THE ROLE OF MEMES IN THE COMMUNICATION PROCESS
O papel dos memes no processo de comunicação

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ABSTRACT

Memetics, as a scientific framework for cultural evolution, must be integrated into the communication process to remain viable. This paper explores whether communication is better explained through memes and whether memes act as autonomous agents. While communication can be understood without memetics, applying a memetic framework offers deeper heuristic insights into communicative phenomena. By examining concepts such as news, meaning, language, reading, listening, writing, silence, lateral thinking, and teaching, this paper demonstrates that memetic fields structure and reshape communication. Drawing from thought experiments and interdisciplinary references, it argues that memes actively reconstruct their environment, making them more than passive replicators. Additionally, the study extends McLuhan's "medium is the message" thesis to social media, where user-generated submedia function as memetic ecosystems that redefine intersubjectivity. The analysis raises an evolutionary question: are humans the agents of memes, or are memes the true agents of cultural evolution? While full validation of memetic agency remains open, this paper advances a model in which memes influence, constrain, and direct human cognition in ways previously unexplored.
Keywords: Memetics, Communication, Strategic memes, Material memes, Memetic field, Intersubjectivity, Agency, Evolution

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The role of Memes in the communication process

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RESUMO

A memética, enquanto quadro científico para a evolução cultural, deve ser integrada no processo de comunicação para se manter viável. Este artigo explora se a comunicação é melhor explicada através de memes e se os memes atuam como agentes autónomos. Embora a comunicação possa ser compreendida sem memética, a aplicação de uma estrutura memética oferece insights heurísticos mais profundos sobre os fenómenos comunicativos. Ao examinar conceitos como notícia, significado, linguagem, leitura, audição, escrita, silêncio, pensamento lateral e ensino, este artigo demonstra que os campos meméticos estruturam e remodelam a comunicação. Com base em experiências mentais e referências interdisciplinares, defende que os memes reconstroem ativamente o seu ambiente, tornando-os mais do que replicadores passivos. Além disso, o estudo estende a tese de McLuhan de que "o meio é a mensagem" aos social media, onde os submedia gerados pelos utilizadores funcionam como ecossistemas meméticos que redefinem a intersubjetividade. A análise levanta uma questão evolutiva: serão os humanos os agentes dos memes ou serão os memes os verdadeiros agentes da evolução cultural? Embora a validação completa da agência memética permaneça em aberto, este artigo avança um modelo no qual os memes influenciam, restringem e direcionam a cognição humana de formas anteriormente inexploradas.
Palavras-chave: Memética, Comunicação, Memes estratégicos, Memes materiais, Campo memético, Intersubjetividade, Agência, Evolução

THE PURPOSE

The purpose of this paper is to advance our understanding of the *ontology of memes* through communication theory, communication examples, and thought experiments. While this paper serves as an independent explication, it is also a **recurrence** of my research—both published and unpublished—that develops a *post-Dawkinsian, post-Dennettian, and post-Blackmorean* approach to memetics.

Recurrence, as one of the methodological foundations of this paper, reinforces the **non-linearity of life** and, with it, the complexity that governs human reality. Applied to this paper, this means that it deliberately *transgresses* the imposed linearity of any text, anticipating that an explanation may sometimes *precede* the question and that certain postulates are not presented as *Q.E.D.* but instead require a conscious reader to allow *the* **emergence of meaning** as the text unfolds.

The ulitimate purpose, therefore, is to push memetic theory forward, especially after it lost its momentum. So far, no memeticists except Aunger (Aunger 2002) have dared to address the issue of the *ontology* and *materiality* of memes.

INTRODUCTION

The memetic theory was developed from Richard Dawkins' initial proposal in *The Selfish Gene* (Dawkins 1976). Dawkins proposed memes as secondary replicators to genes, thereby placing them firmly within the realm of Darwinian evolutionary theory, which is "responsible" for the evolution of (human) culture. Since 1976, a large body of memetic literature has emerged that, in many respects, has expanded upon the initial proposition but has also frequently challenged it. Research on these topics explains cultural evolution—including behavioral, linguistic, neurological, and cognitive variations—as an outcome of the evolution of memes. As Ethan Cochrane clearly states:

Memetics, like evolutionary archaeology, postulates that learning, copying and other forms of imitation can be understood as a transmission system where the distribution of variants, ideas or memes is explained by evolutionary processes. (Cochrane 2011, 23)

What is News from a Memetic Perspective?

This paper's first task is to answer why one should start with the news.

When mass media prevails, news is commonly associated with something that appears in the media. However, various dictionaries and resource pages offer a slightly different perspective. The *Cambridge Dictionary*, for instance, begins with:

information or reports about <u>recent</u> <u>events</u>:

- *That's the best (piece of) news I've heard for a long time!*
- *We've had no news of them since they left for Australia.*
- *Have you heard the news about Tina and Tom? They're getting divorced.*
- *I can't wait to hear all your news.*
- *The news that Dan had resigned took everyone by surprise.*
- *We've got some good news for you. We're getting married. (Cambridge Dictionary 2014a)*

And only then, as a secondary option, offers:

a television or radio program consisting of reports about recent events:

Citing all resources that define *news* would take up too much space. However, the most interesting definition comes from *YourDictionary*, which relies on *Webster* and many other reputable sources while allowing users to vote for the definitions they find most relevant to their usage (what we define as the memetic field). The top-voted definition for *news* is:

New information about anything; information previously unknown. (Yourdictionary, 2024)

This is precisely why the term *news* is crucial for memetics. *News* is anything that changes our state of mind—anything that alters our memetic field. It is "the package" that enters our cognitive system through our perceptual organs, making a difference.

From here, the path leads to David Haig:

If there is information in an evolutionary environment, a difference that could make a difference to something that could detect or just respond to that difference, it will make a difference (generally—this is a rule of thumb), a difference that, in turn, can be amplified by reproduction, making a bigger difference and, in a recursive process, making the detection of that difference more likely in the future, and so forth. (Haig 2020, 14-15)

And Haig again:

Thus, the gene was implicitly defined as a difference because only a difference can cause a difference. (ibid., 81)

And there is only a short leap back to Bateson[1]:

A difference which makes a difference is an idea. It is a "bit", a unit of information. (Bateson 1972, 290)

This brings us directly to memes, even though none of them—except for David Haig—explicitly discuss memes. In my rewriting of Bateson's words:

A difference that makes a difference is a meme. A difference is a homolog of a bit, the smallest unit of information.

A Relation of Information to News

Am I confusing information with news here?

Yes and no. If we take *YourDictionary's* definition seriously—that news is new information—then the answer is no. However, if we follow Bateson, information itself is already the difference and, consequently, news.

Whether information is *a thing* that produces a difference or nothing more than the difference itself is a question that David Haig has a strong stance on at the genetic level. He considers genes as material rather than merely strategic, but he also acknowledges that even material genes are not countable (Haig 2020, 89) and thus can hardly be considered *things* in the conventional sense. However, many other material phenomena are also uncountable yet still regarded as *things*, as he notes on the next page.

A Relation of Rumor to News

This is the right moment to compare rumor with news. When Jean-Noël Kapferer claims that the key characteristic of a rumor is not whether it is true or fictitious but rather its unofficial source (Kapferer 2010, 25), it is clear that he is mistaken. He personalizes agency, whereas in reality, the agency lies in memes—or more precisely, in memetic fields, as we shall develop further.

First, we must recognize that news already exists beyond factuality. Pointing at a chair and saying, *"This is a chair"* is not news. News exists above such factual statements and beyond the falsification principle. Thus, news is a rumor that is accepted as news in a particular situation and by particular individuals. In another situation, the *same* news may instead be perceived as a rumor. And, as we shall see later, the *situation* corresponds to the memetic field.

We conclude this section with the idea that Möbius' track should provide a viable explanation for the duality of information and news. More importantly, however, is the fact that news/information makes a difference—raising the crucial question of *how* or *by what means* this occurs.

What is the Meaning from a Memetic Perspective?

The thesis:

Meaning is the effect—a collapse of the wave-particle function in "collision" with the memetic field of the receiver[2].

Let's test this thesis by applying it to the already ancient Shannon schematic diagram of general communication:

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[1] The distinction between the crucial concepts of physics and metaphysics did not begin with Bateson, Derrida, or Haig. It is as ancient as humanity itself and was even more prominent in pre-Renaissance philosophy. Aristotle's *prime mover*, which is not itself a difference but generates all other differences, is one example. However, a further historical examination of this intriguing concept goes far beyond the scope of this paper.

[2] The ontology of memes and their quantum-like existence is discussed in my paper of the same title. (To be published)
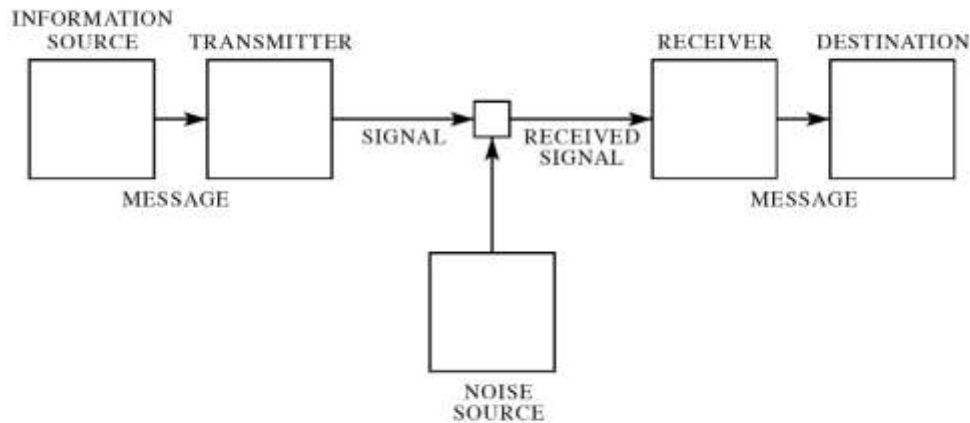
Fig. 1 — Schematic diagram of a general communication system.

Source: Shannon 1948

Information within the source corresponds to the memetic field of the agent source—a *strategic meme* in David Haig's definition. A source transmitter is an instance or apparatus where the transmitted memetic bundle (strategic meme) is encoded into a *material meme*. A signal represents a wave-particle potentiality that becomes actualized (*collapses*) upon encountering the receiver's memetic field—described in Shannon's diagram as the *receiver*. The receiver's *destination* is a (strategic) memetic field that undergoes slight changes with each "bombardment" of memes it receives. Meanwhile, the *noise source* is a collective memetic field that bends the wave-particle entity being transmitted through its *vector field*.

This application of a potential memetic theory to the Shannon model is conceived as a *homolog* to field theory as formulated by Albert Einstein (Einstein 1905) and is further infused with the Copenhagen interpretation (Kumar 2009) of wave-particle duality in quantum mechanics.

With this interpretation of Shannon and memetic fields, we also align with the *Multiple Drafts Model* (Dennett 1991)—one of the more compelling explanations of how thoughts (neural correlates, qualia, etc.) emerge from neural activity in the brain (material processes). With *Reader's Digest* precision, we could paraphrase Dennett as follows: *Memes, as ideas, emerge atop multiple drafts of neural activities.*

Interlude: Memes are not Molecular and are not Ideas

Before we take the next step in explicating Shannon through memetics, we must first strengthen the introduction of the *memetic field*, as memetic fields, as we shall see, play a crucial role in constructing a memetic ontology and phenomenology. As will often occur throughout this paper, explanations will emerge from the flaws of texts that, despite good intentions, attempt to introduce memes into either information theory or evolutionary theory but fail because the memetic framework they operate within is not fully developed.

Jarle Breivik has worked extensively on the question of what natural selection favors—genetic stability or variability—a question closely linked to cancer. In his early papers, *Don't Stop for Repairs in a War Zone: Darwinian Evolution Unites Genes and Environment in Cancer Development (Breivik 2001a)* and *Self-Organization of Template-Replicating Polymers and the Spontaneous Rise of Genetic Information (Breivik 2001b),* he successfully redefined molecular binding and replication on a novel basis:

This study shows that such a mechanism can be directly derived from the fundamentals of molecular biology, and demonstrates spontaneous rise of genetic information from chaotic interactions between physical objects. (Breivik 2001b, 277)

Breivik seeks to connect the molecular foundation of genetics with the spontaneous emergence of information and change—mutations that are not only the *cause* of cancerous developments but also the driving force of evolution.

By his second paper in the same year, he had already recognized that the genetic molecular basis alone was insufficient. Consequently, he introduced *epigenetics*:

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In direct analogy to the findings of Bardelli et al. ... it is therefore interesting to speculate that epigenetic instability represents evolutionary adaptations to carcinogenic agents that disturb DNA methylation. (Breivik 2001a, 5381)

Five years later, he still maintained a molecular approach to information, this time with an explicit shift toward epigenetics:

This concept challenges the dogma that flow of information is unidirectional from DNA to protein (Thieffry and Sarkar 1998; Crick 1970), but is based on simple deduction from well-established molecular mechanisms.(Falster et al. 2010, 272)

Breivik was not the sole author of this last paper, but it remains significant because it attempts to understand information as the trigger for both cancer and variation, which serves as the basis for natural selection. His reasoning becomes even more relevant to our discussion of *memetic fields* in his most recent book, *Making Sense of Cancer* (Breivik 2023).

Ultimately, he concludes that epigenetics alone cannot explain the variability necessary for life—just enough variation to enable adaptation, but not so much as to become cancerous. As a result, he introduces *memes*. This is a bold step for a medical practitioner. Unfortunately, however, his execution of this idea does not match the depth of his explanation of the molecular basis of genetics. He conceptualizes memes in an outdated way:

With regard to cultural information, the physical substrate may seem somewhat unclear, but memes are also patterns that are copied and transformed from one physical medium to another. (Breivik 2023, 156)

By avoiding the question of the *physical substrate* of memes, he reduces them to *ideas*, conceptualizing their informational replication as merely the copying of patterns. This leaves the *ontology* of patterns unresolved, and as a result, the connection between biological causes of cancer and memetic influences remains fundamentally unlinked.

This interlude is crucial because it compels us to establish a *material basis* for memetic information, memetic variability, and memetic mutation. Just as Breivik deftly explains the molecular emergence of genetic and epigenetic information, we must answer the question: *Where does memetic information emerge from?*

The first step in answering this question is straightforward: *Memes do not emerge from molecules*. They do not bind together according to chemical principles. The second step—positively identifying where memes *do* emerge from—is more complex. This thesis is devoted to answering that question.

Yet, the discovery does not occur at the end—it is already present at the outset:

Memes are quantum-like particles that bind together according to the laws of quantum gravity.

Such a controversial thesis must be challenged, and it *will* be challenged, with the aim of achieving a *positive validation*.

Back to Shannon

If Dennett's conception of memes as *ideas* has already been at least partially refuted, let us take the next step in applying *memetic field theory* to Shannon.

A *meme war* resonates at a different frequency when received by a particular observer *before* or *after* the war in Ukraine began, for instance. All the memes exchanged around the war in Ukraine created a strong *vector field* that attracts and consequently deforms all passing memes.

Here, we must be precise. One might be inclined to say that Ukraine's *war memetic collective field* bends only the memes related to *"War," "Ukraine," "Zelensky," "Putin,"* etc.—but, for instance, not a meme related to *"a salmon."*

This is *partially* true. However, we must recognize that this thought experiment deliberately omits a crucial aspect of the collective memetic field at the time of the war in Ukraine. The *entire* collective memetic field *shifted* and, in turn, generated different vector fields for all passing memes after the war began. The specific subset named *"war in Ukraine"* does not act in isolation, nor does it influence only related memes; rather, it affects the entire memetic environment. All memes within the collective memetic field acquire different *wavelengths* (strengths) and *vectors* (directions) due to the new recombination of two preexisting memes: *"war"* and *"Ukraine."*

One unresolved question in this application of *memetic theory* to the *Shannon model* is the memetic *basis* of the *receiver*. If the transmitter is a *material meme* functioning as a *wave-particle*, should the receiver be conceptualized as more than just an *ear* or an *eye*? Should it instead be seen as *brain neuronal complexity*?

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Let us leave this question open for now.

What is essential here is to reiterate a key methodological premise of this paper: *Memes cannot be observed as objects but only as reflections—traces left behind by memetic events.* We have used the Shannon model as a memetic field that, when bombarded by the memetic field of the author of this paper, produced something *new*. This *intersubjective act* generated a novel memetic structure—one that may or may not survive in the evolutionary battle of competing memes. Whether this meme becomes part of a stronger *vector pull* depends on the *potential receivers* it gains and the *collective memetic field* surrounding those receivers at the moment of reception.

But once again—the primary goal of this paper is *not* to arrive at a definitive *Q.E.D.* about memes. The aim is simply to *increase the sigma value* of the probability that memes operate as theorized.

Talking Gorilla Language

According to the *Koko Foundation (Koko.org 2024),* the lowland gorilla *Koko* used over 1,000 signs and understood 2,000 spoken English words. While visiting mountain gorillas in the *Volcanoes* region of Rwanda, I learned two gorilla words that I could use when interacting with them. Trackers, guides, and veterinarians communicate with gorillas using more than 200 words, meaning they have *learned* the natural gorilla language rather than forcing the gorillas to use *our* language, as was the case with Koko.

Is it *news* (a *new* meme entering my perception and cognition) if a gorilla warns me to keep away, using one of the words I had learned—*"go away"*? If I can understand her vocalization far more clearly than if a *Chinese speaker* told me the same thing in *Cantonese*, does that mean the gorilla's sounds were transmitting *memes* to me, while the *same meaning* spoken in Cantonese was not?

This mountain gorilla example presents a compelling argument against critics who dismiss *memetics* as unnecessary within cultural theories of evolution. If we assume that *Koko*, who learned 1,000 signs of human language, could still be considered a *migrant* into human culture—becoming *enculturated* to some degree—then my case does not fit such a cultural explanation. I was there for only two days. The guides taught us those two words just before we entered *gorilla territory*, and we had contact with the gorillas for just *one hour each day* for two days. My ability to understand those two *gorilla words* cannot be explained by any meaningful *enculturation* into the gorilla world.

This experience also highlights where *Susan Blackmore* made a mistake when she claimed:

Chimpanzees and gorillas that have been brought up in human families occasionally imitate in ways that their wild counterparts do not. (Blackmore 2008, 176)

She did not consider the possibility that *humans* might imitate *gorilla sounds* and, in doing so, replicate *their* memes. Why should the fact that gorillas cannot imitate *our* sounds prove that they *lack* memes?

There is only one possible explanation for my experience with the gorillas: *Memes used by—or better, memes that "abused"—gorillas entered my memetic field through my imitation of their sounds, speculating on what those sounds meant to them.* Memes *are* spread through imitation, as *Blackmore* claims, but humans are not the only vehicles for memes.

It is *scientifically established* that higher primates, birds, dolphins, and many other animals communicate. Even if we cannot fully understand them, we *know* they communicate, as we infer it from their *behavior* and its connection to specific sounds or signs. We do not yet understand the *ontology* of their communication; we can only deduce its *effects* from observable material phenomena. However, when we experience *direct communication* with them *in their language*, the situation changes entirely. We enter an *intersubjective exchange* of something *shared*. In those moments, I felt like *Dr. Dolittle* from the movie of the same title—engaging in an unexpected form of cross-species communication.

From this gorilla case, we can conclude that there exists an *entity* that cannot be reduced to *culture* alone—one that we can *share* not only among humans but also with gorillas. I do not need to invent a new name for this entity, as *Richard Dawkins* already named it: *the meme*.

Yet, even if the gorilla case presents memes as a plausible *reality*, it does not fully explain the *ontology* of memes.

To explore this further, let us examine other *memetic phenomena* on a purely *heuristic level*.

Reading or Listening?

As much as I was surprised by my encounter with mountain gorillas in the *Volcanoes* region of Rwanda, I stumbled upon another unexpected question while listening to *Maryanne Wolf's Reader, Come Home* (Wolf 2018). Since I have developed a habit of listening to audiobooks almost every morning for at least half an hour—and often for much longer while walking in solitude through Ljubljana or elsewhere—I decided to maintain this habit while preparing this paper and to incorporate audiobooks as sources. However, this controversial decision, which my peers will likely challenge, raised an intriguing question about a book devoted to *written language* and *deep reading*.

The first challenge concerns *Maryanne Wolf* herself: *If reading is as essential as she argues, why did she approve an audio edition of her book, thereby accepting listeners rather than readers?* Since this challenge is directed at Wolf, I cannot answer it. However, it opens a broader question about how *listening* influences *brain development*.

Considering *The Lindy Effect*, as explained by *Nassim Nicholas Taleb* (Taleb 2014) and *Benoît Mandelbrot* (Mandelbrot 1982), it becomes evident that the *lifespan of reading* is likely to be much shorter than that of *listening*.

The Lindy Effect applies to the non-perishable. Every additional day in its life translates into a shorter additional life expectancy for the perishable. *For the nonperishable, every additional day may imply a more extended life experience. (Taleb 2014, 317-318).*

Leaving aside, for now, the question of whether *memes* themselves are *perishable* or *non-perishable*, we can classify artifacts such as *language, oration, writing, and books* as *perishable*. If we apply *The Lindy Effect* to their potential lifespan, it follows that the *longer* an artifact has existed, the *longer* it is expected to exist. Taleb further argues that the longevity of non-perishables depends solely on their *fragility*—meaning that artifacts that have endured for long periods have demonstrated their *antifragility*. He even formulates a rule for this effect:

...books that have been around for ten years will be around for ten more; books that have been around for two millennia, should be around for quite a bit of time and so more. (ibid., 329)

While determining the precise *origins of human speech* remains difficult (an issue explored in another part of this thesis), even a conservative estimate suggests that *spoken language* has existed for *at least* 40,000 years. In contrast, writing—whose history is easier to trace—dates back only about 4,000 years, with *Gutenberg's* printing press revolutionizing the medium a mere *600 years ago*. According to *The Lindy Effect*, *oral meme transmission* is likely to persist *far* longer than *writing*.

Yet, *The Lindy Effect* also has another implication—one that *Maryanne Wolf* does not consider. She warns that *digital reading* diminishes cognitive development in those who no longer engage in deep reading, instead relying solely on web-based digital media. While her research shows that digital media hinder *deep reading abilities*, disrupt *brain connectivity*, and weaken *empathy*, she does not account for the fact that, according to *The Lindy Effect*, *web-based digital technologies* are unlikely to last much longer. Although our environment may continue to grow more *hostile* to deep reading, she does not take into account the *unpredictable emergences* that could, paradoxically, *enhance* cognitive development and empathy.

Thus, by listening to *Maryanne Wolf's* passionate plea for reading, I may have actually employed a *stronger, less fragile*, and ultimately *more beneficial* cognitive technique—one that, hopefully, also enhances the arguments of this paper.

The Role of Citations and the Inflation of Material Memes

This reflection brings me back to my experience with *citations*. One of the advantages of *printed words* is the ease with which citations can be used. Digital media make citations even more convenient with *copy-paste* functions and web-based tools such as *Zotero*, which I use to save time formatting this paper.

Citations are *exact* copies of a particular text. In the language of *memetics*, citations are *copies of material memes*. Observing the development of academic output over the last few decades, we can see an *inflation* of citations and, consequently, an *inflation* in the repetition of *material memes*. Over the past 40 years, academic science has become increasingly *dominated* by the written transmission of memes—and even more so by *digital* transmission.

When we say that *all human knowledge* is now *easily accessible*, whereas in the past, only the privileged had access to it—and even then, only in *limited* amounts—we must remember that we are referring *only to material memes* and *artifacts*, not to *strategic memes*.

My thesis—supported by both *mythology* and *science*—is that *written language*, contrary to the dominant view, actually *blocks* our ability to relate to *strategic memes*.

The *Gutenberg Revolution* and the explosion of *internet-based written resources* have created the *false* impression that each of us holds all accumulated knowledge in our hands. Meanwhile, we *intuitively* recognize that merely *reading* something is not always enough to *understand* it—and that even *comprehending* written words does not always mean that we have *internalized* the knowledge.

We can now explain this phenomenon through the distinction between *material* and *strategic* memes.

It is *not* enough to relate to *material memes*. It is *not* enough for packets of *material memes* to enter our *memetic field*, as illustrated in the *Shannon diagram*. For them to become part of *our* memetic field, they must be *integrated*. This process of integration transforms them from *material* memes into *strategic* memes.

Reading vs. Communication: The Missing Feedback Loop

However, another crucial distinction arises here. Books do not communicate.

Reading a book *cannot* be classified as *communication* because there is no *intersubjectivity* involved. In this respect, there is *no difference* between *audio* and *written* books—but both differ fundamentally from *live communication* between two or more individuals.

Reading is *not* communication because the *memetic activity* of the recipient is *not* affected by an *active memetic field* transmitting memes into another memetic field. Not only is *feedback* impossible from the *reader* back to the *book*, but even equating the *book-reader* relationship with that of a *speaker* who does not allow feedback is misleading.

Even if an audience cannot transmit *material memes* back to a speaker, *both* memetic fields—those of the *listeners* and of the *speaker*—are affected. The mere *potential* for intersubjective exchange *alters* the memetic dynamic.

If this holds true, then we arrive at two possible conclusions:

Option 1: Even if *material memes* in the form of words do not emanate from listeners, *both* memetic fields *change*, meaning that *material memes* may manifest in forms other than words.

Option 2: *Strategic memes*—once integrated into a *particular memetic field*—can interact and relate to other *strategic memes*.

At this moment, *Option 1* appears *more plausible*. However, *Pierre Bayard's Talking About Books You Haven't Read* (*Bayard*, 2007) offers insight that could refine our understanding of the distinction between *strategic* and *material* memes.

You do not have to read a book to talk about it.

This suggests that *memes* can spread as *strategic memes without* requiring the support of *material memes*.

According to *Bayard*, while *material memes* interact with a reader's memetic field through the *physical book*, we can also be affected by memes *even when our memetic field has not directly engaged with a particular material meme medium*.

Both options, then, may ultimately prove *valid simultaneously*.

A Collective Memetic Field?

As *Borges* develops in his short story *The Library of Babel (Borges 2010),* the *library* should not be understood as a *physical* entity. Borges himself ensures that the library is *not* mistaken for a literal space. However, this raises the risk that we dismiss it as mere *witty speculation*—a fascinating intellectual exercise with no connection to reality.

But *The Library of Babel* is neither a *physical* entity nor *pure artistic speculation*. Instead, it represents the *collective memetic field*. It is a *memetic entity*—not merely because the *story itself*, by definition, qualifies as a *meme*, but because it *describes memetic reality*. The *library* in the story should be understood as a *vast space of memetic probabilities*. It is a *memetic universe*—a parallel to the *time-space universe* that *Einstein* described in *Special Relativity*.

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What is particularly striking about *Borges'* depiction of the *memetic universe* as the *Library of Babel* is that it seamlessly integrates both *macro* and *micro* dimensions—the *cosmos* and the *quanta*. Borges' vision is not *scientific* in the formal sense; he is a *master of symbols*, not equations. But does this not precisely fill the gap that *Einstein* struggled with when challenging the *Copenhagen interpretation* of *quantum mechanics*? Einstein conceded that the *mathematics* of *Copenhagen quantum mechanics* was correct, but he criticized its failure to provide a satisfactory *interpretation* of *physical reality*.

Einstein's vision of reality was one of *locality* and *causality*, governed by laws that it was the job of the physicist to uncover. He expressed his frustration in a letter to *Max Born* in 1948:

"If one abandons the assumption that what exists in different parts of space has its own independent, real existence," he told Max Born in 1948, "then I simply cannot see what it is that physics is meant to describe?" (Kumar 2009, 352)

In the *memetic* domain, however, we face the *opposite* situation. The *interpretation* is already present—crafted by *Borges*. Our task is to develop a *scientific explication*.

This comparison between *physics* and *memetics* naturally leads to a structural homology: the *collective memetic field* functions analogously to *Einstein's gravitational field*, while *memes* operate as the *quanta* of this *memetic universe*.

However, simply identifying a *homology* is not enough. To substantiate this claim, this *heuristic model* must be supported by a *specific ontology* and *phenomenology* that can be validated. If such a model proves coherent, it could have a profound impact on the *endless debate* surrounding *collective consciousness*.

Writing

Socrates: I cannot help feeling, Phaedrus, that writing is unfortunately like painting; for the creation of the painter have the attitude of life, and yet if you ask them a question they preserve a solemn silence. And the same may be said of speeches. You would imagine that they had intelligence, but if you want to know anything and put a question to one of them, the speaker always gives one unvarying answer. And when they have been once written down they are tumbled about anywhere among those who may or may not understand them, and know not to whom they should reply, to whom not: and if they are maltreated or abused, they have no parent to protect them; and they cannot protect or defend themselves. (Plato, n. d.)

This section from *Phaedrus* explains the common experience among writers: that written words become *detached* from them the moment they are written. The issue here is *not* primarily *Barthes' Death of the Author (Barthes 1967),* as we are not engaging in *literary criticism*. *Barthes* "kills" the author *historically*, whereas *Plato* treats writing as *structurally* and *ontologically* detached from its creator. In this sense, *Mallarmé's* assertion that *"it is language that speaks (and not the author),"* which *Barthes* employs in his essay, is far *more radical* and closer to *Plato's* perspective.

However, the *apparent* radicalism of *Plato* and *Mallarmé* disappears the moment we apply *memetics*. If we conceptualize *writing* as the *reverse* operation of *reading*, then the *author* was never fully "alive" as an independent agent in the first place. The *author*—as a *creator* and *agent*—is an *illusion* from the very beginning. Instead, the *author* is *constructed* by *memes*, as described in the previous chapter, and as will be further developed in the later section on *education*.

But if this is true, does it mean that *Plato* erred in the final two sentences of the cited section? If the *sole agency* in writing and reading belongs to *memes*, why should we be concerned that *"they (memes) have no parent to protect them"*?

A *heuristic* approach confirms daily that, as *authors*, we *do* create something when we write—at the very least, we *decide* whether to write or not. Yet, at the same time, we often find that *text* emerges from us *without* our full awareness or intention. This paradox suggests that *authorship* should be understood not as *individual* agency but as a *"shared responsibility"*—a process of *coevolution*, in biological terms, between *the author* and *memetic forces*.

A Step Towards Silence

The above *Cogito, ergo sum* argument leads to an intriguing thought experiment: *If we were all to stop communicating and fall into complete silence, what would happen to the dominion of memes?*

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The result would be analogous to what would occur in the *biosphere* if *biological reproduction* ceased—eventual extinction. *Memes*, like *genes*, require *replication* to persist. If communication were to halt entirely, the *memetic ecosystem* would stagnate and, over time, collapse.

However, in *Western civilization*, where *biological reproduction* has declined, the *rate of memetic reproduction* has *increased*, seemingly compensating for this demographic shift. This suggests that, even as *biological selection* slows, *memetic selection* intensifies, shaping *cultural evolution* through the rapid spread, replication, and recombination of ideas.

This raises a fundamental question: *To what extent can memetic evolution replace biological evolution?* If *memes* can outlive and outcompete *genetic imperatives*, does this indicate a shift toward a reality where *cultural selection* becomes the dominant force in shaping human existence? If so, does *memetic survival*—rather than *genetic survival*—become the primary driver of human continuity?

Being silent

Silence is often speech – quite apart from its tactical use ... -but it is a speech that is in competition with that which is spoken aloud. (Corbin 2018, 68)

What Does This Mean for Memetics?

Although *Corbin's* book holds little academic value for the *social sciences*, as it primarily explores how various *artists* and *writers* have experienced and conceptualized *silence*, it still caught my attention because its title raises an essential question: Does the silence of memes exist—either in reality or in principle?

What Happens in the Memetic Realm When One Stops Speaking?

This question can be partially answered by those who *practice prolonged silence*, such as *yogis, gurus, or Zen masters*. According to *Alan Watts (Watts 1950)*, they report a more *vivid experience* of *physical reality*. One possible explanation for this phenomenon is that, in the absence of *conceptualization* and *memetic reconstruction* of perceptions, raw *sensory perceptions* take over the space that would otherwise be occupied by *memes*.

If this is the case, then Zen masters who engage in such *activity (or rather, non-activity)* may come closer to experiencing reality in a way that is *similar to animals*. Of course, this is *pure speculation*, as we can never truly know *what it is like to be a bat*.

The Time *Dimension* of Silence

What is even more crucial in this example, however, is the *dimension of time*. It is not enough to be silent *briefly*—one must remain silent for *a month or longer* to experience these effects.

Memes do not simply *disappear* when one stops speaking. They are *sticky*. They cannot be erased like *data on a magnetic tape*. Instead, they *fade* over time, most likely because the *neural activity* that sustains them becomes *inactive*.

A parallel can be drawn to those *born deaf*. They are still occupied by *memes*, and their *memetic neural connections* are intact, but their *triggering mechanisms* are not dependent on *speech*. This demonstrates that *memes* can rely on *various artifacts* but can only *remain active* when they are continually triggered through *some form* of *intersubjective brain activity*.

The Profound Implications of Silence

The issue of silence opens an even deeper question—one that *Corbin's* book touches upon and that can be illustrated through *Eugène Ionesco's* statement:

"Words stop silence from speaking." (ibid., 68)

Although *literature* is *not science*, it should still be considered a *valid reference point* for *memetics*, *communication science*, and *social science* in general. Literature is an integral part of *social life* and, therefore, cannot be excluded from *scientific discourse*.

Artists may lack the *scientific tools* to *analyze* reality in the way scientists do, but that does not mean they do not *study* it. Their insights offer valuable phenomenological perspectives that complement scientific analysis.

If we take *Ionesco's* claim seriously—*that words stop silence from speaking*—it is not necessarily *scientifically correct* in a literal sense. However, it should be seriously examined by *communication theory, social science,* and *memetics* as an experiential truth from someone who mastered both *words* and *silence*.

The Question of Agency in a Communicative Process

What does persona mean? A mask. A genuine fake. (Watts 1950a, 1, section 2).

The question of *agency* in *genetics* and *memetics* remains one of the hardest problems in both fields, especially following *Dawkins'* seminal work, *The Selfish Gene*. This *cardinal* book shattered the long-held assumption that the *sole agent* of human action is either:

• A *man* acting independently (*atheistic belief*),
• A *man* as an extension of *divine creation* (*deistic hypothesis*), or
• *God himself* (*theistic belief*).

Dawkins demonstrated that *genes* possess their own *"interest"*—primarily *self-replication*—which ultimately drives *evolution*, using *phenotypes* (bodies) as their *vehicles*.

When he introduced *memes* as *second replicators*, he implied that they play a role *analogous* to genes in *cultural evolution*. However, while Dawkins was explicit about the *agency of genes*, he was less direct regarding *memes' agency*. Still, he made it *clear enough* that the *biological advantages* traditionally attributed to *humans alone* cannot fully explain the trajectory of *cultural evolution (Dawkins 1976, 191)*.

Cui Bono?—Determining the Agent in Memetic Propagation

A fundamental principle in both *criminology* and *memetics* is *"cui bono?"*—**who benefits?** Or, in modern investigative terms: **"Follow the money."** This principle serves as a crucial selector in identifying the *actual agent* behind a given process.

Dawkins himself alludes to this in *The Selfish Gene*:

If the idea catches on, it can be said to propagate itself, spreading from brain to brain. (Dawkins 1976, 192)

In this single sentence, using *everyday terminology*, he touches on the *three core principles* of *memetics*:
• **To catch on** – *Selection*
• **To propagate** – *Replication*
• **From brain to brain** – *Transmission*

Who is the True Agent?—Memes vs. Human Intent

How can we determine whether *we* are the ones propagating *Dawkinsian ideas*, or whether these *ideas* are actually *abusing* us for *their own* propagation?

The greatest challenge in *memetics*, as outlined in the *methodology chapter*, is that *memes cannot be directly observed*. Since memes do not have a tangible form, their *agency* can only be inferred *indirectly*—by analyzing their *phenotypic expressions* (i.e., *cultural artifacts*) and *human behavior*.

To achieve this, *memetics* relies on:
1. **Homology** – Comparing meme replication mechanisms with genetic replication models.
2. **Coherence** – Testing whether memetic theory aligns with observed cultural transmission patterns.
3. **Inductive reasoning** – Drawing conclusions based on repeated empirical patterns in cultural evolution.

Ultimately, the core question remains unresolved: *Are we the authors of our memes, or are memes the authors of us?* While we may *believe* we are in control of the *ideas* we spread, *memetics* suggests that these ideas may, in fact, *be using us*—just as genes use *bodies*—for *their own survival and replication*.

How did Ukraine win the Eurosong Contest 2022?

Science should not judge taste.

Consequently, the cognitive faculty will always judge its own impression as such; and so every judgment will be true. For instance: if taste perceived only its own impression, when anyone with a healthy taste perceives that honey is sweet, he would judge truly; and if anyone with a corrupt taste perceives that honey is bitter, this

would be equally true; for each would judge according to the impression on his taste. Thus every opinion would be equally true; in fact, every sort of apprehension. (Aquinas 2018, Q85, 2)

Contrary to *Aquinas's* claim, the *Ukrainian* song that won the *Eurovision Song Contest 2022* was among the weakest entries—though, as usual, the competition was not much better. So why did it win?

The Political Context and Its Memetic Influence

It is evident that the 2022 contest took place in *Turin* amidst *Russia's war against Ukraine*. Less obvious, however, is the extent to which the *Western press*, the *European Commission*, and the *European Parliament* had taken an *explicit* stance against *Russia*. By *May 2022*, Ukraine was almost unanimously perceived as the *victim* of Russian aggression.

From a *memetic* standpoint, this fact alone is remarkable. But what is even more surprising is that music, in principle, should have no direct connection to politics.

It would be tempting to explain Ukraine's victory as the result of manipulation by *political* or *economic elites*. However, this explanation becomes problematic when we examine the actual voting process. If an elite-driven agenda had dictated the results, why did the *national juries*—composed of industry professionals—rank Ukraine only in *4th place*, while the *public vote* placed it in *1st place* by a significant margin? (*Eurovision 2022*).

Memetic Contagion and Mass Hysteria

The voting pattern suggests that mass memetic contagion—rather than a coordinated effort by elites—played the decisive role.

Unlike *fashion trends*, which can be partially explained by the influence of *fashion designers* (who often claim to follow projected trends rather than create them), *Eurovision voting* cannot easily be attributed to any *singular agent*.

Why?

• The song had only been publicly available for a *short period* before the vote.

• There was *no time* for an orchestrated *top-down* campaign to shape public taste.

• Despite this, the *public vote* overwhelmingly favored Ukraine.

Even if we set aside *conspiracy theories*—such as the idea that the *voting software* was manipulated by a *political elite*—the most plausible explanation remains memes as evolutionary agents.

Memetic Selection vs. Musical Merit

In this case, the meme of Ukraine-as-victim had a *stronger memetic pull* than the meme of *musical quality*. Public sentiment, shaped by *memetic fields*, made voting for Ukraine feel not just expected, but inevitable—independent of the song's actual artistic merit.

This event serves as a powerful demonstration of how *memes* can override *traditional selection criteria* (such as musical evaluation) and shape *mass behavior* in ways that are not centrally controlled but emerge spontaneously through memetic propagation.

Lateral Thinking

When not confronted with any outside source, lateral thinking happens within the existing memetic field. Again, a comparison with animals helps. Animals have brains and neural activity, but they do not engage in lateral thinking because memes do not infect them. As they do not think laterally, they remain purely biological agents. In contrast, humans are both biological and memetic agents, meaning that both mechanisms support us.

It is rather controversial to consider lateral thinking a form of communication. Thinking occurs within an individual's personal memetic field and thus lacks a crucial element of communication—intersubjectivity.

However, our personal experience raises the question of who the agent of thinking is when lateral thinking occurs. If lateral thinking is produced solely by our memetic field, and if our consciousness neither evokes nor directs it—meaning that we, as conscious subjects, are not the agents of such thinking—then only the memetic field and its memes could be acting as agents in these instances.

The above heuristics of memes as selfish agents are so straightforward that they leave us baffled, especially when contrasted with the vast body of literature on memetics. Even among those who accept the existence of

memes, the majority reject Dawkins' *(Dawkins 1976)* original conception of memes as selfish agents. This extensive literature will be critically assessed based on the heuristics developed so far, as well as the heuristics of lateral thinking, which serve as evidence for memes as autonomous, self-propagating agents.

For now, we can conclude that memes function as agents within the existing human memetic field. They actively reconstruct their memetic environment as they interact, rather than existing passively within the human mind.

Teaching

Yet another heuristic proof of the agency of memes—not merely their existence—comes from a long tradition of philosophers who have debated the impossibility of the teaching process. From *Socrates*, *Plato*, and *Aristotle* to *scholastics* like *Augustine*, the question of how teaching occurs has been approached with skepticism and resolved equivocally.

To simplify, I will reference a quotation from *Peter King* in *Augustine on the Impossibility of Teaching*:

According to Plato, all instances of learning are merely apparent. Learning in reality is the soul's "recollection" (anamnesis: 'un-forgetting') of truths it already possesses: recollection is "recovering knowledge by oneself that is in oneself" (Meno 85d4 and 85d6–7).9 Plato supports his Theory of Recollection by the vivid example of the dialogue between Socrates and a slave-boy, complete with a running commentary on the side to Meno (82b-85b). Socrates sets the slave-boy, who is ignorant of geometry, the problem of constructing a square with an area twice the size of a given square. The boy suggests that a square with sides of double length will have twice the area; recognizing his mistake, however, he proceeds to generate the correct construction, which is obvious from simple diagrams. During the conversation the boy has come to see why his first answer is wrong and why the correct answer is correct; he has acquired knowledge by coming to grasp the reasons behind the proof. And that, as Plato concludes, is an internal process. Hence the slave-boy does not really learn at all, but "un-forgets" something already known. Likewise, no teaching takes place in the conversation between Socrates and the boy. (King 1998, 4)

Interestingly, although the intentions of *pre-Enlightenment* thinkers varied, they all unintentionally reinforced the idea that it is *not* the teacher who directly communicates knowledge, but rather that the *pupil* must *reinvent* or *"unforget"* what they already possess. Since we still live in the *aftermath* of the *Enlightenment era*, it is difficult for us to conceive of teaching as anything other than a process in which the teacher *implants* knowledge into the pupil's mind.

Ironically, those who contemplated the *teaching process* in the past were much closer to *Dawkins'* concept of *memetics* than many of today's scholars and academics. Applying *memetics* to the *ancient* understanding of teaching reveals that *various memetic sources*—with teachers being only *one* of them—act as *triggers* that prompt a pupil's *memetic field* to rearrange itself.

Understanding something *anew* is not a matter of *receiving* knowledge but rather a process of **restructuring the existing memetic field**. This new arrangement is not only a product of learning but also makes the field **more susceptible to further rearrangements**, fostering an ongoing process of learning and adaptation.

How Does Media Influence the Memetics of Communication?

McLuhan's assertion that *the medium is the message (McLuhan 1964)* is a profound idea, validated at many unexpected levels. One such level is the well-documented correlation between political orientation and media preference. Studies such as *Differences in Media Preference Mediate the Link Between Personality and Political Orientation* (Xu and Peterson, 2017) confirm this heuristic: individuals tend to align their political views with those promoted by their preferred media sources.

Social Media and the Collapse of the Chicken-and-Egg Question

The traditional question of whether media shape audiences or vice versa *seemingly disappears* in the case of social media. Many network analyses have shown that *like-minded people cluster together*, self-segregating from opposing groups despite sharing the *same* platform. Research further indicates that the more extreme a subgroup's orientation, the *less connected* it is to others, while *moderate users* interact across a broader spectrum.

However, the *crucial point* is not the extent of polarization but the fact that social media platforms themselves do not act as the primary message carriers. Instead, *user-generated submedia* take on that role. Platforms such as *Twitter (now X)* or *Facebook* do not *directly* dictate the message; instead, *their user-generated ecosystems* function as the true medium. In this environment, the *chicken-and-egg* question collapses: users create self-reinforcing memetic fields that sustain their own biases.

The Intersubjectivity of Social Media

Social media also introduce a critical difference from traditional media. If we accept that *reading a book* or *listening to an audiobook* does not create an *intersubjective* situation, does the same conclusion apply to *written exchanges* on social media?

Unlike books, which provide no feedback, social media thrive on constant intersubjective interaction. This feedback loop significantly deforms an individual's *memetic field*. Historical precedent for such mediated intersubjectivity can be found in *epistolary novels* from the *Romantic period*, which constructed intersubjective experiences through letters. However, different media create different levels of intersubjectivity, explaining why some forms of communication—such as *email*—are discouraged in business contexts where *direct communication* is preferred.

This brings us to a more perplexing question: **what happens when a person communicates with a bot, unaware that the bot is not human?**

This question parallels the well-known *zombie problem*:

"Zombies look like humans in all respects but in one: they do not have qualia." (Drapal 2022, 94)

But what are *qualia*?

"As much as a phenotype is an emergence of complex genetic activity, qualia are an emergence of complex memetic activity." (ibid., 95)

If a bot functions as a *zombie*—spreading *memes* without experiencing *qualia*—should we consider reversing this emergence, stating that *memes are the emergence of qualia*? Not necessarily. Both statements can be simultaneously correct, as they represent two sides of the *Möbius strip* of **qualia/memetic emergence**.

Memes as Material Agents in Social Media

The primary purpose of this discussion is not to analyze social media per se but to demonstrate the material nature of memes in the context of digital communication. This discussion also reinforces the intersubjective nature of the memetic environment—in which *the distinction between cause and effect (chicken and egg) collapses*.

If *user-created content*, *sub-media*, and *social media ecosystems* function as messages, can the overarching platforms (*Twitter, Facebook, TikTok*) still be understood as *media* in *McLuhan's* sense?

Initially, social media were promoted as neutral platforms, allowing users to shape their own biases freely. If true, this would undermine *McLuhan's* thesis, suggesting that individuals are only influenced by traditional media—whereas digital spaces allow them to act independently. Such a conclusion would align with the *flower-power ideology* that shaped early visions of the *internet*.

Yet, if social media platforms were *truly* neutral, why did *Elon Musk's* acquisition of *Twitter* provoke such strong opposition? If the platform were merely a passive medium, Musk's changes would not have had such significant implications. This reaction confirms that social media, despite their user-generated content, still function as traditional media in McLuhan's sense—structuring and constraining the memetic fields they host.

The Evolutionary Question: Who is the Agent?

This leads us to a deeper question—not just of *whether media shape audiences* or vice versa, but of whether memes or humans are the true agents of evolution.

Here, *Maryanne Wolf's* work (Wolf, 2018) provides insight. Her research, supported by *neuroscientific studies*, shows that *digital media fundamentally alter our brains*. Those immersed in *digital culture* show reduced capacity for deep reading, as demonstrated by MRI scans and neuronal mapping.

This finding is intuitive—many people recognize that digital media consumption affects *critical thinking skills*. However, this raises a crucial question of agency:

• If digital media reduce *our* cognitive capacity,

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• And if *memes* are more easily absorbed in digital environments,

• Are we losing agency while memes gain agency?

This supports *Dawkins'* original, now widely ignored, thesis that memes act as evolutionary agents, much like genes act in biological evolution.

Memes have evolved a medium that favors their replication while weakening our resistance as their hosts. Like *viruses*, they have shaped an environment in which they spread more efficiently—using humans as increasingly *passive* carriers.

Memes Still Need Us

While this scenario might sound dystopian, it is crucial to remember that memes, like biological viruses, still depend on their hosts. Just as *viruses* require *living carriers*, memes cannot exist without intersubjective human environments.

A world in which *humans completely lose agency, bias, and critical resistance* would be a *dead* environment for memes—rendering them extinct.

And indeed, memes did not exist before humans developed sufficient intersubjectivity to sustain them. This explains why *gorillas* or *dolphins*, while capable of *some* intersubjectivity, host only a small number of memes.

Thus, while memes exert increasing influence over us in the digital era, they can never fully eliminate *human agency*—for in doing so, they would undermine their own survival.

CONCLUSION

Did we prove that communication is better explained with the help of memes? *Partially.* Did we prove that memes are selfish agents? *Partially.*

While a diverse set of references and thought experiments from various fields provide fairly consistent confirmation of an *entity* that plays a crucial role in communicative processes—one that can be identified as a *meme*—the argument for *memes as agents* still lacks fully consistent reinforcement.

Lateral thinking may serve as evidence of *memetic agency*, but what if we interpret the *source* of lateral thinking as *the unconscious*, as conceived in *psychoanalysis*? In this case, we would face a similar regression in argumentation as the one that treats the *memetic field* merely as a *cultural continuum*. If we already have an *easy* explanation (*the unconscious*), why pursue a *more complex* one (*memes*)? Why posit *memes as agents* when we can rely on the *unconscious mind* as the active force behind subjectivity?

However, what has emerged from this paper is that the *vector field model* of memes provides a **heuristically superior** explanation for many instances of communication—one that was previously lacking. This conclusion compels us to develop a more *concise* **memetic ontology**, yet that remains the subject of another paper.

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