

Unveiling the potential: Novel metaphors as cognitive processes for discovery through imagination

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Abstract. This paper proposes a new direction within studies of metaphor. It argues that metaphor, rather than functioning as a model for knowledge transfer between concepts, serves as a process of discovery to unveil the potential for novel connections through possibilities and imagination. The discussion acknowledges the significance of two essential features of metaphors, namely *ambiguity* and *hypotheses*, in the inferential processes of theorizing metaphor and proposes the application of C. S. Peirce's notion of *abductive reasoning*, the method of obtaining new ideas, as well as the application of Bergson's sensory-motor schema, which Deleuze calls 'cliché', to explain how metaphors can become habitual, potentially solidifying thought patterns. Ultimately, this paper aims to transcend the contemporary view of metaphors as mapping processes that promote clarity, uniformity and one-way systematicity to standardized meaning. Instead, it presents metaphors in terms of their multiplicity and the crucial role connotations can play in their effectiveness.

Keywords: metaphor; hypotheses; novelty; meaning; creativity; clichés

1. Introduction

The creative potential of metaphor, its capacity for discovery, and its ability to generate new insights and meanings have been recognized since Aristotle and extensively discussed in the literature (Ricoeur 1978; Derrida 1982; Geary 2012; Haley 1988). While contemporary cognitive theories of metaphor (Lakoff, Johnson 1999; Kövecses 2020; Gibbs 2018) acknowledge this creative capacity, there remains a tendency to approach metaphor primarily through the lens of the Aristotelian comparative model in the form of 'A is B', a paradigm that, as Danesi (1993: 123) observes, continues to maintain its relevance. Notably, George Lakoff and Mark Johnson (1980) adhered to this model in their definition and reframed Aristotle's concept of 'resemblance' as 'analogy'. However, the currently prevalent conception

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of metaphor known as Conceptual Metaphor Theory (CMT) defines metaphor as a cross-domain mapping for understanding one phenomenon in terms of another (Lakoff, Johnson 2008: 62). As Göran Sonesson (2019) remarks, this definition simplifies the classical notion of metaphor maintained through rhetorical tradition and goes as far as arguing that the primary metaphors according to cognitive linguists are diagrams in the Peircean sense.

Moreover, the simple analogy structure between concepts (Gibbs 2018; Johnson 2015; Kövecses 2020) tends to focus on metaphor's function in the pursuit of truth and certainty and does not fully explain the expressive power of metaphor, the "vagueness" in the creation of new meaning, and the cognitive processes of hypothesizing when processing the likenesses between two concepts, since mapping focuses on relatively clear embodied information and settled coordinates. Yet, the beauty of metaphors lies in their expressivity, obscurity, and the search for possible meanings. For example, 'carbon footprint' went viral in 2007 as a "novelty" term with many connotations (Nerlich, Koteyko 2009). Such a metaphor invokes an array of phenomena, delaying arrival at a specific meaning; while it has a tacit range, its interpretation is still not fixed on one phenomenon (Girvan 2015).

Thus, the discussion in this paper draws on the definition of metaphor that emphasizes not only the connection between disparate ideas but also the inherent tension maintained between them (Black 1962; Ricoeur 1978). Sonesson's (2019) critique of reductive approaches that confine metaphor to mere domain mapping underscores the significance of this tension, positing that it allows for innovative understanding and the discovery of new features in the original domain – an aspect overlooked by simplistic cross-domain analysis. Furthermore, when considering the idea that meaning is neither fixed nor singular, but rather exists in a state of multiplicity, contingent upon context, reader interpretation, and interrelationships with other texts and ideas (Derrida 1974; Barthes 1989), the process of "interaction" emerges as a core feature in defining metaphor. This perspective aligns with Juri Lotman's (1990) semiotic approach, which posits metaphor as a mechanism for generating meaning through the interaction of different semiotic spaces within the semiosphere – Lotman's term for the entire semiotic space of a culture. The emphasis on "interaction" presents a significant challenge to contemporary cognitive theories of metaphor, which predominantly focus on correspondence systems between conceptual domains as fundamental cognitive meaning-making processes. The cognitive metaphor theory with the heavy reliance on the mapping process still struggles to account for the full spectrum of metaphors, particularly novel and creative metaphors, which seem to resist straightforward domain mapping, despite being presented as new mappings (Bambini *et al.* 2019; Werkmann Horvat *et al.* 2022; Littlemore *et al.* 2018; Ruiz de Mendoza 2020).

While conceptual mapping has proven suitable for exploring the meaning of conventional metaphors that have lost their sense of wonder or mystery, its application to novel and original metaphors raises several theoretical questions, including those of the role of novelty and possibility and the obscurity of meaning. The proposition that new metaphors engender new conceptual mappings, while potentially valid, lacks sufficient theoretical exploration in current literature, which is particularly evident when examining the processes of comprehension of these new mappings, especially in complex metaphorical instances occurring within nonverbal or multimodal textual environments. The challenges inherent in applying the mapping model to such diverse metaphorical manifestations highlight the necessity for a more comprehensive approach to metaphor analysis. Such an approach should be capable of accommodating the full spectrum of metaphorical expressions across various semiotic modes, while also addressing the ossification process through which newly created meanings eventually evolve into repetition or clichés, in Gilles Deleuze's sense, of humans' limited perception.

With their ability to bridge the gap between the concrete and the abstract, metaphors possess the dual capacity to either clarify or complicate understanding. Jean-Jacques Lecercle (2002: 26) encapsulates this duality, noting that a metaphor's success is binary: it is either "apt or a failure". An apt metaphor can provide profound insight and enhance communication, while a failed one may lead to confusion. Highly creative metaphors do not have certain denotations, and many remain open to interpretation for long periods of time, which means that the mapping process should include some level of hypothetical thinking and creativity. A metaphor is original and spontaneous when its elements are placed together to emphasize one or more connections between them (semantic tension), but the search for the connection is not elucidated in the theoretical discussions of metaphor.

This paper posits that the comprehension of new metaphors is predicated on an interpretative process that engages an interaction mode of cognitive activity between the association of two concepts, that is characterized by the movement of ideas, which means the consideration of multiple emergent insights throughout the text, the engagement of imagination, and probabilities. Notably, Charles Sanders Peirce (1839–1914) posited abduction as the sole logical operation capable of introducing genuinely new ideas (CP 5.172). By situating metaphor comprehension within this abductive reasoning basis, this paper aims to explain the cognitive mechanisms underlying the generation and interpretation of novel metaphorical constructs. Therefore, the paper aims to address the gap in metaphor theory that relates to new mapping for new metaphors by using Peirce's concept of abductive reasoning, Bergson's sensory-motor schema, and Deleuze's notion of

cliché, to examine the semantic evolution of metaphors from initial vagueness to habitual logic that no longer invigorates thought.

More specifically, I argue that (1) metaphors arise in interpreters' imagination, a process that builds on conventionality to give rise to originality, and (2) metaphor is a mode of inquiry that establishes itself as a possibility before it takes the mapping route toward settling into cognition and language as cliché. By covering these two points, I reframe new and original metaphors as processes of imaginative revelation from an already existent connection between ideas, rather than new systems of correspondences. This study addresses the research question: "What is the role of hypothesizing in novel metaphors?" In doing so, I aim to elucidate the cognitive mechanisms underlying new meaning in relation to the comprehension of metaphor, contributing to understanding of newness in metaphors as cognitive processes.

The paper is organized as follows: Section 2 discusses how resemblance in imaginative thinking creates possibilities. Section 3 analyses the functionality of semantic novelty. Section 4 discusses metaphors' journey from being novel to being stabilized. Section 5 explains Peirce's notion of 'abduction' to demonstrate how new ideas are introduced through metaphors. Section 6 uses Bergson's sensory-motor schema and Deleuze concept of 'cliché' to argue that metaphors can also stop the thinking process by becoming habitual associations (or clichés) that stand for limited perceptions by virtue of ideological beliefs and psychological demands.

2. The "imaginative connection" and Peirce's types of signs in metaphors

Novel and impactful metaphors stand out in communication because they "invite" interpretation and simultaneously grant interpreters the opportunity for *creation* that demands active mental engagement. This dual feature highlights their unique role: they engage individuals by offering a fresh perspective, and they empower interpreters to construct meaning, thereby fostering a collaborative dynamic in the exchange of ideas. While an analogy or correlation between two ideas may be a prerequisite, it alone is not a sufficient condition for a successful metaphor, which manifests as an intellectual puzzle that interpreters almost "instinctively" wish to decipher (Black 1962; Glucksberg, Keysar 1990). Without this search process, an expression remains an analogy, merely showing and explaining concepts. For example, 'a coach is to a football team what a manager is to a business' is an analogy that can be elucidated through comparison but requires no deciphering and in this way it is very different from a metaphor. In contrast, the metaphor 'the

internet of bodies' (IoB) is a new way to refer to data collected from human bodies through technology. The metaphor relates the network of connected computers to the human body, which is an organic living system that can be visualized as nodes in a larger web of information exchange. Linking these two ideas requires making an imaginative leap to think of the body as a network and a source of data being assimilated into an internet-like structure. 'The internet of bodies' creates an abstract and novel concept and brings a fresh perspective beyond parallels to reveal a new view of the human body.

Another example of a metaphor that requires a creative leap is Ritz-Carlton's motto "We are Ladies and Gentlemen serving Ladies and Gentlemen." The metaphor conveys a positive message about respect and harmony in human relations, which requires a creative conceptual leap. This imaginative connection qualifies the combination of ideas as a metaphor. Theoretical frameworks often undervalue the "imaginative connection" in metaphors, which is pivotal for transcending mere comparison. This oversight diminishes the recognition of metaphors as dynamic constructs that not only reflect existing ideas but also generate new creative insights. Therefore, a more comprehensive approach to metaphor theory should emphasize the transformative potential of the imaginative connection, which is the hallmark of original metaphors.

Michael Haley (1988: 14) argues that good metaphors involve a balanced use of signification in terms of Peirce's second trichotomy of signs: the symbol (word sign), the index (sign), and the icon (object, resemblance). Peirce's trichotomies extend into ten classes of signs that denote possible, actual, and necessitant, and these classes are the result of grouping the Sign itself, its Object, and its Interpretant. Whereas the first category of signs operates at the level of quality and the third operates at the level of project, the second trichotomy of signs is a framework for the existence of knowledge, that can be used to explain novel metaphors. A sign (or Representamen) is defined as a stimulus that can be interpreted, as either signifying something or standing for something (CP 2.172). Importantly, Peirce's sign is not so much an abstract singular sign but refers, invariably, to "a collection of signs" which means that a word, sentence, or passage can be a sign (Cobley 2020: 18).

Therefore, the relationship given by a sign (Representamen) can refer to its object through similarity (Firstness), contextual contiguity (Secondness), or law (Thirdness), and the sign may be termed an icon, index, or symbol, respectively. Eco (1976: 178) explains Peirce's icon, index, and symbol as follows: an icon imitates an object or concept, and an example is a photograph that resembles what it depicts. More accurately, an icon merely shares qualities with an object. An index is the sign that arises from the presence or proximity of its object, such as

a footprint, which is the index of a foot. It relies on a causal connection between the object and the sign. A symbol is a learned association, such as the letters of the alphabet or language. Invariably, the symbol arises from convention, and idioms are good examples because their signification is ultimately arbitrary and habitual, and speakers within a language community comprehend them based on shared conventions and cultural frameworks over time. Just as icons and indexes can become symbols through repetition, conventional metaphors may have undergone similar representational processes and lost their vitality.

Peirce (W 2.56) suggests that a pure resemblance or icon can involve a highly imaginative act in that the resemblance is merely a possibility rather than an actual reality. It becomes problematic to claim that all metaphors result from the formation of clear cognitive links or mappings, as early cognitive linguists maintained. An imaginative act is a possibility rather than an actuality, as seen in surrealist art, where resemblance emerges only as a possibility from an unnatural or irrational juxtaposition. A metaphor forces two different ideas or meanings to clash, and the semantic tension that results can be further used to create memorable messages, surprise, or intrigue (Richards 1936; Black 1962; Ricoeur 1978). Interpreters recognize the tension as an index that signals something factual (icon) – the shock or surprise of an unusual metaphor. Seeking likeness between a metaphor's referents, interpreters tend to search for an icon (resemblance in the sense of sharing qualities). Searching for the meaning of metaphors can uncover a culturally established likeness between an icon and its object. In the absence of an icon, interpretation remains seemingly wholly subjective. Surprisingly, if the resemblance is weak or non-existent, there is little to no understanding. Roger L. Martin (2022) exemplified this point with the Segway product, a two-wheeled machine developed by Dean Kamen. He suggests that the product's weak market performance relates to its absence of a relatable metaphor. Unlike cars or bicycles, the Segway lacked a familiar point of reference, underscoring the difficulty of marketing new technologies without metaphors that resonate with consumers.

In impactful metaphors, the index of semantic tension takes on its own iconic force, changing and reshaping the interpreter's perception of the similarity between the original image (icon) and its target (Haley 1988). Nonetheless, other metaphors and similes represent their objects mainly through a broad process of resemblance, for example, "We are like dwarfs standing on the shoulders of giants" (John of Salisbury 2013[1159]). Michael Haley (1988: 37) points out that, for Peirce, unusual metaphors are special signs that differ in kind from image- and analogy-based metaphors. Image and analogy metaphors become established conventions because of their symmetry, but unusual metaphors maintain metaphoricality longer because their similarity resists full comprehension or concrete

delineation. An example is the metaphor ‘reign of error’, the name of a single from the metal-punk group Dead Cross’s album. The metaphor presents modern civilization’s failure to act on climate change and iconically represents its object’s character as a sign. It introduces an imaginative perspective by paralleling the symbolic idea of a kingdom/reign with the idea of systematic mistakes, and it captures how entrenched errors can semiotically function as ruling paradigms that exert philosophical control. The parallel between an era or a reign and mistaken belief, via the symbol of a reign creatively depicts the semiotic nature of error as a possible prevailing world view.

Such original metaphors capture representational essence and symbolic value, creating fresh imaginative leaps with continuous variation rather than understanding its meaning as a category and invoking vivid and extensive symbolic imagery. ‘Metaphoricity’ (Müller 2008; Jensen 2017; Camp 2008) is treated as a scalar value that can be enacted in different degrees to refer to the richness of metaphors and distinguish highly original and creative forms from those that are likely to become semi-lexicalized. Original metaphors are often considered to generate further readings because there is no specific, already established, or known cognitive content; however, like many other linguistic expressions, the novelty of metaphors becomes worn out or ossified in quotidian language use. Many metaphors maintain some metaphoricity by being false in a literal sense, as in the examples ‘The boxer has an iron fist’, conveying hardness through sensory connections, and ‘The president has an iron will’, portraying ‘will’ as unmovable, through logical analogy.

For Peirce (1903, CP 2.277) metaphors are signs, or hypoicons, that “represent the representative character of a representamen by representing a parallelism in something else”, meaning that metaphors bring simple qualities (Firstness) and diagrammatic relationships (Secondness) into a generalized relation (Thirdness). Metaphors contribute to the communicability of structured cognitive constructs, facilitating the articulation of intricate concepts’ core elements without losing their inherent qualities to yield fruitful outcomes from one’s hypothetical assertions. The example of ‘reign of error’, discussed above, parallels a symbolic idea with a concept and iconically depicts how erroneous thinking can govern society in the same way a monarch rules.

Not enough recognition has been given to parallelism as the core of an imaginative perspective. The boundary between what is real and what people can imagine is indicated by Peirce when he states: “Of those [combinations] which occur in the ideal world some do, and some do not occur in the real world; but all that occur in the real world occur also in the ideal world. [...] [For] the sensible world is but a fragment of the ideal world.” (CP 3.527) Haley (1988: 108) explains Peirce’s

idea by comparing examples such as ‘a barking butterfly’ with ‘a barking triangularity’, which both require an imaginative process but feature different kinds. The first case is a non-possibility in the real world, that is thought of only by acknowledging the actual world (Actuality). Thus, the tension in the metaphor is moderate. The interpreter crosses an existential boundary that requires only a moderate imaginative effort since the “gap” resides in something that exists in Actuality. In mundane metaphors, the tension stems from merely crossing a conventional boundary of habitual associations without crossing any *boundary of experience or conception*; this is the form of connection that Peirce identifies as ‘habit’. For example, barking is habitually associated with dogs; however, it might be possible to describe someone as ‘barking when talking’, given that barking signifies aggression. The tension here is minor, hardly noticed by interpreters because crossing the boundary aligns with habitual cultural usage. Yet, in ‘a barking triangularity’, a conceptual boundary is crossed because a change in conceptions is required. In highly creative metaphors novelty may stem precisely from this crossing of *conceptual boundaries*, although this usually *follows* a crossing of existential and conventional boundaries. For example, in “words float [...] in [...] syllabic nets of frost” (Tom Sexton cited in Haley 1988: 63), the phrasing is unconventional and most likely not experienced before. For Haley (1988: 63), ‘nets of frost’ crosses an existential boundary by forcing interpreters to imagine a frozen breath forming lattice patterns, aiding comprehension of the more abstract ‘syllabic nets’. Clearly, figural tension relates to the kind of boundary crossed – conceptual, existential or conventional – also guiding interpretation of the icon’s suggested similarities.

Additionally, Peirce’s (CP 2.152) three categories – Possibility/Firstness (results from a conceptual boundary and it pertains to freshness, freedom and newness), Actuality (an existential kind of boundary) and Habit (conventional boundary) – reveal that metaphors involve what might be called high, medium and low tension. Firstness is pure sensation, a state in which there is no analysis, comparison, or any other process, but it possesses a unique quality that is unmatched by anything else. Firstness is reminiscent of Richard Wollheim’s (1987) perceptual act of *seeing-in*, an active process of exploring the relationship between matter, the tangible, and what it represents for the viewer, where artistic expression finds its roots since both notions refer to latent potentiality. Secondness in Peirce’s category is the level of consciousness where reality is experienced and intellectual categorization is performed, such as attributing the firstness of the quality of redness to a flower. Thirdness is the mediator of the relationship between the First and the Second and corresponds to culture, the conformity or habitual mode of thinking through which thought, language, representation, and semiosis occur (Danesi 2004). Considering the above, metaphor functions as a form of Thirdness

by mediating between the First (the ideas being compared) and Second (the logical relation between them) to create a new meaning. Moreover, metaphor aligns with Thirdness within language and culture, mediating meaning through shared habits of thought and representation. At its most creative, a metaphor can transform these habits in dynamic ways.

However, anomalous expressions such as Chomsky's "colorless green ideas sleep furiously" and "triangularity barks" (Haley 1988: 106) cross conceptual boundaries yet remain largely meaningless because no clear similarity emerges between their elements. In contrast, in Sexton's metaphor "Our words float before us/In fine syllabic nets/Of frost [...]" beauty and pleasure result from a near truth in imagining words captured in a frost lattice. Crossing the conceptual boundary is still possible, allowing interpreters to enhance the discovery it enabled. Thus, conceptual boundary crossing is necessary for metaphor; but such crossing is not the essence of metaphor because some kind of similarity must also be discernible.

3. Metaphor as creative discovery

It should be emphasized more that the link and the similarity between the elements of the metaphor is not created but discovered (Geary 2012; Haley 1999). The cognitive process of discovering the similarity in a metaphor, or the "mapping", is an area not covered by contemporary accounts of metaphor. More specifically, this section addresses the question of how finding similarities, or the starting point of the process of "mapping" functions in the interpretation process, before more clarity is achieved in constructing new meaning. The theories overlook metaphor's imaginative nature by not examining this discovery process, despite discussing the nature of metaphor as "many-correspondence mapping" (Lakoff, Turner 1989; Johnson 1987; Kövecses 2020; Wilson 2011). Finding similarities in novel metaphors is a creative discovery with an important role in the process of creating meaning, because the similarity sparked by the metaphorical terms creates a "possibility" or "potentiality". Peirce's account of logic is useful for defining new metaphors because the "possibilities" stem from instinctive reasoning, which Peirce (CB 2.104) terms 'abduction' (sometimes Peirce calls it 'hypothesis'). For Peirce, abduction is "the process of forming an explanatory hypothesis. It is the only logical operation which introduces any new idea" (CP 5.171). Additionally, abduction encompasses "all the operations by which theories and conceptions are engendered" (CP 5.590). For Peirce, abduction is the faculty by which the mind is attuned to reality and the logic of discovery, and such a process needs to be theoretically addressed when examining new metaphors.

Haley (1988: 48) identifies the process of discovery as a principle of metaphor because discovery is an art-creation process of new meaning. In Keats' lines "the dark silent blue/with all its diamonds trembling through and through" the metaphor 'trembling diamonds' compares stars to diamonds and trembling to sparkling. The star–diamond similarity stems from their shared sparkling quality, allowing 'star diamonds' to become a way of discovery. The process is similar to interaction, as presented by Max Black (1962), I. A. Richards (1936), and Paul Ricoeur (1978), where meaning arises from two interactive thoughts rather than a literal comparison and creates semantic growth. Additionally, the interaction creates tension, prompting interpreters to search, which is carried out through possibilities. Haley considers 'diamonds' to be an *icon* for the object 'stars' because both share the quality of sparkling. However, he notes that the same sensory similarity of diamonds and stars could differently connote 'high value' related to stars' height. Thus, similarity in metaphor allows different interpretations through a selective process that is not theoretically mentioned in the "cross-domain mapping" that cognitive linguists consider to be a fundamental cognitive meaning-making process (Bundgaard 2019). Equally important, poetic metaphors are good examples of icons because they show how meaning becomes subjective, embodied and enactive as opposed to the author's intended meaning. Poets use indexical tension to shape people's perceptions of iconic truth, using shocking juxtaposition to direct attention to unnoticed links or relationships (Haley 1988: 16).

Peirce's notion of index helps to explain how novelty in metaphors is aesthetically appreciated. The metaphor's dynamic linguistic actualization involves sometimes false and impossible opposition between its elements, drawing interpreters' attention and making them aware of possibilities (Haley 1988). Even though metaphors themselves do not have the direct causal link of an index, they often indirectly point to or index the characteristics of their signified based on analogy, substitution, or resemblance. Thus, indexical tension is a crucial element in metaphor interpretation, primarily because the metaphor does not directly cause the transfer but relies on pre-existing indexical associations. For example, 'AI tsunami' compares the field of artificial intelligence to a tsunami wave. Although AI and an actual tsunami have no direct causal link, the metaphor taps into the existing qualities as indices associated with tsunamis based on cultural knowledge, such as destruction, unstoppable force, and sweeping change. The metaphor takes the established indexical connections associated with 'tsunami' and transfers them over to 'AI', highlighting similar qualities. Importantly, there is no direct causation but an imaginative linkage through the associated indices. Metaphors indirectly harness the power of cultural indices, providing symbolic meaning through implied analogy and imaginative substitution. Peirce (CP. 5.213) maintains that

all our knowledge takes the form of a hypothesis that interpreters test, classify, and relate through our ability to manipulate signs.

Metaphors gain strength from how powerful they strike interpreters as during the discovery process. However, many new metaphors can be difficult to understand fully at first because identifying new similarities can be a challenge. It usually takes some time to feel the *rightness* of a metaphor and the truth of a fresh metaphorical link. For example, songwriter Nicki Minaj clarifies the interpretation of her song “beez in the trap” as a “slang way of saying, ‘I beez doing such-and-such-and-such. So it’s really like, ‘I am always in the trap.’ Now, the trap, [...] relates to anywhere where you get your money.”² The combination of the two disparate elements, ‘beez’ and ‘trap’, evokes a sense of a Sisyphean moment, a new possibility – linguistically encoded symbols for constant money-making, offering a new perspective on making money. In Peircean terms, *the combination of ‘bees’ and ‘traps’ forms a successful metaicon, encouraging interpreters to see both bees and traps in a new way with a fresh meaning.* This example demonstrates how discovery expands the mind beyond familiar associations to consider new connections. The index’s role is to point indirectly to qualities such as being always moving and busy for financial gains. The indexical power works at a connotative level, and the words act as symbols that linguistically index certain qualities rather than creating a direct causation.

Haley points out that a defining trait of the most effective poetic metaphors is their complex pathway, which ultimately traces back to an original possibility and vagueness (Firstness in Peirce’s terms) that preceded the metaphor’s linguistic expression (Secondness in Peirce’s terms). The process of discovering symbolic thought expressed by language has a “nesting” characteristic. Terrence Deacon (1997: 22, 62) shows how different possible interpretations of signs (iconic, indexical, symbolic) build on each other in layers to lead to levels of interpretation. Metaphor interpretation depends on people’s capacity to interpret and use these modes. Though interpreters typically interpret metaphors hierarchically, first iconically, then indexically, then symbolically, a sign can be interpreted in any way (CP 5.237). Words’ referential links in a metaphor express indexical relationship rather than just being indices, because iconic and indexical interpretations create relationships with other icons and indices, real or imaginary.

Deacon (1997: 89) suggests that the associative reference shifts into a symbolic reference, becoming a medium for consciousness. His view of advanced cognition centres on the evolution of associative indexes into symbolic references, allowing

² The Graham Norton Show, BBC1, 20 April 2012; available at: <https://www.bbc.co.uk/programmes/b01gkf7k> [accessed 1 September 2021].

abstract thought and consciousness to emerge. By freeing cognition from fixed associations, symbols gave mental capacities flexibility by transforming clear references into a medium capable of expressing and connecting abstract concepts, enabling conscious thought and imagination. For metaphors, this means that their meaning relies on words' combinatory role and assumptions to make generalizations from the regularities in the relationships between words, emphasizing embodied ideas' relationships. Such an argument remains a challenge for Conceptual Metaphor Theory, which relies heavily on the content of ideas rather than their relationship (to some extent the relationships are considered in the conceptual blending theory which also addresses the *vague* nature of concepts).

4. Degree of novelty: From novel to stabilized meaning

Novelty in metaphor is usually discussed in relation to the range from conventional and familiar forms to new and highly poetic ones. If new metaphors are indeed new mappings between what is believed to be conceptual metaphors, then the probability that all metaphors were once active and perceived as new and unusual remains a challenge for theories that postulate metaphor as a frame. The conventionalization of metaphors occurs largely because repeated use diminishes their novelty, surprise, and possibilities. Some examples include financial metaphors such as 'being under a bear squeeze' and 'facing a graveyard market nowadays' (Mateo, Yus 2021). As Nietzsche (2009: 257) argues, metaphors that were once vivid become worn and lose their sensuous force as they become ingrained into everyday communication. He points out that after long usage a metaphor hardens or freezes into a more stabilized meaning, a view that is also supported by Relevance Theory when metaphor is presented as the meaning that lies at one end of the literal–non-literal continuum (Sperber, Wilson 2008). Moreover, Nietzsche's suggestion that concepts are metaphorical in nature, because they direct meaning into singular events, invites further exploration into the mapping processes, especially with regards to the difference between abstract and more concrete types. However, a nuanced analysis of metaphorical mappings transcends the scope of the current discussion.

What the discussions of metaphor should mention more often is that the sense of a metaphor can be revived. Arjo Klamer and Thomas Leonard (1994: 39) offer a good example of how, in specific fields such as economy, a dead metaphor is often brought back to life by newcomers and outsiders who may build on the analogy and extend the metaphor, successfully reviving it – an idea also supported by Jacques Derrida (1992) when he suggests revivifying the metaphors that refer

to the Holocaust. The fact that people can revitalize metaphors proves that the mind is metaphorical and that metaphors never die; instead, metaphors become *ossified* or set in stone, where they can still be reanimated. The first generation of cognitive linguists presents the so-called dead metaphors as the architects of the human conceptual system. To exemplify, the metaphor 'she's on top of the world' is the result of the belief in many cultural systems that MORE/SUCCESS IS UP. Perhaps neither Conceptual Metaphor Theory, through its embodied concepts, nor other theories of metaphor that follow it adequately emphasize the idea that all metaphors start provisionally, in the sense that they start as possibilities, and, as Jean-Jacques Lecercle (2002: 26) points out, they can be either "apt or a failure". Furthermore, while the present paper focuses on exploring novel meanings generated through metaphors in human inferential processes, it also recognizes metaphor as a cognitive mechanism that extends beyond human cognition. Thomas Sebeok (1994) suggests that metaphor is a fundamental cognitive and communicative process that has evolved within biological systems, allowing it to operate across various sign systems. Thus, the cognitive mechanism of metaphor contributes to the perpetual existence of metaphoricality across cultures, languages and contexts.

If metaphoricality never ceases to exist (Radman 1997: 149), it can be argued that conceptual metaphors that are dead metaphors can be revived, or, if they are so sedimented that they cannot be revived, then they might not even be metaphors anymore. What cognitive linguists propose to be dead metaphors, which they have named conceptual metaphors, might be in fact dormant and tired metaphors, since otherwise they would be just like any other conventionally accepted meaning. After all, Black (1962) dismisses truly dead metaphors on the basis that a dead metaphor loses its metaphorical nature altogether. Black's distinction between "weak" and "strong" metaphors offers an aid to understanding that a metaphor is alive and resonant when it requires further elaboration and imaginative interpretation. Metaphorical resonance is an opportunity to create thought and use people's imagination. For example, works of art and literature often contain metaphors that invite interpretation and rely on a process of imagination, while other metaphors can lead more directly to a more mechanical process in which no imaginative thinking is required for interpretation. Nonetheless, the perceptual engagement of interpreters is inherently selective, attending primarily to elements of interest, which consequently results in a partial apprehension of the thing or image in question (Bergson 1959). This phenomenon suggests that metaphors may rejuvenate their expressive potency through the imagining process of novel interpretative possibilities. Perception operates as a selective process, in which interpreters perceive aspects relevant to their intentions and the situational milieu that necessitate the metaphor's elucidation.

5. Creation of a new meaning through abductive reasoning

The creation of a metaphor by linking two ideas together serves as a starting point that requires interpretation since the creator of the metaphor leaves the creation of the meaning entirely to interpreters. The creator may provide an initial imaginative leap in bringing the ideas into a relationship in the first place, but the connections are processes that are decoded and elaborated on by interpreters. Arriving at meaning is best explained through Peirce's process of abductive reasoning or developing explanatory hypotheses to make the similarity or vagueness suggested by the metaphor more concrete. Peirce's argument is important in the discussion of how metaphors are a trigger for the evolution of meaning and how they create change and knowledge (Sørensen, Thellefsen 2014: 505). It is important to highlight that Peirce clarifies that *abductions* do not provide a high degree of logical certainty because they are acts "of insight, though of extremely fallible insight" (CP 5.181) that arrive in a flash. They are the only way to generate new knowledge – by way of functioning as the only logical operations that can help get an idea in the first place (CP 7.217–8, 5.172).

There are no established patterns or meanings and no habit of thinking in unfamiliar metaphors, and the unusual associations provoke surprise, shock, and unease by defying expectations. Abductive reasoning allows interpreters to make initial perceptual judgements to explain the surprising juxtaposition. *Abductions* become the first logical processes to make perceptual judgements in order to explain surprising facts and merely *suggest* that something may be. Peirce discusses the interpretative role of percept or perceptual judgement and its relation to abductions and points out that hypothesizing comes from perception (CP 5.185). Thus, the interpretation of original metaphors arises from perceptual judgement, which can also be a limitation to the hypotheses it also creates. As Feodorov (2018: 200) notes, novel metaphors carry the intellect from immediate reality into a *multitude of possible worlds*.

It is beyond the scope of this work to discuss the role or absence of conceptual metaphors in the formation of perceptual judgements. However, I want to point out that CMT considers only what Peirce calls a Logical way of interpretation, not addressing the Emotional and Energetic ways. Despite the recent attempts to include emotions in CMT, there is still a gap in understanding how interpreters map characteristics from different domains when interpretation relies initially on a feeling produced by a sign, which is the emotional interpretant in Peirce's (CP 5.475) account of perceptual judgement. The logical interpretant gives the meaning of the concept, leading to an interpretant that is a habit, which Peirce (CP 5.491) considers "a concept that words can convey". While conventional

metaphors can be explained by finding similarities between two concepts, this approach is limited when it tries to explain the comprehension of metaphors that are novel, the indirectly expressed metaphors that do not follow the 'A is B' format from films and advertising, and even the "one shot mapping" in metaphors such as 'whose waist is an hourglass' (Lakoff 1993: 229).

Subsequently, the abductive inference marks the first stage of meaningfully interpreting creative metaphors. Peirce's abduction is similar to Vico's (1996) idea of poetic logic, a specific mode of reasoning that creates concepts from sensations and affect. Peirce considers abduction in relation to iconic reasoning that makes imaginative leaps and depends on the perceived likeness given by the similarity in metaphors. For example, in 'carbon footprint' the imaginative leap of depicting emissions as a footprint connects ideas through perceived resemblance rather than direct correlation or mapping. The metaphor iconically abducts the notion that human energy consumption and greenhouse emissions are like a footprint imprinted in the environment. Moreover, calling the climate impact a 'footprint' highlights several ideas such as responsibility, environmental degradation, and the global effects of emissions, which generate new perspectives on abstract climate issues.

In an example that appears in Anderson 1984: 464, 'the field smiles', the two terms 'field' and 'smiles' together give rise to a new symbol without losing some of their conventionality. 'Field' and 'smile' cannot be separated, and the metaphor must be considered as a whole. The association above does not bring precision, but rather vagueness, resulting in a metaphor rather than an analogy. However, this point is perhaps part of the beauty of a metaphor because precision is replaced by vagueness. Thus, the new symbol that a metaphor creates contains not only traces of the conventional or clichés, but it also evolves from vagueness, that is inherent in all signs, as Peirce argues. Furthermore, vagueness is mostly created by feelings that are vague through their pre-analytical characteristic (Damasio 2021). Peirce links vagueness with spontaneity when he claims that "the evolution of forms begins, or at any rate, has for an early state of it, a vague potentiality" (CP 6.196). Thus, creative metaphors cannot be other than vague, with potential for future meaning limited by the boundaries set up by what their individual words represent. Kalevi Kull (2022) discusses the aesthetics in metaphors from a point of view that aesthetic judgements presuppose cognitions, pointing out that multiplicity of meaning can be a feature of beauty. Framing multiplicity of meaning in such a way implies that ambiguity often found in metaphors is not a shortcoming, but can be a source of their aesthetic value.

It is difficult, if not impossible, to arrive at a definite interpretation of unfamiliar metaphors that highlight new perspectives. Various approaches that interpreters

may use when encountering unknown meaning add to the complexity of the interpretation process. They might find the construction too artistic and abandon the interpretation process; they may invest effort into creating hypotheses and aim to determine uniformity; or they might continue pondering its possibilities. When interpreters are willing to follow the interpretation route, as Peirce recognized, the hypotheses (*abductions*) are then developed, as consequences, in the process of *deduction* and finally tested against experiences in the final stage of *induction* or determining whether the hypothesis is right, modified, or rejected.

Peirce believes that while hypotheses might be part of logic, their relationship with other logical operations remains speculative. When seeking meaning, natural inclination leads to the search for logical connections, which Peirce refers to as the logical mind or disposition. This is considered the most developed form of sign, driving the reasoning process when exploring new meanings. In many linguistic and pictorial metaphors, the association of elements goes beyond mere logic. Logic is often associated with conventional metaphors that have equivalent literal meanings, such as idioms and other expressions. However, original metaphors demand creativity that surpasses clear logical connections or a core sense of concepts. Consequently, the three stages of inquiry are interdependently connected, and the hypothesis serves as the foundation for selecting arguments and testing possibilities. Throughout the process of reaching an interpretation, possibilities are considered, evaluated, rejected, and refined in an ongoing process. The abductive nature of metaphor is inherent in its ability to create new knowledge. If materialized by the intellect, the metaphor begins its own life and has the potential to accrue stable meaning. Overall, Peirce's theory captures the important role that metaphors play in creatively hypothesizing about reality in a way that current metaphor debates often overlook.

6. The ossification process: metaphors as clichés

With their ability to invigorate thought and offer fresh perspectives and novel insights, metaphors are apt or successful when they allow for multiple interpretations and do not have one "correct" meaning that can be conventionalized, such as the examples 'she's my buttercup' (Elvis Presley's "All shook up") or 'carbon footprint'. When a metaphor is first introduced, its interpretation seeks similarities and imaginative thinking to make sense of the unconventional comparison. This aligns with Peirce's idea of Firstness (a mode of thought as possibility), where a metaphor captures novelty, possibility, and emotions. Considering novel metaphors as signs, the interpretation process is one of semiosis that carries communication.

As the metaphor becomes more familiar through use, the imaginative effort decreases, and the meaning often tends to crystallize into a more standardized form. What was once a discovery and an active process, often becomes routine mental processing. Such a habitual process relates to the sensory-motor schema as proposed by Bergson (1959) as part of his philosophy of intuition, on which Deleuze (1986, 1989) builds his concept of ‘cliché’ in his Cinema books. Both notions offer profound insights into the process of meaning-making and the consideration of novel metaphors as signs. Notably, for both authors, perceptions are not pictures of the world stored in the brain but are rather present in the relationships between bodies. In Deleuze’s perspective on clichés, the shift from newness to conformity can paradoxically constrain the very cognitive processes that metaphors are meant to facilitate, wherein language serves as a force that orders and even freezes the world, subjecting it to common-sense and pragmatic interests, as discussed at length by Lecerle (2002: 25–26).

Bergson (1992[1946], 1959) emphasizes the importance of intuition over rational analysis as a means of driving creativity and attaining knowledge, and suggests that humans’ perception and understanding of the world is shaped by both needs and interests and bodily experiences and movements, which means that interpreters filter their experiences to focus on what is useful for survival and action. Bergson explains this through the ‘motor schema’, which processes sensory information into action plans, indicating that perception is an active, purposeful process connected to our interactions with the world. Thus, a novel metaphor that relies on a good connection between ideas involves first a dynamic, active process that is one of intuition, selection, and insights that go beyond conventional, discursive reasoning. Bergson’s sensory-motor schema aligns with the idea that the understanding of metaphors is grounded in embodied experiences, which is at the core of CMT. Neuroimaging studies (Desai 2022) have shown that processing metaphors activates brain regions associated with sensory and motor experiences. For example, when people hear the metaphor ‘grasping an idea’, areas related to hand movements may be engaged. The embodiment of metaphors is strongly argued in contemporary theories of metaphor that rightly do so. However, the emphasis of the theoretical debate remains on the conceptual metaphors that result from analogical thinking before hypothesizing the analogies and connections that make metaphors so powerful in their expressiveness.

Bergson (1944) highlights ‘duration’ as a key idea, describing it as the continuous flow of lived experiences. This concept is important to understanding expressive metaphors, the comprehension of which requires time, and which often prompt reflection and reevaluation of different options that the association of two concepts can create in a given context. For Bergson, intuition means engaging

with this durational flow directly rather than relying solely on analogical reasoning (Gare 2020). Bergson (1994[1946]: 92) believes that an original thought must inevitably express itself using existing ideas that it encounters and incorporates into its dynamic. He views intuition as a type of perception that goes beyond conventional patterns of thinking to apprehend the direct and spontaneous emergence of thought. Just as original thought requires interpreters to move past pre-conceived notions to embrace innovation, interpreting new metaphors demands that interpreters stretch their imagination to understand new connections and ideas in fresh and unconventional ways.

Analogies remain different from metaphor and even from idioms. Conventionalization removes any vital force from new and highly expressive metaphors. A metaphor that has lost its vividness is a cliché in this sense, in both form and content, as it becomes a product of a code or a structure of societies. Deleuze (1991, 2005: 61) draws extensively from Bergson to develop his own critique of representation, mainly through the concept of ‘cliché’, defined as a pre-packaged image or concept that inhibits genuine thought and creativity and feeds into “ready-made perceptions” of social and political structures. Within the context of cinema, clichés are the repeated tropes and predictable narratives that can lead to a diminished state of sensory-motor engagement with the audience. Analogously, for metaphors, a cliché becomes a repetition of an associative link between ideas and a predictable trajectory of perception influenced by repetitive portrayals and ideological configuration. A novel metaphor might offer a fresh and insightful way to understand a concept by linking it to an unrelated object or idea, but the frequency of its use leads to normalization and common language, or, often, the transition into a cliché. Deleuze’s critique of clichés is a call to break free from the conventional and to embrace the new, the unexpected, and the innovative in film. The conventionalization drains metaphors of their original vividness. When a metaphor becomes conventionalized or habitual, its meaning may become dormant rather than die out completely. Peirce believes that revitalizing conventional metaphors requires tapping back into Firstness by finding new perspectives, questioning habitual interpretations, and using creativity to engage with the metaphor. In strong metaphors, meaning can evolve dynamically through the ongoing cycles of novelty and habit.

When metaphors lose their power to awaken interpreters’ senses and no longer invite new connections between ideas, they become trapped in clichés. Lecerle (2002: 167) states in simple terms that “the embodiment of the freezing of meaning is cliché”. In literary discourse, language operates with nuanced yet overt dynamism, serving as a platform for both the manifestation and the constitution of its power (Lecerle 2002). This dual force, articulated in speech

acts and inherent in linguistic structure, is liberated in literature, allowing for free exploration and not being frozen into meaning. Clichés characterize the semantic rigidity, simultaneously transmitting and suppressing linguistic vitality. With original metaphors, interpreters embark on a quest, navigating through layers of preconceived notions and *a priori* representations. This journey mirrors Bergson's sensory-motor schema, where interpreters actively engage with the new perspective created by the association of two ideas in the metaphor and respond to it in a way that is both reflexive and deliberate. As an example, 'The ocean is our life support system' was used by several organizations in 2023 to emphasize the importance of the ocean to life on the planet and to call for action. The ocean is a symbol of life and abundance, and the metaphor functions as an icon working on a direct similarity between the ocean and a life support machine. By framing the ocean as sustaining human life, like a device supporting a patient, it creates an imaginative leap that reveals new insights about the role of the ocean. Through repetition, the metaphor becomes an accepted association between the ocean and life-giving support. While still metaphorical, the comparison no longer provides novel perspectives as novelty wears off. Joseph Ransdell's point that a symbol derives its value from "the fact that it will be interpreted in a certain regular way" (cited in Copley 2020: 25) supports the idea of rule-governed interpretation of metaphors supported by clichés. Thus, the metaphor creates a referent from which qualities that appear fitting can be selected, but the symbolic meaning of the metaphor relies on the fact that it might always be interpreted in a certain way.

New metaphors emerge when the clichés and the familiar patterns of thought are challenged, pushing the boundaries of understanding. These metaphors serve as fresh sensory-motor schemas, providing novel ways to perceive and interact with the world. They are the antithesis of the cliché, fostering original thought and deeper comprehension. New metaphors are not only a new combination of semantic features. They present a novel combination with a twist, echoing Deleuze's (1997: 135) concept of 'stuttering language' when he introduces language as a conflict among signifiers or a conflict of discourses, an idea further elaborated by Lecerle (2002). Original metaphors can be seen as creative stuttering because of their powerful ability to distort and challenge conventional ways of thinking by stretching language beyond its usual boundaries, creating new perspectives. Lecerle (2002: 230) observes that the act of subverting a cliché for the first time is deemed original and novel; however, this very notion of originality and novelty becomes clichéd as it is itself a consequence of altering a cliché. Similarly, Robert Porter (2010) draws on Deleuze's conception of clichés to articulate their dualistic role within ideological frameworks. Clichés can be instrumental in structuring our worldview, providing a semblance of order, and they are theoretically

discussed as conceptual metaphors. Conversely, the stereotyped application of language via clichés has the capacity to cement and immobilize a world inherently prone to the randomness of scattered thoughts.

Conclusion

In this paper, I have aimed to show that the interpretation of new meaning given by novel metaphors and their “vagueness” follows initially a process of hypothesizing, which can later take the route of conceptualization. By examining the factors that make a metaphor successful, the study explained the journey from new imaginative and metaphorical thinking to habitual thinking when metaphors stop the thinking and turn into clichés. Several elements of Peirce’s semiotic were discussed as essential for clarifying metaphors’ inherently interpretative nature, emphasizing that new metaphors require interpretation, mainly through imagination and consideration of possibilities. The interpretative process then moves more toward the mechanism as similarities become patterns. Notions such as ‘abduction’ and ‘clichés’ are important for theorizing metaphors as active processes rather than models. Hence, acknowledging that metaphors transcend mere reflection of pre-established categories, they should be viewed as vehicles for the exploration and experience of similarities with a twist, which may also be an exploration of one’s perception challenging the clichés and paradoxically becoming clichés themselves.

Furthermore, integrating imagination and consideration of hypotheses in the mapping or blending process through Peirce’s semiotics might help understand the spontaneity and originality of metaphors. By building a stronger theoretical explanation of the movement and multiplicity of meanings in metaphor, the arguments presented in this paper aim to complement conceptual accounts of metaphor that have traditionally been restricted to a view of metaphor as a framework of analogy. The emphasis on creativity as possibilities and intuitive processes is not intended to provide a set pattern for the theories of metaphors. Instead, it aims to encourage experimental approaches that challenge the traditional methods of evaluating metaphors. At the very least, this paper should emphasize how the semiotic nature of metaphor complements the mapping processes. Additionally, it should provide a springboard for further discussion on the issues of hypothetical thinking in the interpretation of metaphors. Further exploration of discovery and imaginative cognition and its interaction with metaphor formation may uncover deeper insights into the genesis of abstract, figurative thought.

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Revelando el potencial: metáforas novedosas como procesos de descubrimiento a través de la imaginación

Este artículo propone una nueva dirección dentro de los estudios de la metáfora. Sostiene que la metáfora, en lugar de funcionar como modelo para la transferencia de conocimiento entre conceptos, sirve como un proceso de descubrimiento para revelar el potencial de conexiones novedosas a través de las posibilidades y la imaginación. La discusión reconoce la importancia de dos características esenciales de las metáforas, a saber, la “ambigüedad” y las “hipótesis” en los procesos inferenciales de teorizar metáforas y propone la

aplicación de la noción de razonamiento abductivo de C. S. Peirce, el método para obtener nuevas ideas, así como la aplicación del esquema sensoriomotor de Bergson, que Deleuze llama cliché, para explicar cómo las metáforas pueden convertirse en patrones de pensamiento habituales y potencialmente solidificadores. En última instancia, este artículo pretende trascender la visión contemporánea de las metáforas como procesos de mapeo que promueven la claridad, la uniformidad y la sistematicidad unidireccional hacia un significado estandarizado. Más bien, presenta las metáforas en términos de su multiplicidad y el papel crucial que las connotaciones pueden desempeñar en su eficacia.

Potentsiaali avalikustamine: uued metafoorid kui kognitiivsed protsessid avastuste tegemiseks kujutlusvõime abil

Artiklis pakutakse välja uus suund metafooriuuringutes. Väidetakse, et selle asemel, et toimida teadmusülekande mudelina mõistete vahel, toimib metafoor avastusprotsessina, et avalikustada potentsiaal luua võimaluste ja kujutlusvõime kaudu uudeid seoseid. Käsitluses tunnistatakse metafooride kahe olemusliku joone, nimelt mitmetähenduslikkuse ja hüpoteetilise, tähtsust metafoori teoretiseerimise järeldusprotsessides ning pannakse ette rakendada Charles Sanders Peirce'i abduktiivse arutlemise mõistet, uute ideede saamise meetodit, ning Bergsoni sensoorse liikumise skeemi, mida Deleuze nimetab „klišeeks“, selgitamaks, kuidas metafooridest võivad saada harjumuspärased, potentsiaalselt kivistavad mõttemustrid. Lõppeks püütakse artiklis ületada tänapäevast vaadet metafooridele kui kaardistamisprotsessidele, mis edendavad selgust, ühtsust ja ühesuunalist süstemaatilisust standardiseeritud tähenduse suunas. Selle asemel kujutatakse metafoore, arvestades nende paljusust ning konnotatsioonide otsustavat osa nende tõhususes.