Semiotics of digital mediation

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Abstract. This article revisits Peeter Torop's typology of mediation in order to assess its relevance within today's digitally saturated cultural environment. Originally presented in his 2012 article "Semiotics of mediation," Torop's framework – comprising autocommunicative, metalingual, metatextual, intertextual, interdiscursive, and inter-/transmedial mediation – remains foundational for the semiotic study of culture. However, the emergence of what has been termed the 'digital semiosphere' necessitates a conceptual update. As digital platforms, algorithmic infrastructures, and AI systems increasingly shape communicative processes, traditional models of mediation must be expanded to account for new technological agents and frameworks.

The article introduces three new forms of mediation: algorithmic, platform-based, and automated mediation. Algorithmic mediation refers to the role of computational systems – particularly recommendation algorithms and machine learning models – in filtering and curating cultural content. These systems act as invisible intermediaries, selecting what information is presented, to whom, and when. Platform-based mediation highlights the ways in which platform-specific grammars, interface elements, and affordances (such as hashtags, character limits, or recommendation engines) structure the production and interpretation of meaning. These platform logics function as digital metalanguages that both enable and constrain cultural expression. Automated mediation refers to the involvement of artificial agents – such as generative AI – in the production of texts, images, and metadata. These agents not only mediate content, but increasingly generate it, thereby introducing a new category of hybrid object – metalanguages within digital culture.

The article further reconsiders Torop's categories of metatextual and interdiscursive mediation in the light of platform culture. Digital artefacts such as hashtags, hyperlinks, and AI-generated summaries now function as metatextual commentaries that frame and contextualise primary content. At the same time, interdiscursive mediation has been intensified through remix practices and cross-genre participation on platforms like TikTok. Features such as *Duet* and *Stitch* enable users to engage directly with existing content, producing dialogic texts that operate across multiple discursive registers.

A further focus is the transformation of autocommunication in digital environments. The article argues that digital archives and personalised

algorithms give rise to a new form of self-mediation. Platform features such as Facebook's "Memories" or Spotify's "Year in Review" demonstrate how cultural systems now communicate with users by referencing their own past behaviours, effectively automating aspects of cultural memory. This autocommunication is both personal and collective, as individual memory acts aggregate into wider mnemonic patterns.

In conclusion, the article argues that Torop's typology should be expanded to account for non-human mediators and processes driven by computational or algorithmic systems. It calls for the development of a semiotics of digital mediation that recognises the interpretive roles of artificial agents. In doing so, it contributes to broader debates about authorship, agency, and meaning-making in a posthuman media landscape.

Keywords: artificial agents; autocommunication; digital mediation; digital semiosphere; generative AI

Among the rich intellectual legacy of Peeter Torop, one text stands out to me in particular. It was first presented at the conference "Culture in Mediation: Total Translation, Complementary Perspectives," held on 26–27 November 2010 in Tartu to mark his 60th birthday, and was published two years later in *Sign Systems Studies*. I am referring to the brief article titled "Semiotics of mediation" (Torop 2012), which, in my view, encapsulates much of Torop's contribution to the semiotic study of culture. As a tribute to his legacy – and given its influence on my own thinking – I revisit his theory of cultural mediation to assess how it might be updated in light of today's "digital condition" (Stalder 2017).

Toward a semiotics of digital mediation: The new ecology of sign systems

Digital environments give rise to new forms of object- and metalanguages, thereby challenging traditional semiotic categories of mediation. In the early 2010s, Torop outlined a typology of mediation – autocommunicative mediation, metalingual mediation, metatextual mediation, intertextual mediation, interdiscursive mediation, and inter-/transmedial mediation – as parameters for cultural analysis. These categories describe how culture communicates both with itself and with others. Contemporary culture, however, operates within a more complex ecology of sign systems, referred to by John Hartley, Indrek Ibrus and Maarja Ojamaa (2021) as the 'digital semiosphere.' The authors explain that the digital semiosphere emerges as an environment in which "many of the meaning-making processes are made happen by billions

of computational devices connected to each other in complex ways" (Hartley et al. 2021: 60). This machine-age infrastructure constitutes not merely a medium but an active participant in cultural semiosis. On the basis of this argument, I propose that Torop's typology could be extended to account for *algorithmic mediation*, *platform-based mediation*, and *automated mediation* – phenomena unique to the digital era.

In digital media, algorithmic mediation refers to the way computational algorithms curate and filter cultural communication. Machine-learning systems now act as third parties shaping the flow of information. For example, social media news feeds and search engine results are ordered by algorithms, not just human intention. These algorithms function as new intermediaries – invisible editors that tailor the cultural messages an individual encounters (Sánchez-Vera 2025). As Tarleton Gillespie (2014) notes, algorithms have become key gatekeepers of relevance in the online information diet. This algorithmic shaping of discourse challenges traditional sender – receiver models of communication: it means that meaning is mediated not only by human choices but by automated rules and learning models.

Platform-based mediation highlights how the infrastructure of digital platforms functions as a mediating framework for communication. Each platform imposes its own grammar of interaction – from Twitter/X's character limits and retweet conventions to YouTube's content recommendation algorithms – and these design features strongly influence how cultural texts are produced and circulated. In effect, platforms function as metalanguages that define the rules of cultural participation: they provide the interface languages and protocols through which users communicate (Van Dijk et al. 2018). The interface elements of platforms (menus, hashtags, like/upvote buttons) form a second layer of signification, a "language of platforms" that shapes the possible expressions and interpretations of content. In Juri Lotman's terms (2005[1984]: 214), they operate like self-descriptive grammars that culture creates to talk about itself.

The rise of automated mediation goes one step further: not only do algorithms filter content, they now increasingly generate content. N. Katherine Hayles (2025: 12) proposes that even stand-alone computers possess cognitive powers, "including the ability to perform interpretations and thus to create meanings," though not in a human sense. Rather than insisting on anthropocentric standards for meaning, she urges us to locate the specificity of machine meaning-making within their internal and external milieu. AI-driven systems intermediate between original source data and human observers by producing summaries, translations, or even entirely new texts

and images. Think of a search engine that doesn't just retrieve a relevant article but provides an AI-generated synopsis, or a social media platform that automatically generates captions or keywords for users' posts. In these cases, a non-human agent stands between the original human communicator and the audience. This new mediator – artificial yet linguistically competent – effectively blurs the distinction between object-language and metalanguage. The AI-generated text may serve as a metatext, commenting on or summarising original texts, but it is also itself an object text consumed by readers. Digital culture thus forces us to consider mediation beyond the human: algorithmic agents and AI systems as mediators of meaning in their own right (I return to this important topic in my last section).

Crucially, the new digital ecology also transforms autocommunication. As Lotman famously noted, a culture cannot interpret itself without selfcommunication, and that this mechanism constitutes the core of cultural memory (Lotman 2000[1977]: 567; Tamm 2015). In traditional settings autocommunication could mean keeping a diary or an artist interpreting their own work; in digital lifeworlds, autocommunication is increasingly personalised and amplified by algorithms. Social media feeds often act as a mirror, feeding us posts and advertisements calibrated to our own profile. Over time, these personalised feedback loops create a kind of algorithmically guided autocommunication: the user's past clicks and likes determine the future messages they see. The self-communicative function of culture is thus partly taken over by machines that "learn" our identity and then address us in its terms. Here, the digital self becomes entwined in what Hayles (2017: 4) calls a "planetary cognitive ecology," where human and nonhuman actors are enmeshed in dynamic feedback loops of interpretation and memory.

In brief, digital mediation introduces new layers of complexity to cultural semiosis. Algorithmic, platform-based and automated mediations operate alongside Torop's original categories, expanding the repertoire of how meaning is transmitted and transformed. Metadata schemas and interface cues serve as digital metalanguages, guiding interpretation and organising cultural texts. And the autocommunicative loop – culture's dialogue with itself – is intensified by personalised algorithms that act as both mirror and messenger.

From text to code: Metatextuality and interdiscursivity in platform culture

In digital culture, code (software and algorithms) increasingly acts as a metalanguage of culture, altering how cultural texts are created, circulated, and interpreted. In this section I will re-read metatextual and interdiscursive mediation in light of platform culture: digital annotation systems (hashtags, hyperlinks, citation algorithms, AI summarisation) create new forms of metatextuality, while the fluid movement across digital genres intensifies interdiscursive exchange.

One clear example of digital metatextuality is the hashtag (Bernard 2019; Losh 2020). A hashtag on Twitter or TikTok serves as a form of metadata that explicitly labels the content of a post (e.g., #COVID19 or #ThrowbackThursday). In doing so, it acts as a concise metatext, telling the audience (and platform algorithms) how to contextualise a given message. Hashtags were initially devised as an indexing mechanism – a way to group posts – but they have evolved into a versatile form of digital metadiscourse. They can convey irony, tone, or commentary on the post itself in addition to categorising it. Notably, hashtags blur the line between text and metatext: they integrate directly into user messages while simultaneously remaining a layer "above" meaning. As one analysis observed, "this ability for hashtags to work seamlessly inside social media texts [...] subverts the traditional role of metadata: separating meta-information from primary content" (Zappavigna 2018: 32). In platform culture, a hashtag like #fail appended to a story is a metatextual comment signalling the user's evaluative stance, while tags like #meme or #science explicitly situate a post within a broader discourse. In all these cases, users employ a coding convention to inject an extra layer of meaning into the text.

Hyperlinks provide another form of digital metatextuality. Every hyperlink embedded in an online article or blog post implicitly functions as a citation or commentary, pointing the reader towards another text. The very architecture of the web, built on hypertext, is "a fundamentally intertextual system" where each link is a metatextual gesture (Landow 1992: 10). This has shifted the nature of reading and interpretation: to read an online text is often to navigate a web of references, an experience of interwoven discourses rather than a single linear narrative (Hayles 2012: 55–79). The code (HTML, etc.) that enables linking is thus a meta-language underpinning modern intertextuality.

Beyond user-added tags and links, consider AI-driven annotations such as content warnings. When YouTube appends a label beneath a video stating

"This channel is funded in whole or in part by X government," or when Twitter/X attaches a fact-check notice to a post, these platform-generated messages function as metatextual elements commenting on the user-generated content. Similarly, AI-driven text summarisation produces a new text that encapsulates the meaning of the original. Unlike traditional marginalia or human-authored abstracts, these summaries are generated algorithmically. They demonstrate how software has assumed the role of cultural commentator: algorithms analyse texts and generate second-order representations that guide our interpretation of first-order texts. In this way, code becomes an active participant in cultural dialogue, writing about human writing. As Hayles (2017: 72) convincingly argues, we must "reject the illusion that computational media simply perform calculations, devoid of interpretations, anticipations, and meaning making."

Digital culture also intensifies interdiscursive mediation – the interaction and overlap between different discursive spheres or genres. This interdiscursivity is particularly evident in online remix cultures (Voigts 2017). An internet meme, for example, can encapsulate multiple layers of discourse – political commentary, pop culture references, and internet in-jokes, all at once. Memes are inherently intertextual and interdiscursive: they rely on the audience's recognition of previous texts and often comment ironically on media narratives or social norms (Shifman 2014). A meme format like the "Distracted Boyfriend" is a visual text that has been remixed thousands of times to comment on everything from consumer habits to academic procrastination (Walker 2023). Each remix pulls in a new discursive context while echoing earlier versions – a clear instance of cultural texts in dialogue. Similarly, fan fiction - fans writing stories using the characters and worlds of well-known novels or films – represents interdiscursive mediation between the official narrative discourse of the original author and the participatory discourse of the fan community (Jamison 2013). The result is a sprawling web of texts that challenge the traditional hierarchy of discourses by openly borrowing and blending elements.

An interesting example of recent practice is the collaborative intertextuality made possible by platforms like TikTok. TikTok's *Duet* and *Stitch* features, for example, allow users to directly appropriate another user's video – placing their own video side by side with it or integrating it in other ways – to create a new piece of content. This technical affordance makes intertextuality a built-in feature of the platform: users literally produce content by adding to or recontextualising someone else's content. Studies of TikTok note that these affordances turn personal expression into

a conversation: videos reference other cultural texts, integrating elements from diverse sources and fandoms. Rafal Zaborowski and Lucy Bennett (2025) observe that the platform's interface and affordances enable users to remix content across contexts and engage in cross-thematic discourse. A single TikTok meme might involve a popular song (musical discourse), a visual gag (pictorial discourse), on-screen captions (textual discourse), and hashtags connecting it to political or social discussions – all in one artifact.

In summary, the shift from text to code underscores that software is not merely a conduit for cultural texts but an active mediator and generator of cultural meaning. Metatextuality proliferates in the form of hashtags, hyperlinks, AI summaries and platform labels, all of which rely on the languages of code and interface. Interdiscursive mediation accelerates as digital genres collide and converse on platform infrastructures. Cultural production in the digital age is increasingly code-mediated co-production, where humans and algorithms jointly shape a polylogue of texts across discourses. The semiotics of digital mediation thus requires analysing not only content, but the operative code and platform logics that continually generate commentary, context and connections around that content.

Memory, mediation, metadata: Digital archives as cultural autocommunication

Digital archives (including social media histories, cloud storage, and block-chain records) function as new autocommunicative forms of culture, reshaping cultural memory. In the digital age, autocommunication becomes a hybrid of personal and collective memory: individuals and communities communicate with their future selves via stored data, while algorithms and metadata shape what is remembered, preserved, and surfaced. In this section, I explore how digital self-archives serve as culture's new form of self-communication, and how metadata operates as a self-descriptive grammar of digital culture's memory. I also consider algorithmic heritage: the idea that algorithms now play a key role in determining what aspects of the past are highlighted or forgotten.

As noted, Lotman's cultural semiotics holds that autocommunication is a key mechanism through which culture sustains and renews itself. Its mnemonic function is grounded in self-referential processes: culture continually tells itself stories to preserve continuity and identity. In digital society, this dynamic is especially evident. Consider how social media platforms encourage users to relive their own past. Facebook's "Memories" feature or apps

like Timehop daily deliver to users content from their own archives ("Here's what you posted 10 years ago today"). In receiving such prompts, the user effectively becomes both the sender and receiver of a message across time – a classic autocommunicative loop, now automated. The digital system has taken on the role of curator and prompter, bringing the past self into dialogue with the present self.

This new form of digital autocommunication is both personal and collective. When an individual shares a memory that a platform resurfaces – such as reposting an old photo because Facebook recommended it – a personal remembrance enters public discourse. At scale, millions of such microacts form a collective pattern of what is being remembered on any given day. Digital archives as cultural autocommunication thus operate on two levels: personal self-dialogue and communal memory reinforcement. The individual's archive (emails, photos, posts) acts as an externalised form of memory, shaping one's evolving self-narrative through reflection and repetition. Meanwhile, shared platforms algorithmically surface and amplify these individual memory acts, allowing them to circulate and synchronise at scale. Anat Ben-David and her colleagues (2024) describe this as the formation of "mnemonic markers" and dynamic "memory ecologies," whereby synchronous memory expressions across users create identifiable patterns of collective remembrance. Consequently, platformed memory practices – while deeply personal - play a significant role in reinforcing broader patterns of cultural remembrance and nostalgia.

At the heart of these digital archives lies metadata, which serves as a self-descriptive language of digital culture – comprising timestamps, tags, geolocations, content categories, and file formats. Every piece of digital content is accompanied by a cloud of metadata that situates it in time, space, and context. This metadata enables digital systems (and users) to organise content and establish connections. For example, a digital photograph might carry EXIF metadata indicating when and where it was taken, by which camera, and even include thumbnails or tags such as "beach" or "birthday." This transforms the photograph from a mere image into a node within a larger self-organising system: it can be retrieved by date, by location, or by event; it may be automatically grouped with other "beach photos" or "2010 photos." The metadata thus serves as a commentary on the content, rendering it legible to the future self and to others.

Moreover, people actively add metadata as a form of self-communication. Tagging someone in a photo, adding a description to a saved file, or organising emails into folders – all these acts are ways we converse with

our future selves or others about what the data "means" or how it should be used. Even the act of choosing what folder to save a document in is a tiny autocommunicative act. In a broader sense, digital culture's enormous labour of classification – from hashtags and keywords to playlists and Pinterest boards – is culture continuously describing and contextualising its creations, thereby building a scaffolding for memory and retrieval.

Perhaps the most profound shift in digital cultural memory is the emergence of algorithmic heritage. In the analogue era, preserving cultural heritage was shaped by a combination of intentional archiving and chance. Today, however, algorithmic curation and automated selection what Valentina Re (2024) terms algorithmic 'caregiving' - have taken over many of these curatorial functions, effectively shaping what is preserved and surfaced. Search engines, for instance, technically index vast swathes of the web's past, but the results they show are ranked by relevance and popularity. As Elena Esposito (2017) argues, unlike human memory – which struggles to remember enough - digital systems struggle with remembering too much and therefore must learn to forget (or hide) information in a controlled way. "In web memory, remembering and forgetting are not two opposing components that negate each other. The availability of memories can increase together with the loss of memory (forgetting)," notes Esposito (2017: 2), highlighting that availability (being surfaced) is key. An old tweet or blog post might still exist on a server (not deleted), but if no algorithm or user ever brings it into view, it is effectively forgotten. Conversely, an event from the past might be pushed into the present by algorithms that decide it is "trending" or relevant (as when YouTube suddenly recommends a 5-yearold video, reviving it).

We see algorithmic heritage at work in phenomena like curated timelines and flashback features. For example, at the end of each year, platforms like Instagram or Spotify often algorithmically generate a "Year in Review" for users – selecting highlights from one's activity. These highlights form a narrative of the year, a memory capsule, created by criteria the user doesn't fully control (perhaps the posts with the most likes, or the songs most played). This is a case of the algorithm shaping personal heritage: out of a person's thousands of moments, the code picks which will represent "your year." Similarly, on a collective level, algorithms determine trending topics and search autocompletions, which influence what fragments of cultural history people encounter. A search for a historical figure will show certain anecdotes high up, effectively canonising them, while burying others. In this manner, algorithms act as curators of culture's accessible memory.

The concept of cultural autocommunication can be extended to these algorithmic processes. Culture is not only communicating with itself intentionally (through people sharing memories) but also implicitly, as algorithms churn through cultural data and present patterns back to users. When Netflix tells you "Because you watched X, you might like Y," it is in a sense culture's database speaking to an individual, relating one part of cultural experience to another. The process is autocommunicative at a system level: the system uses the cultural archive (your past views, the catalogue of films) to generate a new message (a recommendation) that then feeds back into cultural consumption. The user's subsequent choice (watching Y or not) becomes new data, and the cycle continues – a feedback loop of memory and suggestion. This curated memory is not neutral; it reflects the algorithm's selective vision, which becomes culture's de facto curatorial logic – a "technosymbiotic" act of collective remembering (Hayles 2025: 98).

To sum up, digital archives and memory tools exemplify culture's self-mediation in unprecedented ways. Personal and collective memory converge as our individual digital footprints become part of a networked public archive. Metadata provides the language for this memory, making digital content self-describing and thus easier to preserve and interlink. And algorithms have assumed the role of memory gardeners, pruning and highlighting the past in ways that deeply influence what culture remembers about itself. The semiotics of mediation, therefore, must account for these non-human interventions in memory: how meaning is continuously modulated by what the system "chooses" to remember or retrieve at any given moment. Culture's communication with itself has become partly automated – raising both opportunities (greater breadth of memory, novel connections) and challenges (loss of human context, bias in what is shown or hidden).

Mediation without humans? Artificial agents and the semiotics of automated culture

The rise of generative AI calls for a revision of the semiotics of mediation that includes non-human agents as both mediators and generators of cultural meaning. As artificial agents (like AI text generators, image creators, chatbots) participate in cultural production, we encounter a new category of mediation. As proposed, we might call this automated mediation – when sign processes are initiated or heavily shaped by autonomous computational systems. In this final section I examine how AI-generated texts (e.g., ChatGPT dialogues) and images (e.g., DALL-E art) act as hybrid

object-metalanguages, and reflect on interpretative authority in a posthuman context: when culture is mediated by "someone" that isn't actually human, who/what generates, frames, and legitimates meaning?

Torop's (2012) framework distinguished between implicit and explicit mediation. Implicit mediation refers to the background, unintentional ways in which cultural forms shape communication. Explicit mediation refers to purposeful use of media or codes. The advent of AI complicates this binary. When an AI system generates a text, is that mediation implicit or explicit? On one hand, the AI operates based on an explicit algorithmic design (with certain training data and objectives), but on the other hand, from the human user's perspective the mediation may feel implicit (the AI's internal model is opaque, and its outputs often appear as if by magic without explicit guiding intention visible to the user). This suggests a need for a third category: neither human-implicit nor human-explicit, but artificial-explicit perhaps – the mediation carried out by an agent following a programmatic logic rather than human intention.

AI-generated content can be seen as a hybrid object-metalanguage. Take the example of GPT-4 generating a short story in the style of Fyodor Dostoevsky. The output is a new story (an object text) that a human can read and enjoy. Yet, it is generated by analysing a vast corpus of language and extrapolating patterns - effectively, the AI has ingested language about language, rules and styles at a meta level, and uses them to produce text. The AI's story is thus simultaneously an original object and a commentary on the corpus it was trained on (here, all the Dostoevsky's novels and similar texts). Another example: DALL-E creates an image from a prompt "Mona Lisa as a Pixar character." The image is an object in culture now, but one can only understand it by knowing it is a translation of an existing iconic image into a new style - it's inherently metapictorial. AI outputs often carry this twotier nature: they are remixes and syntheses of prior cultural artifacts, so to interpret them fully, one must consider that invisible intertextual layer (the myriad of influences the model absorbed). In practical terms, AI models function as metalanguages that can convert inputs (a prompt, an idea) into outputs in various styles or formats.

The presence of AI mediators raises the issue of interpretive authority and authenticity. Traditionally, meaning in communication has been tied to an agent's intention or a cultural context. We interpret a poem by considering the poet (or the poetic tradition), giving authority to those human contexts in deciding what it might mean. If a poem is generated by AI, there is no human author with intentions to consider. Do we interpret it *as if* the

AI were an author? Or do we treat it purely as a stochastic echo of training data, thus attributing meaning back to the sources it mimics? This becomes tangled. An AI-generated news article that reads coherent and factual might persuade readers, even though no human vetted it – the authority it carries is borrowed from the style and format (it sounds like authoritative journalism). The danger is that implicit trust in mediation can be exploited: if something appears in a familiar genre, we may accept its meaning without question, not realising the mediator was fundamentally different (no human gatekeeping).

Another facet is how AI mediation blurs roles of sender, message, and receiver. When you converse with a chatbot like ChatGPT, who is the sender of each message? One could say the user and the AI take turns being sender/receiver, but the AI's "sending" is guided by statistical prediction, not communicative intent. The semiotic process here is novel: the AI acts more like a mirror or conduit for language patterns than a traditional speaker. Yet, from the user's perspective, it feels like a dialogue. The user may even adapt their style as if talking to a person. A kind of pseudo-autocommunication arises: the AI often reflects the user's own prompts and language back in transformed ways, so the user is in effect communicating with a projection of their input (plus a large training set behind the scenes). The boundaries between self-communication and other-communication blur. The user's role also shifts: they become a prompter or curator of content more than an author or a pure audience.

Automated mediation also forces us to consider how meaning evolves without direct human evolution of signs. AI systems can introduce new expressions or visual styles that were never explicitly created by a person. For example, an AI might interpolate between art styles and create a novel aesthetic. Who interprets and validates that? If the style catches on and humans start imitating the AI's creation, the direction of mediation can reverse: human culture might follow a path initiated by a machine. Instances already exist in which music featuring AI-generated hooks or melodies is incorporated by humans into commercially released songs (consider, for example, Florian Wahl's "Flo Raadio" in the Estonian context). We may be approaching a feedback loop where AI doesn't just remix culture but adds to it, and those additions feed future AI. The semiosphere, that Lotman (2005[1984]) conceptualised as a human phenomenon, might soon include non-human semiotic agents as full participants.

In light of all this, interpretative frameworks must adapt. Semiotics has long accounted for non-human sign processes in biosemiotics and even

machine semiosis in a limited sense (cybernetics), but here we have something distinct: artefacts created by artefacts that humans treat as meaningful. It challenges the anthropocentric baseline of much of cultural theory. Hayles's (2025: 53) recent call to abandon biologism – "the faulty extrapolation of biological reasoning into computational media" – challenges semioticians to recognise technocognitive agents as meaning-makers in their own right. We might draw on philosophical concepts: for instance, the idea of the 'author-function' (Foucault 1979[1969]) might detach from actual authors and attach to AI as a kind of persona or simulacrum of an author (Slater 2024). Perhaps new conventions will emerge, like attributing an AI model as if it were an author ("GPT-5 wrote this story"), effectively personifying it in interpretation because humans are inclined to ascribe agency.

Practically, establishing meaning in AI-mediated content may increasingly rely on transparency of mediation. If we know how a piece was generated, we adjust our reading. For example, if a social media post is identified as bot-generated, we interpret it differently (maybe discount its emotional value or truth). Thus, a critical part of the semiotics of automated culture is meta-communication about mediation: the signs that indicate whether something was human-made or AI-made become very important. A simple label "Generated by AI" on an image or text acts as a sign that frames all subsequent interpretation.

In conclusion, the inclusion of artificial agents in cultural production compels semioticians to extend the concept of mediation. We must ask: Can an algorithm be a "sender" in a semiotic act, or only a channel? The evidence from human interactions with AI suggests that algorithms can unexpectedly fulfil sender-like roles (people certainly respond to them as if they were interlocutors). Culture is increasingly a dialogue not just among humans through media, but between humans and algorithmically shaped media outputs, and even among algorithms themselves (as when AI systems consume content generated by other AI systems). The semiotics of automated mediation will need to map these new circuits of meaning-making, examining how intention, interpretation, and creativity are distributed across human-machine networks. Implicit and explicit mediation are no longer sufficient categories – the synthetic dimension has arrived, wherein meaning emerges from code-driven processes that lack human consciousness yet produce culturally resonant results.

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