

Liquid Memetics: Reconciling Sciences with Art/ Humanities for a Deeper Analysis of Contemporary Literature

علم الميمات السائل : التوفيق بين العلوم الطبيعية و الإنسانية والفن من أجل الوصول لتحليل أعمق للأدب المعاصر

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Abstract

Technological and scientific breakthroughs have radically changed society. More authors of literature today are weaving both these innovations and their themes into their works. For a deeper comprehension of such works, literary criticism ought to include natural sciences as additional tools of analysis. However, Arts/ humanities are distant from natural sciences in terms of interests and aims which could prove problematic. This article suggests a theoretical outline to reconcile these two fields with social sciences and combine them to form a coherent and homogenous framework. Inspired by Zygmunt Bauman's liquid modernity and Edward Wilson's Unity of Knowledge, the suggested framework named "Liquid Memetics" is the study of cultural artifacts (memes) based on the interconnectivity of knowledge across fields of academia. Liquid memetics' framework shows promise in terms of empirical research and further exploration despite its ambitious aims and fluid structure.

Keywords: Technology, Memetics, Liquidity, Consilience, Sciences, Arts, Literary Criticism.

المخلص: أدت الاختراعات التكنولوجية إلى تغيير جذري في المجتمع. كما دفعت العديد من المؤلفين إلى استخدام هاته الابتكارات في أعمالهم أكثر فأكثر. لذلك فإنه من الضروري أن يضم النقد الأدبي المعاصر العلوم الطبيعية كأدوات ومراجع للتحليل من أجل تحليل أعمق، ولكن الفنون والعلوم الإنسانية بشكل عام بعيدة تمامًا عن العلوم الطبيعية من حيث الاهتمامات والأهداف مما يشكل عائقًا أمام الموافقة بينهم والعلوم كأدوات تحليل مستحدثة. تقترح هذه المقالة مخططًا نظريًا للتوفيق بين هذين المجالين والجمع بينهما من خلال إطار عمل متماسك ومتجانس مستوحى من نظريتي الحداثة السائلة لبومان و وحدة المعرفة لويلسون. إطار العمل المقترح والمسمى "Liquid Memetics" هو عبارة عن دراسة القطع الأثرية الثقافية على أساس الترابط المعرفي عبر المجالات المختلفة للأوساط الأكاديمية.

كلمات مفتاحية: التكنولوجيا، علم الميمات، السبولة، التوافق، العلوم، الآداب، النقد الأدبي.

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1. Introduction

The spirit of experimentation has been always the driving force for literature. Since time immemorial, humanity as whole is relentlessly searching for better and more innovative ways of self-expression. Classic genres such as poetry, drama, fiction, and nonfiction have expanded into hundreds of subgenres to meet the drastically dynamic realities of the last century. Due to the calamities of the two world wars and the growth of environmental and global concerns mashed with the huge leaps we witnessed in terms of technology, the 21st century saw the creation of new peculiar genres and literary styles. The scientific and technological themes such as artificial intelligence, cloning, global warming, cybernetics, virtual reality, psychedelics, space and time travel, extra-terrestrials, and genetic engineering became prominent features of these new subgenres like cyberpunk, alternative and contemporary fantasy, post-apocalyptic, flash fiction, young adult fiction (YA), and climate fiction (cli-fi).

More and more contemporary works of literature are embedded with detailed elements of technology and science to the extent of becoming central to the plot, setting, and characters of these works. The same elements have radicalized society today and are radicalizing literature in the process. Consequently, it is only a matter of time until such wave would reach literary criticism as a field. Regardless of the existing schism between natural sciences and literature today, it is high time for the contemporary critic to mend this rift and have more than an idea or two about sciences like physics, Information Technology (IT), biology, ecology, etc.

2. Reconciling the Cultures of Academia

One of the valid questions that can be raised around the proposition of approaching and juxtaposing biology, for instance, next to other disciplines like sociology, philosophy, or even arts and literature is whether there is a common ground for such an endeavour. After all, the “disciplinary isolation” that C. P. Snow, a Pulitzer-winning biologist and a leading authority on myrmecology, identifies as the problem of “the Two Cultures”¹ whereby the Arts/ Humanities

¹ Two Cultures Problem is that “Science is a distinctive culture which is not understood by literary people; and literary people form a distinctive culture which is not understood by scientists. So, have we returned to the original problem, if only in a slightly altered form? How can people, if at all, from

and the Sciences are viewed as opposite poles of knowledge is still considered the privileged discourse today (Velikovsky, 2014, p. 56).

For instance, natural scientists are mainly concerned with predicting and explaining natural phenomena via the observation of material entities under controlled experimental conditions. Their vocabularies are uncommon in that they are built on semantic and mathematical ideas (Kagan, 2009, p. 4), whereas natural sciences are founded on three basic assumptions. First, no scientific explanation is ever completely correct; second, all phenomena are the end result of a series of predictable material processes; and third, natural phenomena lack ethical qualities (Kagan, 2009, pp. 57-58). These principles enable natural scientists to effectively explain a broad range of puzzling natural phenomena, contribute significantly to the national economy, and therefore enjoy, at the expense of humanities today, a high degree of public respect (Kagan, 2009, p. 51). Humanities, on the other hand, aims neither to predict nor explain the natural world but instead to understand the human being and his reactions towards "... the events and meanings that humans impose on experience as a function of culture, historical era, and life history". (Kagan, 2009, p. 4).

Regardless of their level or the lack thereof in epistemological and objective rigor in terms of methodology, the arts/humanities fulfil several important tasks and provide a diverse range of knowledge to academia. Jerome Kagan, considers that the humanities are still relevant today because they:

provide divergent perspectives on the human condition and create objects of beauty. They also remind society of its contradictions, articulate salient emotional states, detect changing cultural premises, confront their culture's deepest moral dilemmas, and document unpredictable events that punctuate a life or historical era." (Kagan, 2009, pp. 230-231)

In his book, *The Three Cultures: Natural Sciences, Social Sciences, and the Humanities in the 21st Century* (2009), Kagan argued that there are three divisions of academia where each group has its own culture, which is reflected in

its vocabulary, techniques, and interests. For instance, in social sciences where the interest is to study the human behaviour, thoughts, beliefs, and emotions, symbol² and culture are as fundamental concepts as mass and energy in physics, atom and molecule in chemistry, gene and cell in biology (Kagan, 2009, pp. 104-105).

Such distinguished interests and vocabulary would eventually lead to distinguished techniques and approaches, which are tilted more or less towards an analytical approach rather than the natural sciences' empirical or the arts'/humanities rational and interpretive approaches.

Even though they disagree on the classification of academia, both Kegan and Wilson called for the unification of the great branches of learning and the end of the cultural feuds. Wilson called for perceiving the boundaries between the scientific and literary cultures as “broad and mostly unexplored terrain awaiting cooperative entry from both sides” (Wilson, 1999, p. 137). Since it is known, for instance, that human behaviour is transmitted by culture; and biology has a significant effect on both its origins and transmission, the remaining question is how biology and culture interact, and more specifically, how they interact across all societies to produce the universal characteristics of human nature (Wilson, 1999, p. 137). On the other hand, Kegan called for cross-disciplinary cooperation, equality of value between the three fields of knowledge, and an emphasis on ethical principles.

Memetics, being approached as a social science, may well be a promising field of study that could offer an attempt to answer both Wilson's and Kegan's call for the unity of knowledge and culture in cross-disciplinary cooperation where all fields of knowledge are equally valued as a source of truth. Kegan's argument that social sciences are still in an early, unhappy stage of development and lack a consensus on a unifying theoretical perspective and methodology is analogous to what memetics as a field of study is going through today. Still, the absence of a strong unifying theory could prove to be a productive quality for the social sciences. This semi-permissive atmosphere would not necessarily be

² A symbol is any event – a color, design, spatial location, animal, object, or word – whose physical features bear no relation to the idea it represents.

correlated with a fruitless yield; it might even tolerate "a thousand flowers to bloom" (Kagan, 2009, p. 127).

Moving from the confining restraints of natural sciences toward the creative and intuitive fields of humanities and arts is the road less travelled today. Perhaps breaking away from the shackles of definitions and the seriousness of it all is what is required to explore the no man's land between these three established divisions. Inspired by Bauman's liquid modernity, in the name of consistency, and in accordance with the spirit of biomimicry which memetics is based upon, an analogy could be drawn between the three cultures and the three main states of matter in nature to demonstrate a synthesis between their points of view and Memetics to suggest a sort of a prototype framework that Memetics might be based upon.

2.1. Liquefaction of Memetics

Matter is the material substance that constitutes the universe and, together with energy, is the fundamental constituent of objective phenomena. As the Encyclopaedia Britannica authoritatively informs, matter may exist in a variety of states depending on the temperature and other environmental circumstances. For example, at standard temperatures, gold is a solid, water is a liquid, and nitrogen is a gas. There are reasons to consider the three states of matter as a fitting metaphor when the aim is to grasp the nature of the different fields of culture in academia. In natural sciences, for instance, the kind of bonding that keeps the solid's atoms together and the structural groupings of the atoms denotes the high stability of solids and their resistance to atom separation (Bauman, 2006, pp. 1-2) and mirrors the strictness and rigidity of the scientific and empirical research. The high level of order exhibited by molecules constituting solids also echoes how orderly and accurately procedures, techniques, experiments, and practices are generally conducted in natural sciences.

Gases are distinguished for their apparent lack of structure. While solids have a fixed size and shape, gases lack both. Due to their chaotic and unpredictable movement, the molecules that comprise gases are relatively free of any bonds, which means they will be scattered randomly in space and collide at varying speeds. Similarly, the humanities and arts share this sense of freedom

and unrestricted motion. After all, these are fields that depend on subjectivity and free association which could lead to contradictory findings and subjective interpretation of data in investigating and expressing an already peculiar and chaotic anomaly which is the human being.

Liquids lack both the strong spatial order of solids in spite of their high density and the absence of order of gases despite the relative freedom of movement among their molecules. Hence, liquids cannot easily maintain their form and are constantly ready to transform. Due to the continuous and irreversible displacement of molecules when subjected to shear stress, the liquids flow (Bauman, 2006, p. 1). This property, i.e., the fluidity of liquids, enables them to travel easily, spill, run out, splash, pour over, leak, flood, spray, drip, seep, ooze, and most significantly, "pass around obstacles, dissolve some others, and bore or soak their way through others still" (Bauman, 2006, p. 2). On account of these characteristics, the liquid state is often referred to simply as the state that occurs between the solid and gaseous states. The same might be said of social sciences, since they use the naturalists' scientific method but are not limited by it, whereas their objectives are in the same spectrum as the arts/humanities, which are concerned with the human being, his relationships with himself, his society, and the universe around him. The social sciences could be seen as a bridge connecting both sides.

Memetics as a sub-branch of Socio-biology fell from the grace of the mainstream science in the past few decades in comparison to its rival theory of gene-culture coevolution theory (GCCE). Unlike memeticists, GCCE scholars are committed to an adaptationist perspective that is inherent in evolutionary ecology and is immune to the restrictions imposed by replicator-based thinking, allowing for the possibility of bringing together scientists from various disciplines under a single theoretical umbrella and addressing the ensuing empirical challenges (Chvaja, 2020, p. 560).

Albeit it is unclear if the adaptationist paradigm is objectively superior to, say, the "by-product" paradigm in evolutionary sciences, the method that allows for more predictions would probably attract more empirical scientists (Chvaja, 2020, p. 561). Accordingly, memetics ought to embrace the same spirit of

broadening the scope of the theory's fundamental premise to attract more scientists and empirical research from various fields; hence the liquefaction of memetics.

The phrase "liquefaction of memetics" refers to the process by which a material transitions from its solid or gas phase to its liquid phase. It is essentially the process of disentanglement from the constraining commitment to replicator-based thinking, in which biological and memetic fitness are decoupled. It is the process by which memetics acquire the fluidity necessary to navigate, dissolve, bore, or soak its way around disciplinary barriers existing between the three cultures. However, one must ensure that the procedure does not result in the theory being fractured, as has previously happened when memetists from different educational backgrounds disagreed on meme ontology.

The challenge hereby lies not in the conceptualization of the idea but in its realization. Similar to how a liquid needs a container to hold a form, liquefied memetics would need a vessel where we can base its form on. Accordingly, Liquid Memetics could be defined and seen as the study of information and culture based on the gene/virus concept of the "meme" under the umbrella of the Darwinian evolution paradigm and through E.O. Wilson's Unity of Knowledge theory of Consilience.

2.2. Liquid Memetics Framework

Wilson believes that the unit of knowledge through consilience, despite the challenges it presents, is of utmost importance not just for all students of academia regardless of their diverse disciplines, but also for every public intellectual and political leader, because it provides "A clear view of the world as it really is, not as seen through the lens of ideologies and religious dogmas or commanded by myopic response to immediate need" (Wilson, 1999, p. 14).

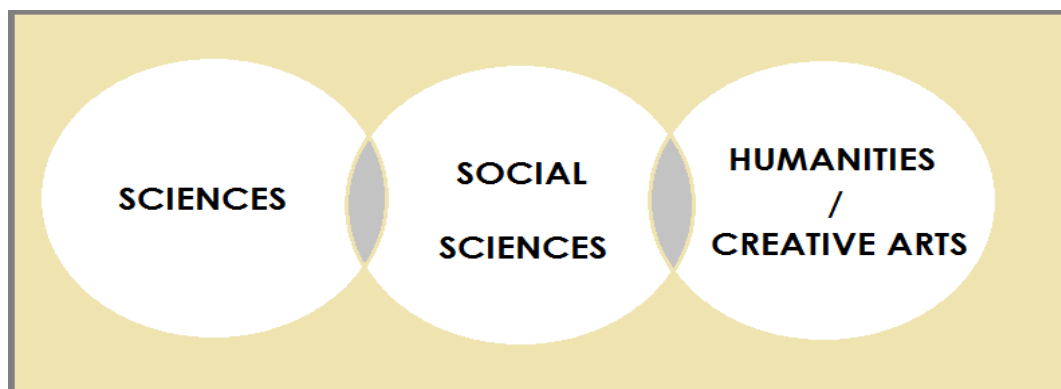
For students of the humanities, and of literature in particular, Wilson's Consilience offers a peculiar challenge. The fact that the essence of sciences is based on methodical rationality, objectivism, and reducing phenomena to the smallest molecules of its working elements whereas arts are based on creativity, subjectivity, synthesis, and intuition is what makes any collective endeavour by

the two polarized fields seem to be such a sterile feat. However, Wilson believes that science reductionism³ does not aim to diminish the integrity of the whole; it aims to understand and associate then synthesize and re-create the original assembly which is the second half of the scientific procedure and in the same time the principal process of creating art; for that reason, he sees that “Neither science nor the arts can be complete without combining their separate strengths” (Wilson, 1999, p. 230)

The alliance between arts and science through reductionism is overdue. Despite the uneasiness consilience would create in fields like literary criticism, it might be the next stepping stone that would empower it to evolve. According to Wilson “Science needs the intuition and metaphorical power of the arts, and the arts need the fresh blood of science” (Wilson, 1999, p. 230) but not in the form of ‘self-conscious hybrids’ of scientific arts or artistic sciences. For a correct exchange between the two fields “A reinvigoration of interpretation with the knowledge of science and its proprietary sense of the future” is required, because “...interpretation is the logical channel of consilient explanation between science and the arts” (Wilson, 1999, p. 230)

Jumping boundaries and implementing various disciplines in interpreting and analysing works of art is not new to literary analysis. However, this has been mainly associated with neighbouring social sciences and humanities. To reinvigorate literary analysis, the scope of interpretation and investigation must be broadened through expanding the circle of the implemented disciplines to cope with and make use of the great leaps in natural sciences. Through consilience, sciences would meet creative arts/humanities by the way of social sciences (Velikovsky, *storyality: Why Some Things Are Popular*, 2014). Velikovsky attempts to construct Wilson’s idea of the unification of “The great branches of knowledge” in a form of a Venn diagram and arrives to two possible forms:

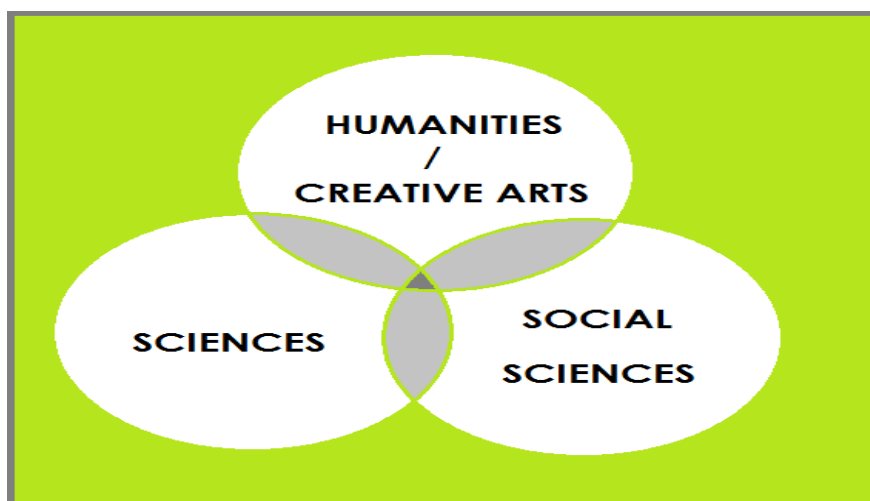
³ Reductionism is the practice of analysing and describing a complex phenomenon in terms of its simple or fundamental constituents, especially when this is said to provide a sufficient explanation.



<http://storyallty.wordpress.com/>

JT Vellkovsky 2013

Form -1- - source (<https://storyality.wordpress.com/>)



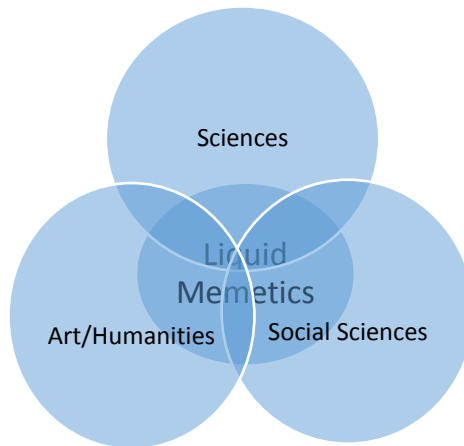
<http://storyallty.wordpress.com/>

JT Vellkovsky 2013

Form -2-source (<https://storyality.wordpress.com/>)

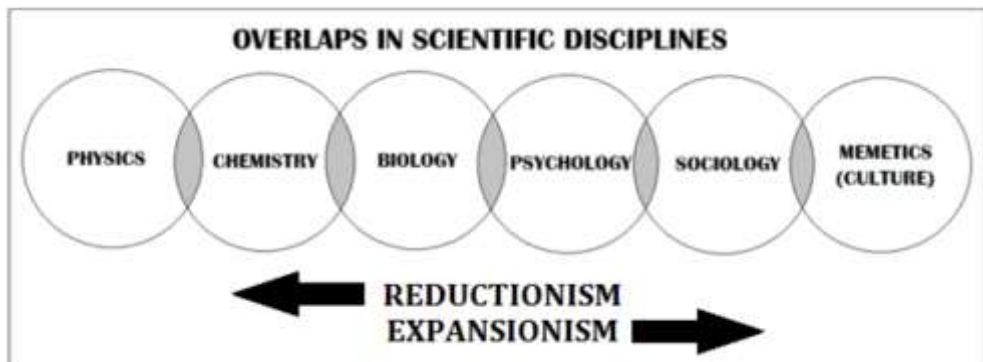
The path of knowledge, according to Form -1- , is linear where sciences overlap with social sciences and the latter with humanities and creative arts. However, this structure does not express the possibilities of sciences overlapping directly with humanities whereas form -2- does. Such structure expresses the concept of conseilience where all branches of knowledge are infused and intermingled together around their boundaries.

One of the most interesting challenges to the implementation of Consilience is how to make the transition from science to art. One may adopt Velikovsky's Holarchy-Partarchy structure as the missing link that would make the unit of knowledge through consilience a well-oiled machine that could reinvigorate the field of literary criticism. Based on form -2-, Liquid Memetics through consilience could be viewed as follows:



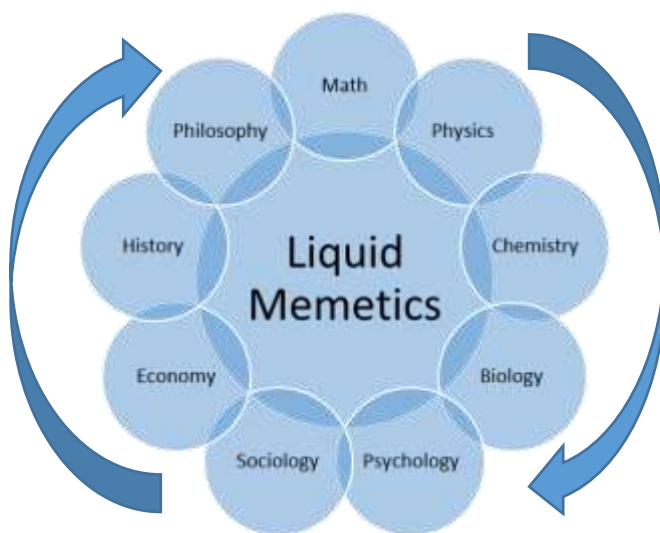
Form -3-

This framework is still too vague and broad to serve as a pattern to base Liquid Memetics on. Nonetheless, these branches of knowledge can be reduced even further. In his book *Why Some Things Are Popular: or - The Meme - The Unit of Culture* (2014), Velikovsky perceives memetics as another sub-branch of social sciences as well as an expansion of sociology:



Form -4-

Since both sciences and arts/ humanities were inspired by the real world and the fact that laws of physics govern such world, a logical link between the two can be considered in the broad sense. According to Velikovsky, certain laws of physics apply to and support the disciplines on the right in figure -4-. Each discipline grows more complex to become a new holon-parton⁴ which means that in addition to these common physical laws, it has its own rules, laws of behaviour, and is complex in its own right (Velikovsky, 2014, p. 16). For Liquid Memetics, however, the unity of knowledge is what contains its “fluidity” and gives it its shape. In other words, in addition to these common physical laws, the other disciplines’ rules and behaviour do apply and govern Liquid Memetics in the broad sense. The following diagram form -5- is based on the synthesis between Velikovsky’s interpretation of Wilson’s Consilience theory and reductionism’s hierarchy of sciences:



form -5-

⁴ It is a portmanteau synthesis of the terms holon and parton. A consilient (science and the arts) synthesis of these two terms used herein is ‘holon/parton’ as this term emphasizes the dual or ‘Janus-faced’ (Koestler, 1979, p. 27) nature of these whole/part entities; they are a whole and also a part at the same time in both biological and in socio-cultural systems and also in biological and biocultural units. (<https://www.igi-global.com/chapter/the-holonparton-structure-of-the-meme-or-the-unit-of-culture/184173>)

Liquid memetics, accordingly, can be structured around the same principles of reductionism and holarchies. Consequently, it can be defined as the study of information and culture based on an analogy of Darwinian evolution and through an approach that is based on general principles and laws that are broadly shared between the different disciplines that span the three major fields of knowledge (art/humanities, social sciences, and natural sciences). The previous Venn diagram demonstrates the suggested approach where we can observe that liquid memetics as a field of study can make use of the different areas of knowledge. A very justified critique could be set forward to the given approach on the ground that such extreme areas of research such as math and physics have little to do with liquid memetics let alone with philosophy and history. A careful examination of this point definitely affirms it, but at the same time sheds the light on the implicit link between them, i.e., life.

Conclusion:

Science, philosophy, and art as representatives of their respective divisions of academia have been always centred around life. Humans invent things to make their lives better and easier; they study and philosophize about the universe so they can better sleep at night when they question the purpose of their existence; they create, synthesize, simulate, and exaggerate the patterns of their lives so they can feel the wide range of emotions which can make us feel 'alive'. It is true that sciences separate and then reduce phenomena to their smallest elements to better explain them, but in real life such phenomena exist in synergy and unison. Liquid memetics is an interdisciplinary field that attempts to derive inspiration from life where physical, chemical, biological, psychological, social, and economic phenomena are in constant interaction and flux.

The least that can be said about this proposal is how ambitious it is, and that's definitely true if the requirement to cover all such broad disciplines in depth is counted; however, this proposed approach is more concerned with the universal principles that are implemented by several if not all these disciplines like Darwinism and Entropy rather than with their intricacies. Liquid memetics, as an approach to literary criticism, aims to analyse literature and arts by incorporating natural sciences in similar fashion to Descartes' perception of

knowledge as a network of interconnected truths that can ultimately be reduced to mathematics. This approach sees the universe as rational and unified by cause and effect. In contrast to social sciences, liquid memetics seeks to go beyond and analyse literature and arts in the same way as we study real-life phenomena.

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