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Echo Chambers and Semiotic Enmeshment

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> Abstract • We undertake a tentative semiotic investigation of what we refer to as semiotic enmeshment – the blurring of the boundaries between semiotic activities, or a failure to distinguish certain environmental and experiential constraints within which semiotic activities occur to make media engagement possible. We argue that semiotic engagement accounts for most of the problematic and dysfunctional patterns of online media experience including echo chambers.

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Introduction

« 1 » Patterns of media engagement are definitely evolving. Today, opinion mongering is more common than straight reporting (Ravenelle, Newell & Kowalski 2021); sensationalism, clickbait and fake news are also trending. Audiences, in turn, do not fall behind: they seem to be online 24/7 not to miss a live stream or broadcast that will be shared, liked or reposted. Such media consumer trends mark the beginning of new phenomena and practices. Echo chambers are one of them.

« 2 » Echo chambers are viewed by Alessandro Martinisi, in his target article, as socio-cognitive ecosystems[1] (§29) of online (what we would describe as *technological-cultural*) origin that minimize the transformative role of negative feedback in experience construction and enclose media users within their familiar schemas of action and thought (§11ff). This is an alarming dynamic because it makes genuine dialogue and conversation a problem (Fomina 2024). Among other media habits, the tendency to lock oneself up in a filter bubble of news and views may account for division and radicalization in a society, an increased incidence of hate speech and other forms of online aggression among its members, as well as the rise of internet addiction disorder in certain individuals. Yet what accounts for the appearance of echo chambers themselves? Why do media users unwittingly entrap themselves in impoverished experiential realities? Why do so many people literally live with and through their gadgets, confusing virtual with natural events?

1| One of us elsewhere (Druzhinin 2025) used the term "cognitive ecosystem" to refer to constraints that result from and in, at the same time, in one's behaviors and choices. Echo chambers can be similarly viewed as emergent patterns of human cognitive ecology.

Echo-chambers and an illusion of control

« 3 » What Martinisi argues in line with radical constructivism is that media users do not simply find themselves in an echo chamber, rather media users actively build it up by avoiding ("filter[ing] out" or "rationaliz[ing] away" §11) negative feedback and transformative experiences in their engagement with audiovisual and textual components of their environment. However, why do echo chambers originate from media interactions in the first place?

« 4 » One could suggest that there are methodological tools that affect decision making, such as recommendation engines or algorithms. Yet, algorithmic filtering alone cannot account for the rise of echo chambers (§2), rather it formalizes our orientational behavior. In natural settings we act under spatio-temporal constraints that are very similar to those that algorithms put on our media choices. When we perform a physical movement, be it manual, vocal or facial, we create a frame of reference for our subsequent behavior, as every bodily movement we make eliminates all other possibilities of movements and lays down a developmental path along which we move ahead:

> "Since the mechanism of choice, as in every neuronal process, is state-dependent, the state of activity from which the choice (new stage of

neuronal activity) must arise restricts the possible choices and constitutes a reference background in the orientee […] that specifies his choice." (Maturana & Varela 1980: 33)

« 5 » The problem is not with the choices or way of choosing but with the way of dealing with the consequences of these choices. Media users develop a certain pattern of technological-cultural behavior that reinforces their sense of a closed (and safe) relational space around them by minimizing expectations-outcome contradictions in their perceptions and understandings. It can be argued that an echo-chamber inhabitant maintains an *illusion of socio-cognitive control*. While in natural interactions she can hardly control how others may react and what they think, in her media environment she relies on voices she hears, faces she sees and texts she reads to like what she likes and/or share what she thinks.

« 6 » We trace the roots of this illusion to certain semiotic habits that arise with a skill-based use of technological-cultural artifacts. Due to these habits, for example, some media users tend to "mute," "close" or "scroll past" an unpleasant voice or an inconvenient opinion, ending up in echo chambers of their own making. In what follows, we will analyze these habits and their experiential origin.

A case for semiotic enmeshment

« 7 » We argue that in the course of semiotic engagement with the experiences that media technologies afford across different modalities (sound, text, picture, video), media users can develop certain patterns of interaction that, if regularly enacted and reinforced, become dysfunctional and unhealthy. We will refer to such a kind of interaction as *semiotic enmeshment*.

« 8 » We borrow the term enmeshment from psychology, where it means a relationship dynamic between family members who do not have their own or do not respect one another's personal boundaries (Minuchin 1974). Typically, enmeshment leads to a lack of emotional, intellectual or even physical autonomy as a result of relatives' overinvolvement in one another's lives, making it difficult for them to separate their own identities and feelings from one another.

« 9 » We believe that autonomy matters not only in terms of overall selfness in a relationship, but also with regard to the relationship itself viewed as a class of interactional processes that occur between a person and her surroundings within certain environmental and experiential constraints. Such constraints are boundaries that define and shape the process of interaction, determining what can be done as well as where, when, and how it can be done. When a media user interacts with her social and cultural environment by means of technological tools and artifacts, she does so by interpreting signs of this or that sensorial origin that allow engaging in this or that semiotic activity within its own boundaries. Although the activities may be numerous – such as reading or writing comments and messages, viewing or creating videos and images, and listening to the radio or podcasts – it is essential to recognize that each form of engagement has its own boundaries, both physical and cognitive.

« 10 » For example, we are typically aware of when our viewing begins or our reading ends. We can engage in viewing independently of reading, treating them as two autonomous activities. We differentiate between video and text and do not require one to understand the other, as we are capable of making distinct judgments based on separate semiotic processes.

« 11 » Nevertheless, this differentiation does not come easily. As we are creatures of the flesh, we find ourselves immersed in a semiotic meshwork of situated bodily (gestural) behaviors that constitute a "talking" environment – a natural condition for our meaning and knowing. In this "primordial multimodal environment" (Goodwin 2002: 33) we grow and develop culturally, conceptually and technologically: we learn skills that extend our talking (environment) to reading, messaging, viewing and beyond. With this extension comes the problem of enmeshment as our immediate, natural semiosis becomes intertwined with the intermediate, cultural-technological one and we fail to draw a line between or within them. Echo chambers might be one of the negative outcomes of such an enmeshment of semiotic activities.

A case of semiotic enmeshment

« 12 » Media use is a demonstrable example of semiotic enmeshment from which an echo-chamber experience (an illusion of socio-cognitive control) originates. Media use, in turn, originates from certain operations that we perform on certain sensorial stimuli of our environment. In the following, we analyze and compare several basic forms of interaction with experiences in the cultural-technological and natural environments:

- Talking (speaking and listening here and now),
- Writing and reading (dealing with all types of text on paper and on screen),
- Appearing on film (making videos or being filmed to engage with the audience),
- Viewing (watching video content).

Let us first briefly delineate the semiotic boundaries (environmental and experiential constraints) that organize each of these activities (see Table 1).

« 13 » When the boundaries are identified, let us analyze how they (should) define each semiotic activity in terms of autonomous functional organization within environmental and experiential constraints.

« 14 » *Talking:* The co-presence of the participants requires them to respond immediately to one another's behaviors under the condition of spatio-temporal continuity between the verbal and non-verbal semiotic resources. The participants proceed from this or that extent of consensuality and shared understanding of the situation, they basically know what to expect under the current circumstances and have more control over how and when (the actions of) the others appear. The participants' primary concern is the process rather than the result of saying, as they pay more attention to turn-taking strategies and the sequentiality of actions that follow one another continuously, leaving little room for going back to or over what has been said verbatim.

« 15 » *Writing and reading:* The participants in the interaction are not accessible to each other and are removed from the context of each other's situation, which determines the suspended character of their responsive behaviors. They have to compensate for the spatio-temporal gap by choosing or interpreting verbal cues that are ad-

Boundary / Semiotic activity	Place	Time	Participants	Behaviors	Attention	Meaning
Talking	is shared and serves both as an enabling and constraining condition	immediate	are embodied and act as perceptual constraints on one another	both intentional and unintentional, spontaneous	divided and selective attention on dynamic processes of different modalities	co-constructed
Writing and reading	is not shared and serves as a constraining condition	suspended	are imagined by the writer or reader, text is a perceptual constraint	intentional and prepared	sustained attention on static visual objects of conceptual origin	unidirectionally constructed
Appearing on film	is not shared, but serves as an enabling and constraining condition	suspended, immediacy is assumed (in live streaming)	are imagined by the film maker, the camera serves as a perceptual constraint	intentionally prepared to appear spontaneous	divided and selective attention on dynamic processes of different modalities	unidirectionally constructed
Viewing	is not shared and serves as a constraining condition	suspended, immediacy is assumed (in watching live streams)	are not embodied but observed, the screen is a perceptual constraint	intentional and spontaneous	divided and selective (rarely, sustained) attention on dynamic visual objects of sensorial origin	unidirectionally constructed

Table 1 • Boundaries of some of the semiotic activities in which media users engage. The columns present the characteristics of the constraints that the environment and experience put on each semiotic activity. "Behaviors" refers to what participants semiotically do in relation to one another either through physical co-presence "in here" or by assuming one another's existence "out there."

ditionally constrained by cultural norms of written language. To this end they need to focus on the task for an extended period of time. They are not supposed to know or understand each other either before or during the suspended interaction; that is why they have little control over how they will experience each other's semiotic behaviors. Because the writer and the reader operate with language as alphabetical patterns of knowledge that are arrangeable and disarrangeable on paper, they are stimulated to select, abstract and analyze certain experiences in the course of reflection.

« 16 » *Appearing on film:* The participant controls the environment and her experience embedded in it as she demonstrates her or someone else's behavior in the changing conditions. The behavior filmed for the viewer is spoken and resembles talk but has properties of text since it is (or should be) constrained by prior choices or corrections made by the scriptwriter or the participant herself in her reflection on what to say and how to say it. She is not supposed to know who the viewer is or understand the latter's situation. The response from the other participants is suspended.

« 17 » *Viewing:* The participant observes but cannot affect the other's behavior; that is why the viewer has a certain (perceptually constrained) knowledge and understanding of the other's situation, but she can find it difficult to predict her emergent experience. Although the viewer orients herself to spoken language in flux, she normally has the time and technological resources to manipulate it in different ways (take notes, replay, quote). Watching is integrated in the viewer's perceptual environment: it does not require a prolonged effort and analytical thinking, it may begin unintentionally, the viewer's attention can often be directed elsewhere or distributed across multiple visual stimuli, she more often than not interrupts or stops the activity before or without reaching a complete understanding of the viewed piece. This semiotic condition allows for greater uncertainty experienced as an environmental irregularity.

The arising of echo chambers from semiotically enmeshed media use

« 18 » In the last stage of our analysis, let us examine instances of semiotic enmeshment and infer some of the negative outcomes that can be linked to echo-chamber experiences.

« 19 » *Reading acquires properties of viewing:* Written pieces are often scanned quickly, left unfinished and insufficiently understood. As a result, authors tend to sensationalize and simplify their pieces to trigger the reader's emotional response and sustain uncertainty. Fast reading, in turn, reinforces cognitive assimilation that is at the

core of echo-chamber construction: what is not liked is immediately rejected (left unread).

« 20 » *Reading and viewing acquire properties of talking:* On reading a post or a message and watching a video, the user feels an urgent need to respond immediately. As a result, the urge to respond to pieces read or viewed in the media may develop into a fear of missing out. In some cases, it may affect patterns of interaction in natural settings: an active media user may expect those around to know, and even share an understanding of, journalistic pieces she has read and watched. A media user begins to need an echo-chamber experience to fight fears or maintain a sense of sharing.

« 21 » *Viewing acquires properties of talking:* Live streams or broadcasts are lived because they give a sense of immediacy, rendering a filmed event or a person perceptually "real," as part of the viewer's immediate environment, which demands emotional, intellectual and other forms of bodily engagement here and now. As a result, media users may become habituated to their online media experience's being a regular component of their immediate perceptual environment (they keep live streams on around them or in their earphones for most of the day). They give full attention to their preferred media sources and deny themselves an opportunity to experience life outside of the echo chamber.

« 22 » *Appearing on film acquires properties of talking:* When on camera, opinion hosts may engage with their viewing audience as if they were part of their immediate and private surroundings (e.g., talking in a friendly and informal style, using emotional language and overreacting to opposite opinions, sometimes initiating rows). As a result, media users develop a stronger sense of dependency on others' opinions and assume or believe that they (need to) co-construct an understanding of their, say, political situation with the opinion hosts of political shows. Such a need for participatory meaning-making arises every time a media user finds herself in a state of uncertainty over the current political situation. To satisfy this need, the media user "addresses" her favorite opinion hosts, who explain not only what happened but how the audience should feel about it.

Conclusion

« 23 » In his discussion of echo chambers, Martinisi operates with the concept of operational closure (§11). Our discussion of echo chambers is also related to this notion. The difference is that closure is interpreted as a boundary of an operation. Boundaries are crucial for the viability and sustainability of everything we do. Our identity is an embodiment of constraints that we encounter, experience and enact (Druzhinin & Fomina 2023). Operational boundaries grant us autonomy, distinctions and choice. A lack of boundaries obscures much of what we do. It may entrap us into behaviors, relationships or beliefs that we think we have chosen to maintain for the better but which indeed result from our failure to make a proper distinction and a better choice.

« 24 » When we say that we are seeing a rapid incursion of digital technologies into our everyday lives, it is no longer a metaphor. We let the virtual happen within the natural, and vice versa. When we engage in watching, reading, listening, etc., we usually engage in all of these activities through convergent media. It puts more semiotic pressure on us: to transition effectively between multiple forms of semiosis, we need to separate and distinguish between them, but often fail to do so. Along these lines, we are wondering what other instances of enmeshment could account for the arising of echo chambers? Q1

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