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Introductory Remarks: "from Homer to Neuroscience"

Theoretical reflection on orality and writing within the field of Classics initiated with Parry's investigation of Homeric epic, whose results gave rise to Oral Theory, and whose impact on scholarship has been far-reaching on classical philology as well as on sociology and anthropology.

The novelty and intellectual success of the Parry-Lord theory is eminently exemplified in the opening statement of the seminal monograph by the founder of Media Studies, Marshall McLuhan, *The Gutenberg Galaxy:*

> The present volume is in many respects complementary to the *Singer of Tales* by Albert B. Lord. Professor Lord has continued the work of Milman Parry, whose Homeric studies had led him to consider how oral and written poetry naturally followed diverse patterns and functions. The *Gutenberg Galaxy* is intended to trace the ways in which the forms of experience of mental outlook and expression have been modified, first by the phonetic alphabet and then by printing.[1]

McLuhan continues by explaining the core of Parry and Lord's work on oral poetry and concludes that "Professor Lord's book, like the studies of Milman Parry, is quite natural and appropriate to our electric age (...)".[2] The intellectual fervour that emerges from McLuhan's words continues in the many phases of studies on orality, from Ong to Vansina, from Havelock to Finnegan.

On the threshold of the digital age, and in line with the first two volumes, *Rethinking Orality* III aims to keep the multidisciplinary dialogue open and expands the exchange to new insights and understandings that have emerged in the last few decades. With an emphasis on theoretical perspectives, it features contributions in dialogue with cognitive sciences (from cognitive linguistics to neuroscience), AI, anthropology, complexity theory, (Parts I and II) and updates the debate with cutting-edge case studies ranging from Homer to Athens, from prose texts to Roman law (Part III).

Since the pioneering studies of both Parry-Lord and McLuhan, research on oral and written modes of communication has continued to adopt a multidisciplinary approach and has produced powerful insights and paradigms by making

1 McLuhan 1962, 1. Lord's book had been published just two years earlier, immediately sparking, as the quote highlights, a lively debate that extended far beyond the field of classical studies.
2 Idem.

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the most from, among others, anthropology, comparative studies, linguistics, and memory studies.

The elan of these great seasons has lasted to this day, yet we currently have at our disposal a new gamut of tools and findings; in the last fifteen to twenty years cognitive theory in general and neuroscience in particular have advanced a great deal the understanding of communication, which may not call for a change of paradigm altogether, but certainly request an updating. The introduction of fMRI scanning has allowed us the possibility of observing cognitive processes connected to communication from a new and ground-breaking perspective, advancing knowledge of linguistic phenomena and physiology way beyond the phonetic apparatus.[3]

If cognitive theory stands as a novel arena for our subject – whose scope for classical studies has been most recently illustrated by Novokhatko – until quite recently neuroscience in particular was an unexplored ground for rethinking orality and literacy particularly in relation to Greek epic.[4] Several contributions to this volume show that the endeavour of crossing disciplinary boundaries is highly fruitful in both senses, and cognitivist scientists have as much to learn from human and social sciences. As neuroscientist Oliverio argued, a contemporary understanding of the human mind demands "to automatically collapse ontological barriers between physical, biological, mental, and social worlds".[5]

From a methodological point of view, a key practice consists in comparing the different cognitive maps of the same territory developed in ancient texts and in neuroscience. Meineck's chapter thoroughly investigates orality as performance by comparing Platonic and Aristotelian passages with findings from relational neuroscience and hyperscanning. Nicolai reads passages from Gorgias and other ancient accounts on the role of deception in persuasion with the results of studies on the mechanisms of deception of mirror neurons, "whereby the person observing an action, whether real or reproduced on stage, activates the same mirror neurons as the one performing it".[6] In a similar vein, Giordano draws on Theory of Mind and embodied simulation to explore aspects of literary reception in *Odyssey* 8 within a combined aesthetic and cognitive framework.

3 On which see Giordano 2022.

4 Novokhatko 2025, which I refer to for a comprehensive overview. Giordano 2022 and Saccari / Travan / Crivellato 2022 are the first contributions that build a dialogue between Greek oral epic and neuroscience. On orality and cognitive studies see Antovic/ Pagán Cánovas 2016.

5 Attanasio/Oliverio 2012, 93. See Giordano 2022, 173–174.

6 See Budelmann 2023, 8, quoted by Nicolai. As Nicolai reminds us, this is not a shortcut for capturing or explaining ancient experiences.

1 From Parry to McLuhan to Neuroscience: a Multidisciplinary Dialogue as well as a Metalogue

In what follows I shall further address methodologically the theoretical continuity and relevance of cognitive theory and neuroscience to orality and Greek epic, arguing that far from being incidental or far-fetched the dialogue between classical and cognitive studies can be shown to be epistemologically consistent with the beginning and the development of Oral Theory.

The theory of orality brought about a paradigm shift not only on the Homeric question, but on the epistemological and theoretical level as well: instead of asking *who* and *how many* authors composed the Homeric poems, Parry and Lord asked *how* they were composed, dramatically moving the province from the who and what— the agent and content of a text —to that of the context, form, and modes in which the texts were produced: the how. Parry's focus, as Lord clearly asserts, was about the "oral *character* of the poems", which he proved by engaging in ethnographic research in former Yugoslavia, where he studied "the *form* of oral story poetry" of contemporary oral Serbo-Croatian singers.[7] By doing so, Parry creatively reflected on a higher level of abstraction, investigating the way the form of communication (oral composition-performance-transmission) of a given content (the epic poem) affects the structure of the content. Using lateral thinking, Parry creatively found an answer about the content outside the content itself.

This investigative shift constituted McLuhan's starting point for his own reflection, as he himself declares:

> the enterprise which Milman Parry undertook with reference to the contrasted forms of oral and written poetry is here extended to the *forms* of thought and the organization of experience in society and politics.[8]

Such enterprise, that he conveyed often apodictically but no less brilliant for that, led him to formulate one of the most famous catchphrases in our intellectual vocabulary: "The medium is the message", whereby McLuhan maintains that:

7 Lord 1960, 3.

8 McLuhan 1962, 1.

> it is the medium that shapes and controls the scale and form of human association and action... Indeed, it is only too typical that the 'content' of any medium blinds us to the character of the medium.[9]

McLuhan advanced Parry/Lord's theoretical acquisition and assumed that the relevance of orality and literacy as media was first and foremost *cognitive* in kind, assessing the import of the technology of the "written word"[10] on the way humans apprehend the world, interpreting writing as a mind-changing medium. He asserted that the cognitive procedure underlying alphabetic writing distinctively prioritises sequencing over contextualising and generates a wealth of conceptual patterns accordingly (time, space, rational analysis).[11] According to the scholar, the blueprint of the uniform, rational, and abstract visual medium of the phonetic alphabet applies far beyond the scope of verbal communication and involves multiple aspects of human interactions and environments.

If Parry and Lord moved the level of abstraction from the text to the medium, that is, the ways and the human contexts that produce a text, McLuhan moved the focus to a higher level, namely to the mindset generated by the use of a medium. McLuhan argues that in "oral cultures" perception of the world and transmission of knowledge are mediated by hearing, sounds, and voices, giving rise to cognitive processes that are markedly different from that experienced in literate societies. The written medium (particularly since the Gutenberg revolution) shapes our way of experiencing and organising life, socially and individually:

> To us the pipe is a convenience. We do not think of it as culture or as a product of literacy, any more than we think of literacy as changing our habits, our emotions, or our perceptions.[12]

Decades before the theorisation of the embodied dimension of cognition, McLuhan stressed time and again the centrality of the sensorium, arguing that "a theory of cultural change is impossible without knowledge of the sense ratios effected by the externalization of our senses".[13] He asserted that the written word

9 McLuhan 1964, 9. See the whole chapter "The medium is the message", 7–23, where the scholar insightfully explores the effects of media of different sorts, from railway to electric light and TV.
10 That "became more intense with the repeatability of the Gutenberg development", Idem, 93.
11 According to McLuhan these patterns are marked by lineal and sequential structuring, continuity, uniformity, analytical separation.
12 Idem, 94.
13 McLuhan 1962, 42.

generates major changes insofar as it switches language's sensory gateway from the hearing to the sight, giving us "an eye for an ear".[14]

McLuhan's merit moreover was to expand the scope of the terms "orality" and "literacy" from the textual to the cognitive level, whereby their polysemy includes today not only modes of expression but also mentality and type of culture.[15] Even if his theory was heavily influenced by evolutionism and technological determinism, the scholar was able to ask new sets of questions, particularly about the ways oral and literate media changed cognitive schemes and societies over time, allowing a finer grain analysis and a deeper awareness of their overall impact.[16]

2 Embodied and Embedded, Cognition and 'Culture': a Middle Ground and a Two-way Conversation

As far as mind and communication are concerned, as I have already asserted, it is necessary to build a genuine dialogue, that is, a two-way relationship in which cognitive and historical perspectives resonate with each other.[17] I would like to briefly illustrate this point by taking into account distributed cognition.

4E (distributed) cognition works on the assumption that cognition is four-faced process where our body-mind and our cultural-mind are interconnected, include and extend into our environment, as Meineck asserts:

> the mind is not brain bound but an embodied agent connected with the entirety of human biological operation, **e**mbedded within the culture within which it exists, **e**xtended out into the world around it, and **e**nactive in that cognition is a matter of the constant crossing of boundaries from the limits of the human body out to the environment and back again.[18]

14 McLuhan 1964, 88–92.

15 See Vatri, this volume.

16 As many scholars of his time, McLuhan frames in evaluative, positive terms the changes brought about by alphabetic culture, while highlighting the cost in terms of dissociation; he asserts, for example, that primary alphabetic features of "homogeneity, uniformity, and continuity", "gave the Greek and Romans their easy ascendancy over the nonliterate barbarians. The barbarian or tribal man, then as now, was hampered by cultural pluralism, uniqueness, and discontinuity", McLuhan 1964, 95. Among recent developments of McLuhan's thesis, see Sirat 1976; Olson 1994; de Kerkhove 1988; Ong 2002.

17 See on this point Chaniotis in Novokhatko 2025, 142–144.

18 Meineck, 22.

The "world around" and the "environment" are what we conventionally, and disputably, call "culture", a continually constructed phenomenon where the embedded dimension relates to the embodied, and vice versa; our perceptual knowledge is in its entirety "culturally dependent in that while our minds make the cultures we live in so in perpetual sensory feedback loop, culture also makes our minds".[19]

Oliverio illuminates this extended dimension of our mind in relation to language as "the fundamental tool that has allowed, generation after generation, to produce new technologies and create environments conducive to learning":

> It is thanks to this "technology" that the way we think and reason is transformed: a word, especially if written, has in fact the ability to externalise our thinking and to change it into a series of cognitive bricks with which to later build further forms of thought and learning.[20]

Much the same goes for the overarching cognitive mechanism of prediction, an ongoing predictive processing of language in oral or written forms, dictated by the limited resources of our energy and the unlimited stimuli to be perceived in the world 'out there'. As Meineck has it, "our brains make *educated guesses* about everything we encounter".[21] These "educated guesses" that form the changing and flexible filters of our predictive processing, however, are largely dependent on the culture we live in and grow into. The cultural filters select perceptual information from the sensory and kinesthetic systems and thus the embedded dimension continually impacts our embedded dimension… and back again.[22]

Ultimately, cognition is an interconnected relational process, in which what academic conventions isolate as separate is in its actuality intertwined and interdependent. Communication takes place in a continuous interaction between internal and external, in an intermediate dimension, a common ground where knowledge of cultural factors is as relevant as that of cognitive factors.[23] Interestingly,

19 Idem.

20 Oliverio, 133.

21 Idem, my italics.

22 An example of this interplay is shown in Oliverio, this volume, in relation to language acquisition.

23 Clark uses the term "wideware", indicating "a mind that originates from the meeting of brain, body, and external reality", a notion that rests on a relational rather than predicative perspective: "an enlarged structure that depends on various cognitive technologies, such as language, able to expand and give new forms to human reason", and can encompass as in a continuum writing media from clay tablets to manuscripts, to computers", Oliverio, this volume. See Clark / Chalmers 1998.

this middle ground, according to Yeshurun *et al.* is engrained in the DMN, the default mode network, that is responsible for many cognitive activities:

> The synthesis of different perspectives in the DMN depends primarily on the structure and nature of our social interactions and social connections. In this perspective, we argue that the DMN is 'default' not because it is engaged when we are looking inward, nor because it is shaped by others. Rather, we suggest that the DMN is 'default' because it is central for integrating external and internal information, allowing for shared communication and alignment tools, shared meanings, shared narratives and, above all, shared communities and social networks. This is what people continuously and naturally do by default.[24]

3 The Reading Mind

A case where we can show the scope of a synergy between cognitive and cultural-historical perspectives is literacy. Recent research on ancient literacies has deepened our understanding of the ways the embedded and extended aspects of cognition, that is the historical and cultural contexts, adapt and shape the technology of writing in accordance with their socio-political frames, and have decidedly moved away from the so-called "literacy hypothesis" and technological determinism in general.[25] Still, if cognition is distributed, the embodied dimension, the physiological endowment which enable us to read and write, is as active as the others.

Thomas speaks of a "fascinating tension between the obvious fact that writing makes certain activities possible or easier, and that different potentials are seized upon by different communities".[26] These "potentials" are in fact our embodied cognitive instruments: "if we write and read, we owe it to the fact that humans have used areas of the parietal cortex involved in spatial functions to trace the signs of writing".[27] If we wish to get an in-depth understanding of literacy to pursue an integrated investigation of these aspects in dialogue with each other may be particularly rewarding.[28]

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24 Yeshurun / Nguyen / Hasson (2021), 190.

25 The unwarranted thesis that the influence of a given technology (writing, in our case) will bring about the same psychological, cultural and social changes, on whose fallacy see particularly Street 1984.

26 Thomas 2009, 14.

27 Oliverio, 128.

28 On universal assessment from both a cognitive and anthropological perspectives see Goody 2000; de Kerckhove 1988; McLuhan 1962 and 1964, a ground-breaking approach; Ong 1986; Sirat 1976.

In the last decade, neuroscientific studies have fairly advanced on the understanding of cognitive potentials, particularly with the work of Dehaene, that have studied how learning to read may change our neurophysiology and show that to become a literate person implies a modification, a "recycling", in Dehaene's terms, of our brain areas.[29]Among other results, this new "science of reading" has shown that reading modifies our embodied cognition in that it creates a new visual gateway to language and shifts the sensory gateway from auditory to visual, actually "giving the user an eye for an ear", as McLuhan had already understood. Learning to read modifies the brain's physiology and continuous reading practice directly activates a particular area of the visual cortex called the "visual word form area" (VWFA).[30] The outcome is rather dramatic: whereas spoken language involves an auditory circuit, reading activates the areas of spoken language *by means of vision*; visual information is, thus, turned into sounds and meanings.

As scholars of ancient Greece and Rome, moreover, we may ask specific set of questions beyond "genetic", embodied, constraints by situating reading in an anthropological-historical context, the embedded and extended dimensions of reading.

The neuroscience of reading rests on the fundamental assumption that reading has always and everywhere been a silent, solipsistic activity, where the action of reading involves sight and the so-called phonological loop, whereby verbal, auditory information (such as a series of figures or a sentence) is processed and stored in working memory through a rehearsal loop. The assumption that the activity of reading takes place within the individual mind, proves to be culturally dependant, that is, true for us situated scholars and proficient readers. Pancotti has recently asserted in this direction that:

> the obsessive reliance on alphabetic script characteristic of modern hypergraphic societies has altered the users' perception of language and the way they read it, producing a bias of sensory divorce between sight and hearing.[31]

Furthermore, reading is a gradual process, in which "reading out loud gradually gives way to quieter reading; we begin to read in our heads (what is technically called endophase reading)", and the activation of the "internal voice" is a slow acquisition and only proficient readers are able to perform the "mute" reading of

29 See particularly Dehaene 2009; Dehaene, Cohen, Laurent 2011; Dehaene 2013; Dehaene 2015; Romanowska, Bronte 2021.

30 See Dehaene 2009, 97; see also ibid. 69–72; Dehaene / Cohen / Morais / Kolinski (2015), 236. See Giordano 2025, part. 274–276, 281–282.

31 Pancotti 2025, 24.

text, which, in our "Western" societies is regarded as an accomplishment and the standard practice. We know however that far from being an ahistorical, unchanging phenomenon, silent reading is rather a culturally relative practice:

> The evidence is substantial that it is only in relatively recent history, and specifically in the modern West, that the book has become a silent object, the written word a silent sign, and the reader a silent spectator.[32]

For centuries the standard way of reading was vocal, not mute, and often collective, ethnographic research has amply shown that reading out loud is commonly practiced at different levels and latitudes, even if not necessarily within our cultural purview.[33] Fabian speaks of "re-oralization of written texts" and illustrates the reading practices of the Shaba Swahili speaking people of Zaire, for whom the act of reading "is not achieved by the ability to decode graphic signs. It demands a capacity to reenact or recreate the oral performance that is the source of the text".[34]

As far as ancient Greece is concerned, Svenbro stated most famously the case for an embodied reading, arguing that:

> the text is more than the sum of alphabetic signs of which it is made up: these signs are to guide the voice through which the text will take on a body – an audible body [*corps sonore*].[35]

The question of embodied, oral reading prompts us to ask whether such a difference in the embedded dimension of reading makes a difference in the embodied one. We may ask in which ways does vocal reading impact the interconnection between visual and auditory circuits, and in particular whether it affects the circuit we use when we recite words mentally, the phonological loop. Oliverio explains in this respect that:

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32 Graham 1987, 45.

33 See for example the evidence gathered in Boyarin 1993.

34 Fabian 1997, 88.

35 Svenbro 1988, 54. Svenbro argued that the *scriptio continua* demanded a vocal reading, but this has been disproved; in fact, "there is no cognitive difficulty when fully literate ancient readers wished to read silently", as Johnson 2010 asserts. Vatri 2012 and this volume has further shown that *scriptio continua* is not necessarily a constraint for silent reading. The evidence of vocal reading, however, stands not on a physiological determinism, but on a socio-anthropological level, the vast number of references in our texts, that show that in ancient Greece written texts were conceived as intrinsically vocal: see most recently Giordano 2025; Pancotti 2024 and Pancotti 2025, with *loci*, for an innovative analysis of the verb ἀκούω in the meaning of "reading".

> the subvocal rehearsal of words, that is, the virtual movements of lips, mouth and tongue that often less experienced readers openly use even in the "mute" reading of a text – and a process of re-codification through which the written letters, perceived through vision, are translated into phonological representations.[36]

Hasson *et al.* have shown that, from the point of view of our neurophysiology, hearing oneself speaking aloud produces an externalisation of our own voice:

> Whereas it is typically thought that signals between parts of the brain require anatomical connections, neural states can also be influenced by physical signals that were generated by another part of the brain and transmitted through the environment (...). The motor areas of the brain generate a program for speech, and the body produces an acoustic signal that mixes in the air with ambient noise. This sound travels back to the speaker's ears and auditory system and thus acts as a feedback signal directing the motor system to adjust vocal output if necessary. This is the reason why humans (and other primates) reflexively raise their voices in noisy environments. In this scenario, communication between the motor and the auditory parts of the brain is coordinated through the vocal signal, with the air as a conduit.[37]

The difference between reading aloud and reading silently seems to correspond to a difference in neural pathways, a question that may prove insightful for neuroscientists as well, all the more so as "the precise pathways used for the conversion from letters to sounds are not yet fully understood".[38]

This may be conducive to further elucidate the neural connection – and/or disconnection – between orality and literacy, both intrinsically and more specifically in neural encoding /retrieval/ comprehension of messages. What are the neural codes for, respectively, reading/writing words and hearing/speaking words?[39]

The study of reading, therefore, may gain a greater understanding from an integration of the neuroscientific approach with a history and anthropology of reading.

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36 Oliverio, 132.

37 Hasson / Ghazanfar / Galantucci 2012, 116–117.

38 Dehaene 2009, 109.

39 Moreover, as far as the extended and enactive aspects of cognition are concerned, we may want to take into account the fact that in ancient Greece reading was not a solitary, but collective sharing. As I have argued for the reading of epigraphic public texts, we may surmise that vocal literacy and ensuing public discussion were the default reception of many epigraphic public texts, which would be read aloud through different declamatory styles and modes of rendering depending on the type of the text inscribed. Giordano 2025, 290.

4 The Narrative Mind

Several contributions of this volume illustrate how an integrated perspective may enlighten our understanding of literary narration, and reconsider storytelling's "complex and multifaceted nature" not only as an act but as a cognitive ability.[40] Oliverio and Ercolani show from a twin neuroscientific-classicist perspective that "the narrative attitude of the mind is an essential evolutionary adaptation", and that what literature is made of, narrations of all sorts, serves a foundational role in our lives, and, among other things, acts as a "flight simulator", which "helps us organize experience into a tale", "a fundamental tool that helps to process this flow of experienced data by establishing meaningful relationships".[41] The narrative mind plays a fundamental role in creative thinking, as Oliverio explains:

> fantastic or far from one's lifestyle, the events of the story trigger an analogical type of thought, very different from a thought based on logic (...). Yet, it is precisely the various aspects of analogical thinking that indicate some salient aspects of the human mind, to allow it to make leaps and to have illuminations, insights, unknown to the rigidity and "heaviness" of logical-rational thought. It is in these situations that analogical strategies can lead to innovative solutions, visualise concepts in concrete form, let us glimpse a different dimension.

Storytelling engages our emotions, as Ercolani shows for Homeric storytelling: "epos is emotional communication", and as such is able "to convey the cultural message by delighting, fascinating, captivating".[42] Narration triggers an emotional response and activates our imagination, that as Oliverio points out, being based on symbolic thinking, implies a creative activity of the mind, unlike the imaginary involved in contemporary audiovisual narration that, for all its charm, "is predominantly passive".[43]

Through the paradigmatic case of *Odyssey* 8, Palmisciano shows that storytelling is a powerful means for turning experiences into stories, thereby constructing identity; Odysseus probes Demodocus' competence so that he may turn him into an addressee of his own *Apologoi*. The scholar shows that Odysseus authorises the singer to preserve his memories and thus his identity through his stories, so that they may enter "the circuit of oral memory of which the singers are the repositories".[44]

40 Ercolani, Oliverio, this volume.
41 Ercolani, 139.
42 Idem, 147.
43 Oliverio, 135.
44 Palmisciano, 197.

In fact, narrative identities are built both on the individual and social levels, as Ercolani asserts Homeric narrations are a "vehicle for conveying foundational content", and our embodied and embedded mind seems wired to work in this direction. Hasson *et al.* have shown that:

> Shared language, shared memories and shared schemas allow us to better align and couple our DMN responses. Sharing stories and building collaborations further enhance such coupling. Developing shared ways to understand and act in the world is an evolving communal effort in which we synthesize our intrinsic idiosyncratic perspectives and actions with the extrinsic perspectives and actions of others.[45]

From this fascinating perspective, we can observe ancient and modern realities (groups, large or small communities) and appreciate the forms of narration and sharing of verbal art as ways to build hermeneutic communities, in which people share their knowledge while co-constructing their world in a continuous linguistic exchange and in a continuous neural alignment and adjustment.[46]

5 Orality *vs* Literacy? On the Fallacy of Polar Oppositions

Starting from the common assumption that the "either-or" logic literacy-orality is simplistic at best, and often conducive to wholesale conclusions, many contributions in this volume fundamentally and richly deal with the categories "orality" and "literacy", dismantling from different points of views both essentialist and oppositional assumptions, in favour of more refined and complex ways of considering their interactive complementarity. Orality is illustrated as performance (Meineck), and as an enabling factor (Vatri), a multimodal type of expression that interacts with writing:

> orality is not just a legacy mode whose relics surface here in there in the style, themes, or the mental and cultural schemes exhibited in classical Greek literature. Conceiving a text for oral delivery (…) comes with a number of benefits and licences that break the expressive constraints that the technology of writing entails.[47]

45 Yeshurun / Nguyen / Hasson 2021, 192.

46 Brain-to-brain coupling or alignment is a major discovery of Uri Hasson and colleagues that shows the on-going interconnections of neural processes among the speakers and further demonstrates that the process of exchange happens within the relationship, in-between the parts of a communication. See Hasson / Ghazanfar / Galantucci 2012.

47 Vatri, 231.

Recent scholarship has tackled literacy as a plural, multifaceted phenomenon, to be comprehended through a more refined scrutiny of the socio-historical constructions of literacy; similarly we would better speak of oralities, starting from its definition. [48] Building on Bakker's distinctions, Vatri explains:

> texts may in principle be called oral on either dimension — they may be considered 'literally' oral if the use of the spoken medium is involved in any stage of their composition or reception, or they may be considered oral regardless of any consideration of medium, as long as they reflect an oral 'conception' in terms of mindset and expression (...).[49]

Furthermore, as Finnegan argued decades ago, we would better see orality and literacy as complementary rather than antagonistic or opposing media that in many ways "slide towards each other", working by integration rather than opposition. This is shown in Finkelberg' study of literacy in ancient Athens, where "orality and literacy existed side by side, and the social framework of classical Athens encompassed both", and while the pervasive presence of literacy in Athens can be easily demonstrated, still:

> we should rather speak of multichannel transmission, in which performance, storytelling, festivals, visual arts, landscape, cult and ritual interlocked in creating a nexus of cultural practices which kept local traditions alive among the members of the community.[50]

Deconstructing stereotypes and advancing the innovative perspective on the (neglected) role of orality in ancient Rome, Bettini shows that the character of fixity, permanence and rigidity, that we usually attribute to writing, was typical of the oral delivery in Roman law, where fixed utterances were fundamental to initiate a legal procedure. In this instance, "the 'spoken word' displayed all the power of its ritual efficacy" because of the extreme rigidity of the ceremonial protocol, where "it was necessary to use the same words in the same order, according to a prescribed scheme".[51] While the act of writing played no role, the oral ritual lacked the fluidity we usually associate to orality and was endowed with the permanence and timelessness we usually attribute to writing. At the other end, Vatri argues that some written prose texts can require or imply oral delivery, and re-

48 For the idea of literacies or "multiliteracies" see Johnson / Parker 2009; Thomas 2009, 13–14. See also Street 1984 and Street 1993.
49 Vatri, 219.
50 Finkelberg, 207.
51 Bettini, 236.

veal a "need for voice", a fascinating illustration of writing as reduction and "precipitation" of oral multimodal communication.[52]

Historical situatedness is a crucial factor that comes to the fore in Kahane's contribution. Homer's verses are embedded in the singularity of any situated performance and reading, reminding us that as a "textual event", a verse is always different when considered in its actuality and situatedness, this being so from a foundational perspective: "every inscription in language, whether in the mind, oral, orally derived or written, is a complex, interactive and entangled event".[53]

6 Looking Forward: Ubuntu and the Challenge Ahead

Many contributions share this project's aspiration to reach out to the present and provide some epistemological inspiration for the time we are living. This is forcibly argued by Pagán Cánovas that investigates the potential role of oral traditions in contemporary debate and argues that modelling oral and multimodal communication in all its richness and chronological depth can take us beyond the alphanumeric technologies that underpin current generative AI.

Following the outlined approach, rethinking orality may ultimately become a rewarding anthropological and historical practice, where the typographical habitus can be understood as an etic category, a Gadamerian prejudice, rather than a universal and trans-historical human concept. This perspective may be particularly welcome in our epoch, that we usually refer to as the digital age, where alphabetic literacy, that is, a medium based on writing and reading through a material, analogic support (stone, paper, etc.), is accompanied by its digital form. Somewhat dematerialized and disembodied media are integrating or surpassing former technologies of literacy, producing, among other things, new forms of experience and a swift – and baffling – change of socio-political practices as well as of cognitive habits.[54]

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52 See Vatri this volume.

53 Kahane, 96.

54 Political propaganda is currently conveyed through devices and platforms unheard of until quite recently – e.g. social networks and microblogging such as Facebook or Twitter. As new media and devices have emerged in the last decade, the new digital literacy seems to be surpassing the ancient technology of literacy. Reading performance has deteriorated among the European population, as the sobering PISA survey (2009–2018) revealed and as shown by the recommended policy on education European Council delivered in 2018 where 'literacy' features

To rethink orality and literacy today means also imagining putting forward a transferable set of questions for a new, thought-provoking questions on digital literacy and on the changes it is bringing about:

> Can we step back a little and ask if something innately human is getting lost? That is the element of live person-to-person contact that facilitates the performance of orality and the multi-sensory context for empathetic communication it provides us.[55]

The significance of rethinking orality and literacy by an ongoing dialogue and under a wider framework may prove to be fruitful and far-reaching attempt to "compare our maps" beyond our fields of studies. As Yeshurun *et al.* remark:

> In a world that is more polarized by the day, the need for rebuilding a shared common ground is perhaps more urgent than ever. The Ubuntu expression states "I am because we are". "Are" in this insightful expression can refer to 'us but not them' or to 'us as all people'.[56]

As scholars living in the "current phase of frantic specialisation", we can start rebuilding a common ground, freeing ourselves, as Nicolai expresses, "from the perspective of the corporate-driven structure that dominates academia, which tends to turn disciplines into closed islands", and dare to venture in novel research practices, "in which intellectual curiosity is rekindled";[57] comparing our humanistic maps with those of (neuro)scientists may be just the beginning of a promising intellectual adventure.

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