involves various aspects. These include understanding how the concept is used in various contexts, connecting it to what we already know, using real-life examples, finding similarities to other concepts, breaking the concept down into smaller parts, applying it in practical situations, forming emotional attachments to it, and repeating and reviewing it. Therefore, the concept is fixed in the mental representation with a "thirst for the real" that determines its nature.

Keywords: concept, narrative thread, meaning, mental representation.

#### Introduction

This paper delves into the details of concept formation – a pivotal element shaping our understanding of the world. This paper endeavors to contribute to the collective knowledge of how individuals construct meaning by arranging concepts, focusing on the nuanced nature of the concept "narrative thread" and cognitive development of concepts in children, emphasizing the distinctive features of their conceptual acquisitions. Drawing insights from psychologist L. S. Vygotsky, we underline the productive nature of concept formation and its role in communication, understanding, and rationalization.

Education practices introduced herein seek to impart complex concepts with a deliberate focus on awareness beyond mere memorization. Our attention then

<sup>\*</sup> *Author note*: The article is to be published in Romanian in *Revista de Filosofie, LXX*(4) 2023, pp. 437-448 under the title *De la detaliu la întreg: despre construcția "firului narativ"*.

shifts to the practical application of the discussed concepts. Through a holistic educational approach, we observe students actively engaging in the process of creating a "narrative thread," highlighting the tangible impact of theoretical perspectives on practical learning experiences.

#### The Concept - Between Linguistic Tag and a Standalone Entity

A concept can be thought of as a file containing information and data. The word concept contains this information, including features about a certain thing that is presented in the form of a linguistic tag. This "file" contains information that would otherwise have been scattered, difficult to perceive, and challenging to systematize into a cognitive whole. Therefore, a concept is a mental representation of a category that has specific functions, one of which is to allow us to determine whether an element is part of a category or not (e.g., whether a literary text would fall into the category of "stories," considering the characteristics it has). A category is, in turn, a set of similar concepts or that share specific common characteristics. The data "file" ties them together by virtue of several factors, including similarities, so that the ease with which we understand them, generalize them, classify them, and communicate them is in accordance with the organization of the surrounding world based on these particular categories of concepts.

Similarity, meanwhile, is a fundamental principle of organizing categories (Douglas & Coley, 1998, p. 405). This fact allows us to ask the opposite question – how do we undertake the breakdown of a concept into the properties that itself is composed of? These word "files" can be arranged in a mind map, which is a method of generating ideas through associations, starting from a central theme that generates keywords, concepts, data, and figures ("narrative" would order other keywords after it, such as "prose," "fact" or "event," "subjective perspective," "narrative," "narrative thread," etc.) The organization of data into themes helps, in turn, to visualize the problem whose solution is being sought and, thus, facilitates productivity and analysis of the targeted subject, plans solution strategies, and provides space for new ideas and creativity.

Therefore, a word in and unto itself does not explain but binds information together into a concept; it is a representation, the glue that holds our mental world together. However, the concept is open-ended. In other words, it is not a frozen abstraction or static knowledge; a concept requires inputs and dynamic adjustments to keep up with the times. Precisely, this aspect is essential in its view, the fact that a concept not only accumulates information and stores it but also is itself updated in a continuum of knowledge. A concept links past experiences to present interactions with the world.

Concept formation occurs in two directions – from general to particular and from particular to general. The child acquires the concept of a "story" before acquiring the particular names of stories, which does not demonstrate thinking abstractly, but rather, general words are used to indicate particular objects. Thus, the concept is the tool with which knowledge is sought. Knowledge is found in conceptual forms; it is abstracted starting from the concrete reality; it is generalized starting from the particularity of the concrete; they resemble each other, starting from the distinctions encountered in reality. Theories about what a "concept" differs in the kind of relationship they establish with thought and the world, while the mechanism of knowledge passes precisely through these processes of abstract modeling of reality.

The concept aims at the problem of universals, which is central to philosophy and in fields such as epistemology, logic, and semiotics. Addressing several theories, such as realism, the concept exists in the world as a real entity and preserves the essence of objects. The dimension of forms in Plato's dialogues defines concepts (piety, courage, justice, knowledge, virtue, wisdom, etc.) as perfect, eternally valid, abstract, and non-sensory entities in contrast to the everchanging world. In moderate realism, it appears that it is Aristotle's definition of the concept that sees the universal, the ideal form subsisting in each of the particular objects, being their essence.

Thus, in what follows, we are going to explain the journey from the abstract to concrete, from concept to tangible manifestation, and practical application by exemplifying the concept of "narrative thread" in its material being, in a school work activity with sixth-grade Romanian language and literature.

# The Evolution of Concept Theory

The classic view of the concept (Katz & Postal, 1964) grounds it in the definition in terms of necessary and sufficient features. Therefore, the definition *is* the concept. The definition of a "narrative thread" is actually the concept of "narrative thread," and it is taught starting from the definition. The simplicity of this resides in the fact that it bypasses the entire process of concept formation; it has to do immediately with the result that is written in the textbook or on the blackboard; it has to do with a ready-made product, in which the dynamics of the process itself have been omitted, limiting themselves to the reality of the word. All that remains for the students to do is to memorize it.

This theory was opposed by the Russian psychologist L. S. Vygotsky in his well-known work "Thought and Speech," in which he notes that cognitive abstraction, the concept, does not survive being isolated and frozen in its static form. It performs functions in processes of communication, understanding, rationalization, and problem-solving. Vygotsky (1986) argued that the formation of concepts has a productive rather than a reproductive character (p. 117).

In contrast, the textbook answers learned in the classroom contain two logical aspects of definition: necessity and sufficiency. The need for parts must be found in the definition; otherwise, it is not a member of the category. The sufficiency of the parts existing in the definition, which share it with a certain category. Thus, the concept is mentally represented as a definition that provides necessary or sufficient characteristics. A thing is either part of a conceptual category or not, a fact that resides in the law of excluded middle. But the reality is much more complex, and we are dealing with exceptions and variations of various forms. Otherwise, the classical view would suit only a closed and definite system, in accordance with the tradition of logic and with the possibility of a hierarchical order of the categories in the system, such as the upper-intermediate level and its sublevels (a form of communication / verbal / fiction/genre / epic-type story). Therefore, hierarchies organize and structure concepts, clarifying their relationship to each other and to the world.

As a response to the classical perspective, Eleanor Rosch proposed, in 1975, that the prototype perspective of concepts in the field of cognitive psychology, in which each category is represented by a central prototype, is the best example of a certain category that has the most common and familiar characteristics with other entities in the category. "The most prototypical members of common superordinate, basic level, and artificial categories are those which bear the greatest family resemblance to other members of their own category and have the least overlap with other categories." (Rosch & Mervis, 1975, p. 599). Thus, the quality of being a member of a category is determined by its degree of similarity to the prototype.

Concepts are classified around a median representation, which is a prototype of the category. The entire category is represented by a unified entity, not by separate representations of each member in the category. Some entities may be closer to the prototype (considered typical entities) or more distant (atypical entities). The story "Domnu Trandafir" would be a typical example of the category of stories, while the story "At the North Pole" by Marin Sorescu would have new characteristics that are not found in the fold of those of the species, so it would move away from the prototypical model, but would still be included in the category by virtue of the familiarity of the imminent features. This fact would influence the ease with which a thing is classified or not into a certain category of concepts.

A complement to this perspective is the exemplar view developed by Douglas L. Medin and Marguerite M. Schaffer (1978), in which the concept of "story" includes neither all existing characteristics nor its defining characteristics, which they are more or less found, but a set of stories that one remembers from experiences and is stored in memory. Therefore, the mind stores memories, namely these individual examples from the past, defines the concept, and contrasts it with new things experienced in everyday life (when I read a text, I classify it as a "story" by contrasting it with the set of stories I read prior to this one).

Thus, categorization occurs according to how well the new object matches other objects encountered in stored past experiences, how similar they are, and how the new object can stimulate the retrieval of stored information from past examples. "The greater the similarity of a stored example to a new text, the more likely it is that the analysis will retrieve the information associated with that." (Medin & Schaffer, 1978, p. 210). The diversity of examples in a category contributes to a better and more flexible understanding of the concept since the diversity of experiences drives the categorization as such, just as several stories read in the past finalize the concept of "story" in the set of common characteristics found in each particular experience. Thus, knowing several examples, it is possible to note the similarities and differences, solidify a "big picture" concept, and developing skills for classifying species of a given category.

## The Cognitive Role of Concepts in Language And Communication

Essentialization, by definition, represents the principle of conceptual rationalization. How else could the elements of the world have existed if a singular word had named each? Besides, there would only be a particular "file" with an infinitely large capacity to store words. So, by mediating the induction from one element to a new element of the series, by extending the properties from the group to new entities – represents one of the fundamental functions of the concept.

Douglas L. Medin and John D. Coley (1998) distinguished seven cognitive functions such as categorization, understanding, argumentation, explanation, reasoning, learning, communication, and combination (p. 404). Categorizing in this way allows us to access relevant information that helps us understand and make predictions about how, for example, a story would end.

The representation of the meaning of a word resides in the concept. Thought uses words as tools to express ideas. The use of the word is mediated by the voluntary directing of attention, i.e., the abstraction of the characteristics that are synthesized through the mediation of the symbol. The word is a linguistic symbol that signifies something; it is a content in which Eugen Coşeriu distinguishes three kinds in the study "Man and His Language": designation, significance, and meaning. Denotation indicates reference or referring to something external to the word (for example, the word "story" refers to a particular story in the library); the meaning is the very content of the word and through the mediation of which the designation as such is achieved; meaning refers to thinking in a textual unit, in a statement or text, such as a statement, finding, question, order, assumption, indication, answer, protest, etc.

The word cannot be summed up, as Eugen Coşeriu wrote. Sign, symbol, word, just a sound envelope, or just a pure expression; the word is a sign with meaning, a unity of these two. Language, therefore, creates the world and mediates towards it; language starts from meaning and goes back to things through it. Thus, the world created through language "is a world of the possibilities of being and not a world of concrete existences" (Coşeriu, 2009, p. 126), a world in which things are configured and "species" are created – but not in the material sense of creation, but the fact-of-being. "Language is not a passive copy or reproduction, but an original and intentional configuration" (Coşeriu, 2009, p. 127). Thus, things are not created by language but are given as "things" by it. He makes things be things, explains the fact-of-being-thing, namely by representing this fact of being – one mediates, passes through, accesses the things themselves. In this way, meanings are the tools (not the objects of interpretation) by which things are accessed in a language-ordered world, a conception and representation of the being of things explicitly, and at the same time, access to the things themselves.

The concept is not possible without the word, just as the fact of thinking in the concept is not possible in the absence of the word (Vygotsky, 1986, p. 127). The meaning of a word is an instrument of speech; the word has meanings precisely to be able to clarify the world; it goes without saying that in order to theorize about the narrative perspective, one must understand what "narrative" means. The meaning of the word, therefore, fixes the being of the narrative, indicating what it is, without depicting the set of characteristics that coagulated this category.

## Cognitive Development of Concepts in Children

Conceptual acquisitions in children differ from those in adults in their content; the smaller number of experiences the child has led to a constant acquisition process. Since child concepts eventually develop into adult concepts, any qualitative difference between the two poses a problem in explaining development. Thus, the prototypical model in children invokes the elements considered central in a category, which have an advantage in that it is easier to perceive, learn, classify, evaluate, and communicate.

As mentioned above, the prototypical model resides in an average and summary representation of a category that, being appropriated, is updated through experiences and practical applications. Children learn from simpler concepts, from empirical data, and achieve better performance in acquiring typical elements, those with characteristics closer to the prototype. If children cannot rely on knowledge, they use an associative learning mechanism, based on empirical examples or associations based on features that lead to the category.

This is what happened to Helen Keller, who, following an illness, remained blind and deaf. At seven years old, she met a teacher named Anne Sullivan (a moment Helen called her "birthday of the soul"), who taught Keller to read and write using the fingers of Sullivan's hand to make letters and form words, therefore developing the Braille system. The word at that time was not only a symbol but replaced the concept of the thing in the world. Sullivan said that language means more to the mind than light to the eye. The first thing Keller deciphered via Sullivan's hand signs was "doll," the doll she was holding. She was then using an alphabet for deaf people so that her fingers would learn the alphabet. At the end of the work, as the play "The Miracle Worker" by William Gibson suggests, Sullivan stated that she intended to teach her all the vast things in the world, all that people feel, think, know, and share through words, so that no one is left in the dark. Anne longed for at least one word from her hand to reach her mind, that is, her understanding and the dilemma of how she could tell her that a word led to that thing he had placed in her lap; how to realize this connection between the two. The word can become the "eyes" of the little girl so she can see everything beyond and inside her. What is she without words if she cannot think, have ideas, or communicate without them? Otherwise, no thought could be hers.

The "miracle" happened when, at the climax of a family conflict, Sullivan and little Helen are outside pumping water, and Sullivan signed with her fingers the word w-a-t-e-r, after which, repeated several times, the miracle of understanding occurs in which Keller's face is transfigured at that moment when the light of knowledge shone.

# Narrative as a "Biology of Meaning"

The concept is grounded in knowledge and theory, so categorization does not remain a simple matching of the characteristics of the new element with those of the category of concepts but rather requires that any new element fit into the explanatory relationship of the theory that organizes the concept into a based structure on the ability to combine, starting from relationships. The concept is, therefore, a part of the theory, a brick from which the foundation of thinking is built. Theories thus determine which properties are relevant in the categorization exercise and are more concerned with content than with structure itself, as narrative perspective theories do.

The narrative participates in the "biology of meaning" (Bruner, 1990, p. 72), which is not only a mental achievement but a practical social exercise that leads to stability in the child's social life. Meaning is a cultural phenomenon that depends *a priori* on the existence of a common system of symbols. The structure of the narrative is inherent in the praxis of social interaction before its linguistic expression, based on social openness to meaning. As the cognitive narrative theory states, one of the most widespread and pronounced forms in communication is the narrative, based on four grammatical constituents: human action, undertaken by an agent and oriented towards a goal; sequential order of events; affectivity towards the laws present in human interaction; the narrative perspective, the presence of a narrative voice (Bruner, 1990, p. 77). Human beings think, understand the world, and organize their experiences through the mediation of these narratives, a thesis developed by Jerome Bruner that highlights how the stories constructed and stored in our minds help us make sense of the world.

Some of the key aspects of this theory are that stories are a complex way of understanding, in which we organize and make sense of our experiences; the narrative is a cognitive tool through which information is stored and transmitted or is a means of communication (public speeches, presented in the narrative form of the story); the pattern of identification with the characters in a story, in which we project our emotions and experiences onto the characters, thus creating space to work with them.

Just as human affectivity towards art resides in the fact that we do not keep in mind the totality of the abstract theses that are part of our own philosophy –

otherwise, art just brings metaphysical values and reasoning back to the level of consciousness perception, thus making their perception as concrete as possible.

## Systemic Awareness of Scientific Concepts

The concept is not a simple collection of association-based connections between entities in categories; it is not an automated habit, but a complex and authentic act of thought that internalizes itself through the mediation of the sign. Success is not possible through memorization, but through cognitive functions such as voluntary attention, logical memory, abstraction, comparison, differentiation, etc. Direct instruction in working with concepts is difficult to achieve, otherwise it would turn into learning without awareness of one's own learning, as suggested by Vygotsky. Vygotsky investigated how the awareness of one's own consciousness takes place, since this act presupposes the object of consciousness as its own activity – understood as a generalization and involving a certain level of skill.

The specific nature of the scientific concept aims at its relationship with the object to which it relates - a relationship mediated by other concepts that, in turn, participate in a hierarchical system of reciprocal relationships.

We thus recall here the fundamental distinction of education between "instruction" and "development", between scientific concepts learned through instruction and everyday concepts which are acquired spontaneously in the natural process of personal development through experiences. The concept taught in school differs by its nature from the one acquired in everyday life. Training is useful when it is carried out in front of development, the process of growth and maturation, otherwise it would not be necessary, wrote Vygotsky.

Training and learning is an impetus to use concepts deliberately and consciously in solving tasks and problems; they become operational tools on demand with the teacher's support. Thus, everyday concepts are restructured under the influence of learned scientific concepts, and the willful and intentional mode also moves to that level of spontaneity with which the everyday concept, perhaps "water", is learned. Thus, the learning process of scientific concepts only has to be one based on structure, relating to other concepts already learned. The child is aware of the concept itself, not just what it represents. Concept whose essence lies in enriching the perception and reflection of the surrounding reality that it represents.

Thus, for example, in the network of the conceptual structure of "narrative" is also involved "storytelling" whose definition from the sixth-grade textbook of

Romanian language and literature states that "it is a species of the epic genre in prose in which they are presented, from a subjective perspective, facts focused on a single epic thread, from the point of view of the narrator, character or witness of the events described (Grama-Tomiță et al., 2020, p. 151). The definition of the concept of "storytelling" includes other concepts related to the systemic network, such as "epic genre", "prose", "perspective", "narrative thread", "narrator character", etc. An unfamiliar concept to the students in that class (within the definition of the concept of "storytelling") is the "narrative thread."

Although the students know from experience what the word "thread" means and have learned the notion of "narrative", they find it difficult to conceptually abstract what the words mean when they form a sentence. Starting from the process as such to form this concept (aimed at shaping an epic thread), it will be made together with the material from which it is made in the story. A work technique suitable for this mission should be the modelling technique, in which, through the prism of interdisciplinarity with technological education and plastic art, the concept will thus define a concretely constructed one.

The concept-producing mechanism has a purpose, just as any action directs its forces to achieve a particular goal. The concept is formed with the emergence of the need to be satisfied in the concept – an activity oriented towards finality. So, through the mediation of a task that is to be solved by the formation of the concept – we note that the purpose of a task consists of solving it by building as such the concept targeted as a solution, as it does not just boil down to a chain of associations, but involves a process complex of thinking and moving thought further towards knowledge. The solution is, therefore, contained directly in the task it sets. But is the presence of a goal or a task a sufficient or only a necessary condition of concept formation?

In this example, students were given the task of writing a story with reference to different creative writing topics given, such as a story about a world where all the glass has disappeared or a snippet of a day watching a black and white film, and the narrator realizes that it is about himself / herself and from that moment the events begin; a story of how the letter "H" disappeared from the alphabet and what happened afterwards; someone from the neighbours is packing their bags in a hurry and the events continue like this; a cat the size of a block of apartments appears in the yard; stories about things kept in pockets; a text written from the perspective of the toothbrush, etc.

Students wrote down, in a short outline of ideas, the main sequences of the sequence of the story, which they wrote on separate sheets and which are

determined by the moments of the topic. They connect with a thread that, by the end of the activity, becomes a "narrative" one. They would look like this:

#### Figure 1

Narrative threads, Source: Workshop with students from Anenii Noi, Moldova



Through this educational practice, the definition of the "epic thread" is arrived at, which consists of chaining the narrative sequences of the story into a whole that has a beginning and an end; it is a thread that connects the narrative sequences in a story; the moments of the subject chained in a thread that connects them in a whole text that is perceived as a whole made up of parts and whose parts are integrated into this whole by the force of the thread: exposition, plot, the unfolding of the action, the climax and the denouement, with openness to the fact that they can also appear in other sequences, depending on the intentions of the one who writes the actual story.

# Conclusion

A concept is like a single piece of a mental puzzle, a piece of ever-expanding understanding. The mind is an architect of knowledge that builds and reconstructs unexpected connections between concepts – to create semantic structures of the inner and outer world alike, branching out into a radiant mental map of meaning. These pieces are assembled in the ascent or vice versa: from the concrete to the abstract, from the particular to the general – moving away from the physical, tangible and individual aspects of a thing perceived in experience towards the deeper, more general and respectively less tangible aspects.

The intricate mechanism of crafting a "narrative thread" in an educational context involves a spectrum of representations facilitating the realization of a meaningful path, recognizing that the solution lies embedded within the data itself. Conceiving a concept as a mental puzzle piece, the development of the "narrative thread" is a multifaceted journey.

Rooted in the insights of psychologist L. S. Vygotsky, the study accentuates the dynamic and productive nature of concept formation. From linguistic tags to standalone entities, concepts serve as mental files organizing scattered information into coherent representations. The conceptual landscape, however, is not static; concepts evolve with time, linking past experiences to present interactions, reflecting the continuous flow of knowledge.

Learning a new concept, such as that of creating a "narrative thread", requires contexts such as understanding the ways in which the concept appears (the definition of "story" and its composition); building connections with previous knowledge (past readings or the relationship of the concept to the epic genre); the use of concrete examples (the narrative sequences themselves, which form nodes and connect to this thread); the search for analogies (the "narrative thread" is analogous in structure to a thread); dividing the concept into smaller parts (the expression as such, "thread" and "narrative", sub-concepts); applying the concept in practical situations (noting the simple plan of ideas of the story on a certain theme on sheets attached to the "narrative thread"); establishing an emotional connection (the theme on which the story is built that meshes with the inner world of the writer); repetition and revision (the more narrative threads are presented in the classroom, the easier comprehension will occur); according to which the concept is fixed in the mental representation with a "thirst for the real" that determines its nature.

Understanding transcends from specific ideas to broader categories. As concepts evolve, they embody the essence of knowledge. This paper advocates for a purpose-driven concept formation, where the solution is embedded in the task itself, fostering a profound and authentic act of thought.

#### **References:**

- 1. Bruner, J. (1990). Acts of meaning. Cambridge, London: Harvard University Press.
- 2. Coșeriu, E. (2009). *Omul și limbajul său* [Man and his language]. Iași: Editura Universității "Alexandru Ioan Cuza".

- 3. Douglas, L. M., & Coley, D. J. (1998). Concepts and categorization. Perception and Cognition at Century's End. Cambridge, Massachusetts.
- 4. Grama-Tomiță, A., State, L., Nicolaescu-Onofrei, L., & Onofrei, D. (2020). *Limba și literatura română. Manual pentru clasa a 6-a* [Romanian Language and Literature. Textbook for the 6th grade.]. Chișinău: Cartier educațional.
- 5. Margolis, E., & Laurence, S. (1999). *Concept Core Readings*. Cambridge, Massachusetts: The MIT Press.
- Medin, L. D., & Schaffer, M. M. (1978). Context Theory of Classification Learning. *Psychological Review. American Psychological Association*, 3(85), 207-238.
- 7. Murphy, L. G. The big book of concepts. (2002). London: The MIT Press.
- 8. Rosch, E., & Mervis, B. C. (1975). Family Resemblances: Studies in the Internal Structure of Categories. *Cognitive Psychology*, 7, 573-605.
- 9. Vygotsky, L. S. (1986). *Thinking and Speech*. Cambridge, Massachusetts: The MIT Press.

**Acknowledgment:** The work was carried out within the grant Epistemological approach to personal development and education for society: from transdisciplinary strategies to the pragmatic purposes of the current society in the Republic of Moldova; digit 20.80009.1606.08.