ARTIFICIAL VS NATURAL CREATIVITY: WHAT MEMES CAN TELL US

Kristian Bankov
New Bulgarian University, Sofia, Bulgaria
kbankov@nbu.bg

Federico Biggio
University of Tours
federico.biggio@univ-tours.fr

The previous volume of *Digital Age in Semiotics & Communication* was devoted to the "cultural explosion" of artificial intelligence and to the many ways in which AI is reshaping society and culture. In its final pages we announced that the conversation would continue within the ERUA research cluster AICIED (Artificial Intelligence and Creative Industry Employment Disruption). Volume IX takes up the question that sits at the heart of that research agenda and that kept returning, in one form or another, in almost every contribution to Volume VIII: can machines be creative, and if so, in what sense, and at what cost to those whose livelihood is creativity? The title of the call, "Artificial VS Natural Creativity", was deliberately provocative. It does not presuppose that the two terms are symmetrical, nor that the answer

Digital Age in Semiotics & Communication, Vol. IX, 2026, 9–23
Under CC BY 4.0
https://doi.org/10.33919/dasc.26.9.1

is already known. It invites semiotics, together with philosophy, cognitive science, law, architecture, medicine and artistic practice, to examine where the difference between the two lies, if it lies anywhere.

Before presenting the eleven articles of the volume, we would like to share a small piece of research of our own. It approaches the question from an unexpected but, we believe, revealing angle: that of Internet memes and of the comic effect on which they depend.

1. Why memes?

Most discussions of artificial creativity take their examples from the summit of human achievement: painting, poetry, music, the novel, scientific discovery. These are the domains where the stakes appear highest, but also the domains where the evaluation of creativity is most mediated by institutions, by critics, by the market and by the slow work of tradition. If we want to observe creativity in a purer, more spontaneous and less institutionalised form, there are few better places to look than the Internet meme.

A meme is a minimal creative act. It takes a recognisable template – an image, a still from a film, a stock photograph, a scheme – and adds a twist: a caption, a substitution, a new context. It is produced by "ordinary people", usually anonymously, with no professional training and with the everyday tools of a smartphone. Its success or failure is decided not by a jury but by the crowd, and it is decided almost immediately: a meme that works is shared, copied and remixed within hours, and one that does not simply vanish. In this sense the meme is one of the few cultural forms whose creative success can be measured directly, through its "viral" effect.

At the same time, the meme and its peculiarities – its viral and in some way "automatised" circulation, its apparently authorless nature, and the fact that, from a formal point of view, it consists of assemblages of pre-existing cultural texts – constitute a metaphor for the forms of "creative creation" that we collectively attribute to generative AI today. A large language model can be prompted to write a caption for any given template; an image model can generate the template itself, and its functioning always involves creating starting from something that already exists, in terms both of cultural products, encyclopaedic habits, or shared rules and genres of meaning-making. Just as with meme creation, generative AI always creates against the background of everything that has already been created, thereby also prompting us to reconsider what we mean by "natural creativity."

And because memes are, almost without exception, meant to be funny, the comparison brings us directly to one of the oldest and most demanding problems in the philosophy of creativity: the problem of the comic.

2. The comic and the mechanical: from Bergson to Eco

In one of the most famous sequences of Charlie Chaplin's *Modern Times* (1936), the Tramp works on an assembly line, tightening bolts on a conveyor belt at an ever-increasing speed. When the shift is over, his body cannot stop: his arms keep repeating the twisting gesture in the void, he chases anything that looks like a bolt, including the buttons on a passer-by's dress, and finally he is swallowed by the gears of the machine he serves. Earlier, he was chosen as the guinea pig for a "feeding machine" designed to let workers eat without leaving the line, a device that soon goes out of control. Few images of the twentieth century have expressed more powerfully the anxiety of a human being reduced to a mechanism, and few have been funnier.

Chaplin's film is almost a textbook illustration of the theory set out by Henri Bergson in *Laughter* ([1900] 1911). For Bergson, the comic arises when we perceive "something mechanical encrusted upon the living". We laugh at the absent-minded man who walks into a lamp-post, at the professional whose gestures repeat themselves regardless of circumstances, at the person who behaves like a puppet or an automaton. "The attitudes, gestures and movements of the human body are laughable in exact proportion as that body reminds us of a mere machine" (Bergson [1900] 1911). Laughter, in this view, is a social corrective: life and society demand of each of us a constant attention and a certain elasticity of body and mind, and laughter punishes the rigidity that betrays this demand. It is also, according to Bergson, an affair of the intelligence rather than of the emotions: we laugh only when our sympathy is momentarily suspended, and we laugh, as a rule, together with others.

What is often forgotten is that the theory of the comic is not an isolated chapter in Bergson's work but a corollary of his whole philosophy of life as creativity. Seven years after *Laughter*, in *Creative Evolution* ([1907] 1911), Bergson described life as an *élan vital*, a current of continuous invention that matter tends to slow down, fix and repeat: "for a conscious being, to exist is to change, to change is to mature, to mature is to go on creating oneself endlessly". The mechanical is precisely what life is not: it is creativity that has become automatic, invention frozen into habit. Laughter is therefore the reaction of the living to the sudden appearance of the non-creative in a place where creativity was expected. Read in this light, the scene from *Modern Times* is not only a satire of industrial labour. It is a staging of the

very opposition between the creative and the mechanical that is now at the centre of the debate on artificial intelligence. It is worth noting that Bergson's analysis of the comic has recently been brought into the philosophy of technology for this very reason (Steinert 2017).

Umberto Eco's essay "The Frames of Comic 'Freedom'" (1984) provides the semiotic link between Bergson's intuition and our object. Eco opens by acknowledging that, "from antiquity to Freud or Bergson", every attempt to define the comic has stumbled on the heterogeneity of the phenomena it covers (Eco 1984: 1). His own proposal is that the comic always involves the violation of a rule – a social norm, a narrative frame, a conversational maxim – which must be known to everybody but stated by nobody. "What remains compulsory, in order to produce a comic effect, is the prohibition of spelling out the norm. It must be presupposed both by the utterer and by the audience. If the speaker spells it out, he is a fool, or a jerk; if the audience does not know it, there is no comic effect" (Eco 1984: 6). This is why, Eco observes, "the tragic seems to deal with 'eternal' problems (life and death, love and hate), while comedy seems to be more closely linked to specific social habits" (Eco 1984: 3-4). Comedy and carnival, far from being real transgressions, "remind us of the existence of the rule" (Eco 1984: 6). Humour, finally, is "always, if not metalinguistic, metasemiotic": it casts in doubt other cultural codes from within, which makes it, in Eco's memorable phrase, "a cold carnival" (Eco 1984: 8).

Eco's point has a direct consequence for our question. If the comic depends on a shared and unspoken encyclopaedia of habits, then producing a comic effect requires a form of *complicity* with an audience: the producer must know which rules the audience knows, and which of them it would enjoy seeing broken. This is not a formal operation that can be performed on texts alone; it is an operation performed within a community and AI creativity can be finally seen as an "automatization" of these operations (and, precisely for this reason, its outputs often elicit laughter). Contemporary philosophy of humour has refined but not abandoned this picture. Comic effect is most often defined today as the psychological response of amusement or laughter produced by an incongruity that is perceived as non-threatening (Carroll 2014; Olin 2016; Steinert 2017; Leddington 2020). Incongruity requires a scheme against which something appears incongruous; non-threatening requires a shared sense of what is at stake. Both, in other words, presuppose the social habits that Eco placed at the core of the comic.

3. From the élan vital to the standard definition of creativity

Bergson's philosophy offers what may be the most radical conception of creativity in the Western tradition. In "The Possible and the Real" (Bergson [1934] 1946), he argued that genuine novelty cannot be anticipated, because the possible is a retrospective projection of the real: it is only once a work exists that we imagine it was "possible" before. Creation, in this sense, is the emergence of what could not have been predicted from what came before. It is easy to see why such a conception has become relevant again. A generative model produces outputs that are, by construction, probable continuations of its training data. If creativity is the unforeseeable, then a system optimised for the most likely next token seems to be its very opposite – a Bergsonian mechanism *par excellence*.

Yet the experience of anyone who has used such systems is more ambiguous. Their outputs are often surprising, sometimes genuinely new in the sense that they did not exist before in exactly that form, and occasionally useful or pleasing. The psychology of creativity provides a more modest, operational definition against which this ambiguity can be measured. In a widely cited paper, Runco and Jaeger (2012: 92) argue that "the standard definition is bipartite: Creativity requires both originality and effectiveness". Originality alone is not enough – the random, the bizarre and the merely unusual are original too – and effectiveness, which may take the form of usefulness, fit, appropriateness or value, is what distinguishes a creative product from noise. Runco and Jaeger trace this two-criterion view back to Morris Stein, who wrote that "the creative work is a novel work that is accepted as tenable or useful or satisfying by a group in some point in time" (Stein 1953: 311), and to Jerome Bruner's formula of "effective surprise" (Bruner 1962: 18).

Two elements of Stein's formulation deserve particular attention. First, the creative work arises, in his words, from "a reintegration of already existing materials" (Stein 1953: 311) – a description that fits a meme perfectly, and that also fits, uncomfortably well, the way a generative model recombines its training data. Second, and more importantly, creativity is defined by acceptance on the part of "a group in some point in time". Effectiveness is not a property of the product alone; it is a relation between the product and a community that recognises it. Here the standard definition meets Eco's theory of the comic. In both cases, the decisive criterion lies outside the text, in the shared habits of an audience. This suggests an empirical strategy: instead of asking whether a machine "is" creative, we can ask whether its products are accepted as creative by a group, in a domain where acceptance is immediate and measurable. Memes are such a domain.

4. What makes a meme effective?

Two studies from very different disciplines help us to understand what "effectiveness" means for memes. The first is a cognitive-psychological investigation by Wong and Holyoak (2021), who treat memes as a variety of metaphor. A typical image macro maps a source – the recognisable template – onto a target topic indicated by the caption, in the same way as a verbal metaphor maps one domain onto another. What makes memes particularly interesting is that, unlike the metaphors usually studied by psychologists, which are either produced by researchers or by "elite writers", memes "are typically created, modified, and transmitted by 'ordinary' individuals, and hence may provide a window into the nature of everyday creativity" (Wong & Holyoak 2021: 864). In two studies, using well-known templates such as "Distracted Boyfriend" and "Evil Kermit" as well as political memes, the authors measured how participants rated each meme for aptness, relatability, surprise, familiarity, comprehensibility and humour, and – in the second study – their willingness to share it. Structural equation modelling showed that "the most potent and robust direct predictor of both comprehensibility and humor was the rated aptness of the meme", that is, the participant's sense of how well the source image matched and informed the target topic (Wong & Holyoak 2021: 870). Relatability, in turn, was the main path to aptness, while surprise, the variable most often associated with incongruity theories, played a negligible direct role in humour. Humour and comprehensibility then predicted the propensity to share. Strikingly, many participants were willing to share memes that mocked their own political views: "If a meme is funny enough (even at one's own expense), it may be worth passing along to others" (Wong & Holyoak 2021: 871).

The second study is Gabriele Marino's semiotic account of spreadability (2015). Marino distinguishes three "memetic radicals" – spreading, transforming and imitating – and, accordingly, a continuum of spreadable texts, from ready-made virals that circulate unchanged to proper memes, which exist only through transformation of a source text. "Virality", in this perspective, is a "sur-categorisation": not all virals are memes, and not all memes go viral. What makes a meme spreadable is the balance of two hooks. The first is a "syntactic hook": a modular structure, formula or template that invites users to intervene and that makes the text replicable. The second is a "semantic hook": a striking element, a *punctum* in Barthes's sense ([1980] 1981), which Marino describes as, broadly speaking, a "mistake" – a grammatical error, an ambiguity, an oddity, an exaggeration, an inadequacy, that is, everything "that can convey the idea of 'incongruity', a classic mechanism of comedy". Hence his slogan: "Never a failure, always a meme". The syntactic

hook acts on users' agency, the semantic hook on their engagement; both depend on the affordances of the text and on the competence of the users.

Read together, the two studies converge on the conditions identified by Bergson and Eco: a meme succeeds when its incongruity is grafted onto a template the audience recognises and when it is relatable. Relatability is the psychological name for Eco's shared encyclopaedia; memes are inside jokes on a massive scale. Can a machine, which has no community to be complicit with, meet these conditions as well as humans do?

5. A small experiment: student memes vs AI memes

Students from two courses at New Bulgarian University – OOOK285 Digital Semiotics and GENB025 Culture and Semiotics – were given a simple task. Working with everyday tools and without any AI assistance, they were asked to "make a meme mocking students who use AI entirely to prepare their university assignments". The theme was chosen on purpose: it concerns a situation that the students know intimately, and it touches, with some irony, on the very question of this volume. The two groups produced about 30 memes. We then used exactly the same prompt to generate ten memes entirely with AI: seven with ChatGPT-4 and three with Gemini.

The resulting 40 memes, human and artificial mixed together and without any indication of their origin, were then evaluated in a quantitative survey conducted by Prof. Dimitar Trendafilov from the Sociosemiotic Lab of New Bulgarian University ("Memes Perception Research") between 20 June and 4 July 2025. The survey was administered online through a Google form to a random sample of 157 respondents. Each meme was rated on a single five-point scale, from 1 ("totally dislike it") to 5 ("like it a lot"), and two demographic questions (gender and age) completed the questionnaire.

The results were clear-cut. The three most appreciated memes were all created by students. The most liked of all, by Tsvetoslava Ploshtakova, uses the well-known "drowning child" template from a swimming pool scene (Figure 1): ChatGPT is the adult happily playing with the "uni students", while "books" is the child struggling to stay above water, and a skeleton at the bottom of the pool, labelled "critical thinking", completes the picture. The second (Figure 2) uses the "Third World Skeptical Kid" template with a caption in Bulgarian: the student assures the professor that the term paper was written entirely by themselves, while the professor has just found, at the end of the text, the sentence with which chatbots typically close their answers. The third (Figure 3) needs no template at all: it simply shows the main building of New Bulgarian University, renamed "New ChatGPT University".



Figure 1: The most liked meme in the survey (student meme by Tsvetoslava Ploshtakova)

The AI memes did not fail, but they did not excel either: they were distributed in the middle of the ranking, and the best of them came around tenth. Significantly, it was a variation on the "Distracted Boyfriend" template (Figure 4), the very meme used as a stimulus by Wong and Holyoak, in which a "student with a 10-page assignment due tomorrow" turns away from "doing actual research" to look at a "ChatGPT summary of a summary of a Reddit thread". It is a competent meme: the mapping is apt, the template is universally known, the joke is perfectly readable. What it lacks, compared with the three most successful student memes, is precisely what Wong and Holyoak call relatability and what Eco calls complicity. The student memes refer to the professor who finds the chatbot's closing formula in a term paper, to the very building in which the respondents study, to the skeleton of a critical thinking that is drowning in their own pool. The AI meme refers to a generic student in a generic situation. It is apt, but it is nobody's inside joke.

Perhaps the most important finding, however, is a different one. At the textual level, no one could tell the human memes from the AI memes. The



Figure 2: Student meme ranked second. Top: "Me, explaining to my professor that I wrote my term paper entirely myself"; bottom: "The professor, seeing at the end of my text: 'If you have any additional requirements or would like edits, just say!'"



Figure 3: Student meme ranked third. Caption: "When ChatGPT does all your assignments for you"; the sign on the building reads "New ChatGPT University"

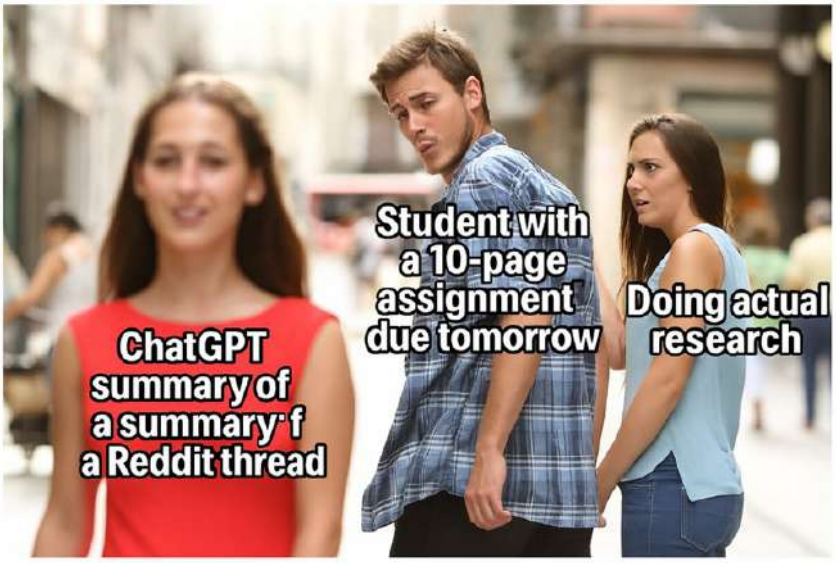

Figure 4: The highest-rated AI-generated meme (ChatGPT), a variation on the "Distracted Boyfriend" template

captions written by the machines are grammatically flawless, idiomatic, and fully consistent with the conventions of the genre; nothing in their wording betrays a non-human origin. The difference, where there is one, does not lie in the text as such, but in its anchoring in a lived context shared by producer and audience. This is, we believe, an important lesson for the semiotics of artificial creativity. If creativity is measured by originality and effectiveness, the machine can reach the threshold of effectiveness – its memes are understood and moderately liked – but the highest degree of effectiveness, the one that makes a meme go viral, still depends on a kind of complicity that cannot be read off the text. In Bergsonian terms, the machine can produce the form of the comic, but not yet the life on which the comic is encrusted.

We are well aware of the limitations of this small study: a single prompt, a single topic, a single scale of appreciation and a limited, local sample of respondents. These limitations are, in a sense, part of the result. Relatability is always relative to a group, and the advantage of the student memes may well be the advantage of the insider. But this is exactly the point: creativity, as Stein put it, is something "accepted by a group in some point in time", and the group is never a generic one.

6. The articles in this volume

The eleven articles collected in this volume approach the relationship between artificial and natural creativity from a wide range of perspectives, theoretical and applied, semiotic and interdisciplinary.

The volume opens with the broadest frame. In "The Political Semiotics of Artificial Intelligence", **Massimo Leone** argues that AI is a problem not only of technology but of meaning, enunciation and power. Combining a Peircean conception of semiosis with Greimasian narrativity and Lotmanian cultural semiotics, he treats AI as an epistemic Other whose probabilistic mode of signification compels us to rethink language, authorship, veridiction and, not least, creativity. Moving from science-fiction imaginaries and journalistic experiments to algorithmic governance and labour, the article shows how statistical regularities crystallise into cultural norms and political orientations, how the dialectic of *langue* and *parole* is transformed under stochastic generation, and why semiotics must move from textual analysis towards an ethics of meaning.

Jeanne Marlot and **Maria Giulia Dondero**, in "Understanding Visual Stereotyping in Images Generated by Multimodal AI: A Matter of Style?", address the aesthetic dimension of generative AI and, more precisely, the way styles and stereotypes become rules. Their first protocol compares historical works and generated images through a grid based on the plastic categories of Greimas and Floch and on Wölfflin's opposition between classical and baroque vision; their second submits to three systems prompts that combine genres and styles never attested together in the history of art. The resistance of the models to these incongruous combinations reveals how what is embedded in their training data tends to impose itself as a norm of image generation.

In "What LLMs Can't Do: Intentionality, and Hence Creativity", **Bolette Hansen**, **Jordan Zlatev** and **Alexandra Mouratidou** develop, from the perspective of cognitive semiotics and phenomenology, the most explicitly conservative position in the volume. Revisiting the history of "language machines" and, at length, Searle's Chinese Room argument, they defend a clear syllogism: a creative agent must understand what it produces; LLMs, which lack intentionality, do not understand; therefore they cannot be authentically creative. What remains open is the possibility that such systems extend human creativity as instruments of "extended agency".

Konstantinos Michos offers an original approach to creativity through architecture, a field that, as he points out in "Balancing between Science and Art: Generative AI in Architecture", requires images to be at once imaginative and truthful about the world. Analysing a set of AI-generated

images of imaginary Santorini resorts that became popular in Greece, he submits them to semiotic, cultural and epistemological validation criteria, in order to separate their artistic qualities from the information they claim to convey about reality, and shows how a multi-perspective reading can reduce the risk of misuse.

Nicolas Chiappucci's "Formalizing the Canonical Narrative Schema: A Semiotic Neuro-Symbolic Approach to Narrative Analysis" brings classical semiotics into computational narratology. Rather than asking LLMs to interpret narratives on their own, he formalises Greimas's canonical narrative schema as an ontology and integrates it with a language model in a neuro-symbolic architecture, testing it on a short story by Edgar Allan Poe. The result shows both the potential and the limits of a dialogue in which semiotic theory provides the structure and the model provides interpretive flexibility.

George Damaskinidis, in "Multimodal Signs, Clinical Meaning, and the Limits of Artificial Creativity: A Theoretical Exploration", moves the question to medical imaging and diagnosis, where the stakes of interpretation are unusually high. Drawing on Boden's distinction between combinational, exploratory and transformational creativity, he argues that current systems can support novelty within learned representational spaces but cannot, on the basis of their outputs alone, legitimate the transformation of the categories that make clinical signs actionable. Clinical reasoning emerges as a form of interpretive creativity, defined by accountability, tolerance of indeterminacy and the negotiability of sign value.

In "Prompting as Meta-Creation: The Mythologization of Artificial Intelligence", **Andriana Bartziou** examines the creativity of prompts through Roland Barthes's theory of myth. Through a multimodal case study – a prompt, its textual rendering and the image produced by ChatGPT-4 – the article follows the processes of intersemiotic translation and intertextuality through which the system reconfigures meaning, and proposes the notion of a "meta-myth": a third-order semiological chain that naturalises statistical synthesis as the work of a creator and shifts our perception of AI from tool to author.

Devon Schiller's "The Janusian Face of Facial Recognition, Part 2: In Marnix de Nijs's Biometric Art" completes the study whose first part appeared in Volume VIII. Having developed, from a Peircean and pragmatist standpoint, a method of "semiotic deblackboxing", Schiller now applies it to the work of the Dutch media artist Marnix de Nijs, whose installations use facial recognition creatively, turning it against itself. Contemporary art becomes here a way of entering the black box with semiotic tools, and of

asking whether such systems operate with genuine triadic signs or merely with dyadic quasi-signs.

The last three articles are inspired by the work of the interdisciplinary ERUA research cluster AICIED, which is devoted to the critical study of the impact of AI on the creative industries. Grażyna Zboralska's "Safeguarding Voice Actors from AI Displacement: The Case of the German 'AI Collective Agreement'" analyses the legal case of German dubbing actors, whose voices can easily be cloned, and the first collective agreement that regulates the use of generative AI in film and television production. She examines its key mechanisms – separate consent for the creation of digital replicas, transparency obligations and a remuneration model based on "fictitious shooting days" – as well as the limits of its scope for voice actors.

In "Distributed Creativity: Rethinking Authorship in the Age of Artificial Intelligence", Diana Kulchitskaya situates AI-assisted art within a longer history of the critique of the solitary author, from Barthes to Foucault. She insists, however, that the participation of many agents does not by itself mean that creativity is distributed, and she distinguishes between intentional collaboration and the unwitting contributions on which AI systems depend. The article ends by calling attention to the questions of credit, consent and fair compensation that this distribution raises.

Finally, Dimitar Uzunov and Hristijana Stoimenova reflect, in a theoretical register, on their own experience as artists working with AI. Their "Two Models of Human–AI Collaboration in Storytelling" distinguishes AI as ghostwriter from AI as story architect and, drawing on the science-theatre production *Wonderspace future*, analyses how artistic judgement, computational assistance and technical control are distributed in practice, between AI-assisted world-building, a digital environment acting as a scenic partner and the simultaneous presence of bodies on stage and on screen.

Taken together, these contributions do not provide a single answer to the question of artificial creativity, and it was never our intention that they should. They do share, however, a conviction that our small experiment with memes seemed to confirm: whatever creativity the machine may have, it can be understood only in relation to the human communities, habits and institutions in which its products acquire meaning and value.

We wish you a fruitful reading!

References

Barthes, R. 1981 [1980]. *Camera Lucida: Reflections on Photography* (transl. R. Howard). New York: Hill and Wang.

Bartziou, A. 2026. Prompting as Meta-Creation: The Mythologization of Artificial Intelligence. *Digital Age in Semiotics & Communication*, Vol. IX (this volume).

Bergson, H. 1911 [1900]. *Laughter: An Essay on the Meaning of the Comic* (transl. C. Brereton and F. Rothwell). London: Macmillan.

Bergson, H. 1911 [1907]. *Creative Evolution* (transl. A. Mitchell). New York: Henry Holt and Company.

Bergson, H. 1946 [1934]. *The Creative Mind* (transl. M. L. Andison). New York: Philosophical Library.

Bruner, J. S. 1962. The Conditions of Creativity. In Gruber, H. E., G. Terrell and M. Wertheimer (eds.). *Contemporary Approaches to Creative Thinking*. New York: Atherton, 1–30.

Carroll, N. 2014. *Humour: A Very Short Introduction*. Oxford: Oxford University Press.

Chaplin, C. (dir.). 1936. *Modern Times* [film]. United Artists.

Chiappucci, N. 2026. Formalizing the Canonical Narrative Schema: A Semiotic Neuro-Symbolic Approach to Narrative Analysis. *Digital Age in Semiotics & Communication*, Vol. IX (this volume).

Damaskinidis, G. 2026. Multimodal Signs, Clinical Meaning, and the Limits of Artificial Creativity: A Theoretical Exploration. *Digital Age in Semiotics & Communication*, Vol. IX (this volume).

Eco, U. 1984. The Frames of Comic "Freedom". In Sebeok, T. A. (ed.). *Carnival!* (with V. V. Ivanov and M. Rector). Approaches to Semiotics 64. Berlin, New York and Amsterdam: Mouton, 1–9.

Hansen, B., J. Zlatev and A. Mouratidou. 2026. What LLMs Can't Do: Intentionality, and Hence Creativity. *Digital Age in Semiotics & Communication*, Vol. IX (this volume).

Kulchitskaya, D. 2026. Distributed Creativity: Rethinking Authorship in the Age of Artificial Intelligence. *Digital Age in Semiotics & Communication*, Vol. IX (this volume).

Leddington, J. 2020. Comic Impossibilities. *The Journal of Aesthetics and Art Criticism*, Vol. 78, No. 4. Available at: https://doi.org/10.1111/jaac.12762.

Leone, M. 2026. The Political Semiotics of Artificial Intelligence. *Digital Age in Semiotics & Communication*, Vol. IX (this volume).

Marino, G. 2015. Semiotics of Spreadability: A Systematic Approach to Internet Memes and Virality. *Punctum*, Vol. 1, No. 1, 43–66. Available at: https://doi.org/10.18680/hss.2015.0004.

Marlot, J. and M. G. Dondero. 2026. Understanding Visual Stereotyping in Images Generated by Multimodal AI: A Matter of Style? *Digital Age in Semiotics & Communication*, Vol. IX (this volume).

Michos, K. 2026. Balancing between Science and Art: Generative AI in Architecture. *Digital Age in Semiotics & Communication*, Vol. IX (this volume).

Olin, L. 2016. Questions for a Theory of Humor. *Philosophy Compass*, Vol. 11, No. 6, 338–350. Available at: https://doi.org/10.1111/phc3.12320.

Runco, M. A. and G. J. Jaeger. 2012. The Standard Definition of Creativity. *Creativity Research Journal*, Vol. 24, No. 1, 92–96. Available at: https://doi.org/10.1080/10400419.2012.650092.

Schiller, D. 2026. The Janusian Face of Facial Recognition, Part 2: In Marnix de Nijs's Biometric Art. *Digital Age in Semiotics & Communication*, Vol. IX (this volume).

Stein, M. I. 1953. Creativity and Culture. *The Journal of Psychology*, Vol. 36, No. 2, 311–322.

Steinert, S. 2017. *Amusement and Beyond: Challenges and New Directions for the Philosophy of Humor*. [Dissertation]. Munich: Ludwig-Maximilians-Universität München. Available at: https://doi.org/10.5282/edoc.23180.

Uzunov, D. and H. Stoimenova. 2026. Two Models of Human–AI Collaboration in Storytelling. *Digital Age in Semiotics & Communication*, Vol. IX (this volume).

Wong, E. F. and K. J. Holyoak. 2021. Cognitive and Motivational Factors Driving Sharing of Internet Memes. *Memory & Cognition*, Vol. 49, 863–872. Available at: https://doi.org/10.3758/s13421-020-01134-1.

Zboralska, G. 2026. Safeguarding Voice Actors from AI Displacement: The Case of the German "AI Collective Agreement". *Digital Age in Semiotics & Communication*, Vol. IX (this volume).