

Rethinking Orality III

Transcodification: Arts, Languages and Media



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Simone Gozzano

Volume 9

Rethinking Orality III



From Homer to Neuroscience

Edited by
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and Riccardo Palmisciano

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Foreword

Part of the contributions of the volume stems from the homonymous conference hosted at the University of Siena in October 2021 as well as from the series of on-line seminars “LabOrality” (University of Siena, University ‘Orientale’ of Naples), that we conceived as a dialogue among classicists on the one hand, anthropologists and neuroscientists on the other, who convened in several occasions to share and discuss the respective perspectives and epistemologies.

The aim of the volume is rethinking orality *per se* and in its relationship to writing as media of knowledge transmission through a multidisciplinary approach.

Together with case-studies advancing the state of the art in key topics of the orality/literacy debate, the volume features contributions from neuroscientist Oliverio and from classicists engaging at different degrees with neuroscience, cognitive linguistics, complexity theory.

Taken together the volume draws a capacious map which envisions the above-mentioned aspects and readings simultaneously. By doing so, we believe it ultimately provides a cross-cutting approach on our theme, which, it is our hope, not only may change and update our paradigms, but also might prove suggesting and insightful for contemporary debate on orality, literacy, and digital literacy.

This volume owes a great deal to the participants, students and colleagues alike, of both LabOrality and the conference. We wish to thank them warmly for this shared experience.

Manuela Giordano

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.

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 cognivist 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, embedded within the culture within which it exists, extended out into the world around it, and enactive 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

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:

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.

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 (Meinck), 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’s 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

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.

References

- Antovic, M. / Pagán Cánovas, C. (eds.) (2016), *Oral Poetics and Cognitive Science*, Berlin / Boston, 125–147.
- Armstrong, P. B. (2020), *Stories and the Brain. The Neuroscience of Narrative*, Baltimore.
- Attanasio, A./Oliverio, A. (2012), “Empatia e cognizione sociale. Una lettura darwiniana del *mirror neuron system*”, in: *Paradigmi* 3, 93–138.
- Bakker, E. J. (1997), *Poetry in Speech: Orality and Homeric Discourse*, Ithaca (NY).
- Boyarin, J. (ed.) (1993), *The Ethnography of Reading*, Berkeley.

on top of the list of the eight key competences to be promoted by EU member states for lifelong learning.

⁵⁵ Meineck, 41.

⁵⁶ Yeshurun / Nguyen / Hasson 2021, 192.

⁵⁷ Nicolai, 114.

- Budelmann, F. (2023), "Introduction", in: F. Budelmann / I. Sluiter (eds.) (2023), *Minds on Stage: Greek Tragedy and Cognition*, Oxford, 1–21.
- Clark A. / Chalmers D. (1998), "The Extended Mind", in: *Analysis* 58, 7–19.
- Dehaene, S. (2009), *Reading in the Brain. The New Science of How We Read*, New York.
- Dehaene, S. / Cohen, L. / Morais, J. / Kolinski, R. (2015), "Illiterate to Literate: Behavioural and Cerebral Changes Induced by Reading Acquisition", in: *Nature Reviews. Neuroscience* 16, 234–244.
- Fabian, J. (1993), "Keep Listening: Ethnography and Reading" in: J. Boyarin (ed.), *The Ethnography of Reading*, Berkeley, 80–97.
- Giordano, M. (2022), "From Oral Theory to Neuroscience: a Dialogue on Communication", in: A. Ercolani / L. Lulli (eds.), *Rethinking Orality I*, Berlin–Boston, 167–198.
- Giordano, M. (2025), "Textualizing Athens. The Eion Herms between History and Neuroscience", *Mnemosyne* 78, 273–297.
- Goody, J. (2000), *The Power of the Written Tradition*, Cambridge.
- Graham, W. A. (1987), *Beyond the Written Word: Oral Aspects of Scripture in the History of Religion*, Cambridge.
- Hasson, U. / Ghazanfar, A.A. / Galantucci, B. / Garrod, S. / Keysers Ch. (2012), "Brain-to-Brain Coupling: a Mechanism for Creating and Sharing a Social World", in: *Trends in Cognitive Sciences* 16, 114–121.
- Johnson, W. A. / Parker, H.N. (eds.), *Ancient Literacies. The Culture of Reading in Greece and Rome*, Oxford.
- Kerckhove, de, D. (1988), "Alphabetic Literacy and Brain Processes", in: J. W. Berry, / S. H., Irvine / E. G., Hunt, (eds.), *Indigenous Cognition: Functioning in Cultural Context*, Dordrecht – Boston – Lancaster, 85–104.
- Klein, Anne C. (1994a), "Oral Genres and the Art of Reading in Tibet", *Oral Tradition* 9, 281–314.
- Lord, A. B. (1960), *The Singer of Tales*, Cambridge, Mass.
- McLuhan, M., *The Gutenberg Galaxy: The Making of Typographic Man*, Toronto 1962.
- McLuhan, M., *Understanding Media: The Extensions of Man*, London 1964.
- Olson, D.R. (1994), *The World on Paper. The Conceptual and Cognitive Implications of Writing and Reading*, Cambridge.
- Ong, W. J. (2002²), *Orality, and Literacy. The Technologizing of the Word*, London.
- Pancotti, M. (2024), "Riconoscere la scrittura come oggetto grafico", in *Mètis. Anthropologie des mondes grecs anciens* 22, 191–213.
- Pancotti, M. (2025), "An Ear for an Eye: the Visual Listening of Writing in Ancient Greece", in *Interface* 25, 7–29.
- Romanovska, L. / Bronte, M. (2021), "How Learning to Read Changes the Listening Brain", *Frontiers in Psychology* 20, pp. 1–16. <https://doi.org/10.3389/fpsyg.2021.72688>
- Saccheri, P. / Travan, L. / Crivellato, E. (2022), "The Cerebral Cortex and the Songs of Homer: When Neuroscience Meets History and Literature", in: *The Neuroscientist*, <https://journals.sagepub.com/doi/abs/10.1177/10738584221102862?journalCode=nroa>
- Sirat, C. (1976), *Écriture et civilisations*, Paris.
- Street, B. (1984), *Literacy in Theory and Practice*, Cambridge.
- Street, B. (1993) (ed.), *Cross-Cultural Approaches to Literacy*, Cambridge.
- Svenbro, J. (1988), *Phrasikleia: anthropologie de la lecture en Grèce ancienne*, Paris.
- Thomas, R. (2009), "Writing, Reading, Public and Private 'Literacies'", in: W. A. Johnson / H.N. Parker (eds.), *Ancient Literacies. The Culture of Reading in Greece and Rome*, Oxford, pp. 13–45.

- Vatri, A. (2012), “The Physiology of Ancient Greek Reading”, in: *Classical Quarterly* 62, 633–647.
- Yeshurun, Y. / Nguyen, M. / Hasson, U. (2021), “The Default Mode Network: Where the Idiosyncratic Self Meets the Shared Social World”, in: *Nature Reviews. Neuroscience* 22, 181–192.
- Zadbood, J. Chen, Y.C. Leong, K.A. Norman, Hasson U., “How We Transmit Memories to Other Brains: Constructing Shared Neural Representations Via Communication”, *Cerebral Cortex*, 2017, 1–13.

Part I: **Oral Theory in Dialogue with
(Neuro)science**

Peter Meineck

Orality's Theory of Mind: the Necessity of Performance

Abstract: In this paper I examine orality from the perspective of performance, focusing on the Greek classical period, where we detect a distinctive “literacy turn”, somewhat comparable to the “digital turn”. First, I establish that orality is 1. intrinsically connected to the act of performance in that all oral communication is “played” **between** the speaker/singer and recipient(s), 2. it is not only an auditory process but one of movement, gesture, facial emotional display and kinaesthetic empathy. Here I use examples from ancient philosophy combined with contemporary research from the cognitive sciences. Second, I establish that literature is not performance, though it may contain motifs derived from it. Finally, I focus on the concept of “play” as both a mimetic form and a cognitive process. Current studies in relational neuroscience and hyperscanning are applied to how orality operates as a collective experience.

Keywords: Distributed Cognition; prediction; performance; perception; Theory of Mind; mimesis.

Socrates tells a story from Africa about orality and literacy in Plato's *Phaedrus*.¹ He says that he heard about a divinity in Naukratis named Thoth, the god of knowledge. Naukratis was the Greek trading colony on the western Nile delta in Egypt and a place where both goods and ideas flowed up and down the Nile and across the trade routes of the Sahara and the sea lanes of the Mediterranean. The story tells how Thamus a mythical ancient Egyptian king is visited by Thoth who wants to offer his arts to mortals. These include writing, which he calls “an elixir (*pharmakon*) for memory and wisdom.” Thamus recoils at this saying it will do the exact opposite and “introduce forgetfulness into the soul of those that learn it.”² Literacy, he adds, offers only the semblance of wisdom – it will lead people to think they know a great deal when they really know hardly anything at all. Finishing his story, Socrates adds that writing shares an affinity with painting: while they both seem “living” they are actually unresponsive, passive artforms and cannot be actively questioned. For Socrates, writing can never be as effective as dialogue as it “never knows to whom it should speak to and to whom it should

1 Plato, *Phaedrus* 274c-277a.

2 Plato, *Phaedrus* 274e-275a.

not . . . and it can never defend or support itself. For Socrates, writing will always stand solemnly silent, as opposed to a discourse between living, breathing people, which if spoken with true intent, has the ability to plant a seed of knowledge in others and then to flourish.³

Plato continues the horticultural analogy in *Phaedrus* likening the written word to a seed planted in a garden of Adonis – a small potted plant intended to only survive for a few days during the Athenian Adonia festival. But when the seed of an idea is cultivated by speech in the soul of the listener then it survives and thrives. As we shall see, Plato's concept of orality has a great deal in common with contemporary theories of distributed cognition, the notion that the mind is not brain bound but an embodied agent connected with the entirety of human biological operation, embedded within the culture within which it exists, extended out into the world around it, and enactive in that cognition is a matter of the constant crossing of boundaries. These extend from the limits of the human body out to the environment and back again and down to the cellular level where even cell membranes are semipermeable and matter constant crosses back and forth. This so called "4-E" cognition forms the theoretical basis of distributed cognition together with predictive processing, which is how the human mind sensorially operates and will be described below.⁴

Plato's main defence of orality over literacy is that it is an embodied, embedded, extended, and enactivist process. Words are not received passively by the listener but are instead part of a highly dynamic process of distributed cognition. Inspired by Plato, I will investigate and try to re-think the age-old debate between orality and literacy from the interconnected and distributed perspectives of performance, neuroscience, and cognitive theory. Performance has been a neglected area of research when considering the differences between orality and literature and yet, as I argue here, it is integral to the functional of our predictive cognitive faculties, an essential part of our affective mechanisms, and the way we learn how to be in the world we live in. As I hope to show, performance is fundamentally human as orality is performance.

³ Plato, *Phaedrus* 275d-275e.

⁴ Newen / De Bruin / Gallagher 2018, 3–17; Carney 2020, 77–79. On distributed cognition applied to antiquity see Anderson / Cairns / Sprevak 2019.

1 Orality Is Performance

Speaking, conversing, lecturing, reciting poetry, singing, chanting, swearing, making inarticulate and expressive sounds, whispering, even silently mouthing words, are all forms of performance dependent of mutual co-presence between a “performer” (the speaker/singer) and an “audience” (the receiver/s). This co-presence is mutual because the performer is also usually aware of the audience and their embodied reactions. In the past century, recording devices and telephones have altered this somewhat, enabling solo listening, but for the 80,000 years or so that humans have had the ability to speak, 2.5 million if we also consider non-word sounds and gestures as forms of orality, mutual co-presence in oral communication has been a fundamental part of human existence.⁵ What this means from a cognitive perspective is that when we consider the performance of orality, we must also consider the many facets of non-verbal communication that accompany and contextualize it. These includes facial expressions, eye movements, gestures, postures, bodily movements, the manipulation of any objects being held or worn, cultural associations with hairstyles, makeup, tattoos or other body adornment such as jewellery or watches, clothing – its style, condition and colours, the general health of the speaker, and our emotional responses to them and what they are saying. When we experience any kind of in-person orality, cognitively speaking, there is a lot going on.

In addition to those visual markers there are other perceptual stimuli that are less apparent but still critical. These include kinaesthetic empathy, which is the micro-mirroring of the body movements of the person being observed by the observer, which can affect their emotional state. Kinaesthetic empathy is particularly acute when the observers are immersed in either a performed narrative or a real event where the emotional stakes are high. Think of the times you might have winced when you observed someone getting accidentally hit in the face by a ball. If you are paying close attention to them it can momentarily seem as if it is also happening to you, you may even duck or try to move you head out of the way, and afterwards you will more than likely be concerned about the fate of the person who was actually hit – this is the empathetic part of the kinaesthesia, as is the momentary union that occurs between the observer and the person being observed.⁶ The human mirror neuron system, which is a complex neural network in the brain that responds to the movements of others, is engaged when we observe a person undertaking any kind of oral performance. The mirror

⁵ Zlatev 2020, 156–174.

⁶ Garner 2018, 145–183.

neuron system is an essential component in social cognition, empathy, and Theory of Mind (the ability to perceive another's intentions) but it has also been shown to be vital in speech production and oral language learning.⁷

One way to think about kinaesthetic empathy, the way in which we can feel into another person's movement, is to consider the seminal 2005 fMRI study carried out at University College London against ancient evidence for Greek drama.⁸ In that study, it was observed how dancers trained in a particular artform, in this case ballet or capoeira, respond differently in terms of brain area activity depending on whether they also are proficient in the dance form they are observing or not. In terms of understanding kinaesthetic empathy, if we consider that the members of the audience for Greek tragedy would have likely rehearsed and dance in a tragic chorus, or something aesthetically similar, themselves. Their embodied responses to experiencing a chorus dance, gesticulate and sing in a performance they attended would have been a highly embodied one, increasing their spatial, temporal, and emotional responses to what they were watching.⁹ The gestures performed by a performer have a similar kinaesthetic embodied effect, particularly if the gestural sign system is known and used by the audience.¹⁰

The multisensory nature of orality also extends to the ways in which we perceive the oral performer's biological autonomic bodily functions such as breathing rate, skin conductance (is the face flushed, pallid, or sickly, etc.?), blood-pressure (by perceiving tension/relaxation), even pain, which is often bodily displayed, and certain "basic" emotions which are facially and bodily displayed including sadness, fear, joy, disgust and surprise.¹¹ Then of course there is the fact that an oral performance always generated some sort of sound.

Aristotle was said to have asked why "rhythm and music" (οἱ ῥυθμοὶ καὶ τὰ μέλη) seem to take on ethical qualities whereas flavours, colours and smells do not. He surmised it is because music "is movement as are our actions, and actions also have an ethical quality (ἢ ὅτι κινήσεις εἰσὶν ὡσπερ καὶ αἱ πράξεις; ἤδη δὲ ἡ μὲν ἐνέργεια ἠθικὸν καὶ ποιεῖ ἦθος).¹² Basically, music is movement that moves us. The making of any kind of music involves the movement of air through a hole, a stick striking a surface, a string under tension, air blown through a constricted hole, or the vocal cords of a person. These noises are projected through the air by moving sound waves and perceived initially our auditory systems as

7 Shamma / Patel / Mukherjee *et al.*, 2021, 91.

8 Calvo-Merino / Glaser / Grèzes *et al.* 2005, 1243–1249.

9 On kinaesthetic empathy and ancient Greek chorality see Olsen 2017, 153–174.

10 Young 2021, 89–101.

11 Shiota 2024, 310–330.

12 Aristotle, *Problems* XIX, 920a 5–6.

movement, before being converted into electrical signals and coupled with our predictive processing systems (more on this below).¹³ Humans are particularly attuned to high frequency sounds that resemble the human voice, a major auditory system stimulant that “promotes social connection, informs the listener about identity and emotion, and acts as the carrier for spoken language.”¹⁴ Brain imaging research carried out with fMRI has shown how specific parts of the brain respond to the human voice with EEG studies showing that our processing speeds for vocally generated sound is significantly faster than non-vocal sounds.¹⁵ Additionally, it has been shown how humans develop to respond emotionally to vowel sounds in utero as the tissue that surrounds the womb makes low frequency sound much harder to discern. What can be perceived in the pitch and rhythm of the mother's voice and open vowel sounds

At around 25 to 29 weeks, the main components of the auditory pathways can be identified. By the end of the sixth month, the cochlea has established axonal connections between the inner ear, the brainstem, and the temporal auditory cortex. At this stage, the auditory system becomes functional, and the first evidence of fetal auditory perception can be observed using ultrasound imaging and fetal heart rate monitoring.¹⁶

The sound made by the human voice is both generated and received by movement with the vibrations produced by the vocal cords tongue and lips acting on the drum in our middle ear the sent as ripples across the liquid in the cochlea which activate the hair cells of the basilar membrane. These are converted to electrical signals and sent along the auditory nerve to the specialized regions of the brain's superior temporal sulcus where these neural signals are perceived as speech or song by our brain's predictive processing mechanisms. There bottom-up sensory signals are actively compared to top-down stored precepts. This is an incredibly dynamic cognitive activity that encapsulates the basic premise of distributed cognition, that perception is action orientated and consists of a continuous feedback loop between the thing being perceived and the person perceiving it.

It is not so simple to place orality in a neat binary relationship with literacy. While oral performance is certainly a multi-sensory experience it cannot be said that reading is completely imaginary – only a kind of literary Theory of Mind where the reader constructs immersive story worlds from the printed page.¹⁷ San-

¹³ Korka / Widmann / Waszak *et al.*, 2022, 321–342.

¹⁴ Harford / Holt / Abel 2024, 100127.

¹⁵ Davies 2013, 69–176. Meineck 2018, 160.

¹⁶ Paquette / Dionne-Dostie / Lassonde *et al.* 2018, 191–201.

¹⁷ Zunshine 2024, 117–126.

chez *et al.* have pointed out how e-readers have not yet replaced books because of what a book “looks and feels like, both the weight of the volume and the feel of the pages, but also the distinctive smell. In fact, one might also want to consider the sound made by the pages as they are turned over.”¹⁸ However, there is no doubt that our minds process the written word and the performed word very differently, although there is now a good deal of evidence that literacy ability is enhanced by increased oral comprehension and that reading is a semiotic version of oral communication.¹⁹ However, the phenomenological experience of an oral performance is still different to reading a text.

There is a primary cognitive function that underlies how we process words in either oral or literate form, this is known as predictive processing. A very basic explanation is that our minds cannot possibly generate enough energy to continuously perceive the entire world around us as we move through it, there’s simply far too much sensory information out there, *all the time*, so instead our brains make educated guesses about everything we encounter. Andy Clark calls this “surfing uncertainty” in that prediction is the basic way our minds process external sensory information.²⁰

Our perceptual sensory systems, sight, hearing, touch, taste, smell, proprioception (the sense of our bodies in space) and kinaesthesia send us bottom-up signals that we quickly compare to stored percepts held in our working memory that we have gained over time through experience. This perceptual knowledge is all culturally dependent in that while our minds make the cultures we live in so in perpetual sensory feedback loop, culture also makes our minds.

The phenomenologist Merleau-Ponty developed a similar concept in the 1940’s he called *pratiqement*, that we experience percepts in action and store them in our working memory to actively compare them to what we encounter in the world around us.²¹ His famous example was a table lamp: we expect the part of the lamp we cannot see to resemble our expectations of what it looks like based on the part we can. Our stored percept tells us that it is going to resemble the part we can see. We rely on this perceptual inference, we do not walk over to the lamp, pick it up, look around it and survey it from every angle before we are satisfied. No, what we do in make an educated guess, and we do this constantly for everything thing we perceive. This even includes perceptual concepts we might think are stable such as colour perception. However, it is now well known that col-

18 Sanchez / Dingler / Gu *et al.* 2016, 1459–1466.

19 Metsala / Sparks / David *et al.* 2021, 675–694.

20 Clark 2015.

21 Merleau-Ponty 1964, 12–14.

our is perceived based on cultural and linguistic factors and individual subjective perceptions.²²

As I look out my window I see trees, I've seen a tree before and so I really pay no more attention to it, unless I'm considering a tree for some reason at that time, or there is something distinctive or different about one of more of the trees I see. Let us say that one of the branches is purple and shiny. This I am not expecting, and so I engage my predictive active inference systems, I move my eyes, my head, and my body to find out more, and if I cannot find an explanation for this anomaly I may even get up and go outside to take a closer look. In so doing I expend far more energy, than if the tree just resembled my stored percept and I paid it no more attention. Now if I expended this amount of energy for everything I perceived out of my window it would take an extraordinary amount of time and a large amount of energy, I'd get nothing else done and I'd be quickly exhausted, so in thermodynamic terms, prediction also conserves what the neuroscientist Karl Friston has called free energy of which we only have a finite amount of. The maintenance of free energy is essential if we are to safely remain in the very narrow confines of human homeostasis, essentially the ability to stay alive.

When we are faced with something incongruous and surprising like our purple tree bough, the continual feedback loop of bottom-up sensory information being seamlessly compared top-down stored percepts gets interrupted. Clark calls these "prediction errors" and they demand that we expend energy to resolve them. We are compelled to solve them, to understand what we perceive. Humans have strong emotional responses when they are surprised by the unknown. In *Poetics* Aristotle said that τὸ θαυμαστόν or "amazement", is key to the success of a tragedy.²³ His concepts of *peripeteia* and *hamartia* are based on surprisal, but they must ultimately be predictive and make sense.²⁴ If we cannot resolve or reconcile them with the events of the plot's narrative, the drama will be rejected.

Orality and literacy are both regulated by prediction. We will discuss literacy prediction below but a good practical example of how we predict spoken or sung words is the so called "McGurk Effect." One demonstrator stands before an audience and mimes "ba-ba-ba" over and over until they change to miming "fa-fa-fa." A person standing behind them, whose mouth we cannot see speaks "ba-ba-ba" and nothing else in unison with the person miming. When the mimmer is instructed to change from a "ba" mime to a "fa" with their mouth the audience "hears" "fa" even though the speaker is still saying "ba."²⁵

²² Bosten 2022, Roberson/ Davidoff / Davies *et al.* 2008.

²³ Aristotle, *Poetics* 1460a 13.

²⁴ Aristotle, *Poetics* 1452b 10–14.

²⁵ Iqbal / Shahin / Bortfeld 2023, 510–517.

The McGurk effect is dramatic in performance and seems to defy logic. So, what exactly is happening here and how does it relate to how we receive oral performance? One explanation is that the visual pathway eclipses the auditory in that “seeing is believing” and “you can’t believe everything you hear,” to cite two old English adages, but the effect is the product of our predictive minds.²⁶

What happens in the McGurk effect is that our predictive perceptual systems kick in and when the mimer changes their articulation from a “ba” to a “fa” most of us will predict that we should also be hearing “fa” even though we are not. Sometimes our predictions are wrong as we “surf uncertainty.” The McGurk effect not only demonstrates cognitive prediction, but it also highlights the multisensory nature of orality, if it were only our auditory mechanisms that were responding to the performer we would not be tricked, but we need to perceive oral performance within a much broader sensorial context.

Another distinguishing aspect between orality and literacy is where they occur within human spatial perception. The neuroscientist Fred Previc has taken a perceptual and distributed approach to spatial cognition positing that humans actively create space as they move through it dependent on the relationship of their bodies to the environment within which they find themselves.²⁷ He divides this spatial perception into four distinct realms: 1) *peripersonal space*, where you are holding this book or engaging with this screen right now. This is our most intimate spatial realm within our own physical reach: 2) focal extra personal space. This is a space that can be physically quite far away, yet you can still engage your foveal (focal) vision, zoom in and take a closer look. If you were seated in a theatre that might be the face of an actor on stage: 3) action extrapersonal space. This is a space you can imagine yourself moving through, such as a doorway or path that you could reach quickly and easily: 4) ambient extrapersonal space. This is distal space like far away views or sky space and the reason we might choose to spend several hours hiking up a mountain to take in an expansive view. Extrapersonal space is the realm of abstract thought, and as I have written elsewhere, a feature of Greek theatres that encouraged their audiences to engage with drama under such expansive and mind opening vistas.²⁸

²⁶ There is also an audio/visual version of the same predictive phenomenon called the “Green Needle / Brainstorm effect, where the same recorded voice will sound like wither “green needle or brainstorm depending on which of the two words are read at the time the recording is played. There is an example found at <https://languagelog.ldc.upenn.edu/nll/?p=52241> (accessed December 20th 2024).

²⁷ Previc 1998, 123–129.

²⁸ Meineck 2018, 7–24.

Until the advent of electronic amplification, most oral performances would have taken place within either action extrapersonal space, or if the acoustics allowed, focal extrapersonal space. Prior to electronic amplification the speaker or singer needed to be within earshot or in a space with enhanced acoustics (there is no evidence that ancient masks had any kind of megaphone mouth), but even so, our perceptual predictive mechanisms seek to conflate sight with sound. It is an old theatrical adage in lighting design that if you cannot see the actor, you also cannot hear them. This means that oral performance was always one of mutual co-presence with an array of perceptual, sensory, and affective communicatory systems operating in tandem with the words being uttered. Orality is a perceptually distributed multisensory activity.

The last point I want to raise about the performative aspects of orality is the importance of gestural sign systems that accompany vocal utterances. I am not limiting the term “gesture” to only signs created by the hands and arms, but also head movements, facial expressions, eye rolls, stares, and glances, body postures, as well as physical manifestations of tension and release. We only need to consider the array of non-verbal expressions communicated by of a Kathakali performer as just one example of how much live oral performance is accompanied by significant gestural signs. The cognitive psychologist Merlin Donald posited human gestural systems as a vital developmental stage in the ability of humans to communicate concepts to each other in abstract terms. He called this the “mimetic stage” and linked gestural abilities with toolmaking and the ability to imitate and perfect actions. For Donald, “the cognitive core of mimesis is kinematic imagination, the ability to envision our bodies in motion.”²⁹ Donald views mimesis as a human cultural starting point involving mime, imitation, skill, and gesture combined with the suppression of emotions to effectively communicate with another, and calls it “the elemental expressive force that binds us together.”³⁰ This mimetic training begins in infancy and Donald described the family as a kind of “theatre-in-the-round of kinematic drama” performing mimetic plays to each other.³¹

Material cultural evidence examined with brain imaging technologies also indicates how human mimetic systems evolved as a form of language. Palaeontologists mark a distinctive shift in tool making around 1.75 million years ago when symmetrical tools with blades made on two edges emerged in the Acheulean period. These replaced the simpler single edged tools from the Oldowan period

²⁹ Donald 2001, 271. On the relationship between Donald's mimetic theory and Neuroscientific studies on the mirror neuron system see Jenson / Iacoboni 2011.

³⁰ Donald 2001, 263.

³¹ Idem, 266.

(2.9–1.75 million years ago). Although striking the one edge of a flint with another stone requires some planning and forethought, this is a far less cognitive complex operation than making a symmetrical hand axe that involves a kind of “grammar of flint knapping” in terms of creating symmetrical tools. In a transcranial ultrasound study at the University of Liverpool in 2013 the brains of flint knappers were scanned as they made a symmetrical Acheulean-type axe.³² It was found that they employed the same region of the brain for language acquisition, Broca’s Area. Further studies have reinforced this link between mimetic embodied tasks and the development of complex speech in humans.³³

Aristotle cited mimesis as fundamental to human development stating in *Poetics* that it is an innate in humans from infancy and that they learn through mimesis (1448b 5–7). Later in *Poetics* he pronounces that playwrights should “work out their dramatic plots using gestures” (1455a 30) in order that they be convincing. Gestures distribute emotional intention and when observed by another activate the pre-motor sensory areas of the brain. Watching them we form perceptions of another’s intentions and their affective state, and as Hostetter and Alibali have shown, that this influences human reasoning and problem solving.³⁴ It is notable then that in the preeminent forum for oral performance in fifth century Athens, the Theatre of Dionysos, the actors were masked which forces the spectator’s attention to the gestural movements of the actors and enhances recognition of emotions and kinesthetic empathy.³⁵

Orality is a multi-sensory collective performance in that at minimum there is an utterer and a listener. We have also established that the audience does far more than listen to an oral performer. Just as orality developed from existing forms of non-verbal human communication that still accompany it, so literacy developed from orality. Therefore, learning to be literate is significantly enhanced by combining textual comprehension with oral communication.

2 Literature Is *not* Performance

Literature is not performance, as text can communicate concepts without an interlocuter. Reading is a solitary event intended for the reader’s personal consumption, and not for any other audience. In antiquity this kind of solitary silent reading was rarely practiced. The Greek term for reading a text, *anagignōskō* means to

³² Uomini / Meyer 2013.

³³ Mahaney 2014, 586–606; Kulik / Reyes / Sherwood 2023, 93–115; Malafouris 2021, 107–121.

³⁴ Hostetter / Alibali 2019.

³⁵ Meineck 2019, 71–91.

“know again” and conveys the sense of a recital or a reperformance as if the written word is merely the record of a performative act. Even the Latin, *lego*, *legere* and *lectito* convey the sense of “to send out,” “distribute” or “recite.” Reading in the ancient world was for the most part still an act of orality, extracted and then enacted from a written text, which was probably created with the intention of being recited.

Solitary, silent reading does not involve co-presence with others. Although we may read while amongst others, the cognitive process of immersion necessary to facilitate written language processing in effect involves shutting oneself off from those around us. This is exacerbated by the fact that most reading of more than around one line of text takes place in peripersonal space, remarkably close to our bodies, and the space within which we are most cautious about letting others share with us. This is why even brief glances at text on a smart phone, require immersive cognitive resources and when other people seek our attention, we can experience moments of cognitive dissonance as our minds try to choose between the interior focus reading requires and the sensory stimulants of the external world around us. This can actually make us feel quite frustrated and even angry as the intimacy required of reading texts within our peripersonal space is seemingly disturbed. In effect, the page or screen is acting as an exogram, an external informational storage device, as opposed to an engram, which are the percepts we store in our working memories, although there are significant cognitive differences between reading comprehension from a page, which is superior to textual information read from a screen.³⁶ Exograms can be powerful mind and memory expanding tools, and a good book can certainly take us deep into wondrous story worlds we might never have imagined, but this is fundamentally a different cognitive process to the shared experience of an oral performance.

The other major distinguishing factor between literature and orality is that for the most part, reading is a process devoid of movement, apart from eye saccades, the turning of a page or the pressing of a button. If we try to move and read, our immersive state is instantly negatively affected as is our spatial awareness. We have all experienced people looking down and reading their cell phones walking straight towards us, completely oblivious of our presence or the fact that they are about to collide with us. This also means that the reader is having a deeply personal response to the textual information and is not affected by the kinesthetic empathy and/or affective states of others around them. In an oral setting there is at least one other person to consider; that is the oral performer, and we may interpret what they are saying very differently. Our affective response

may also be quite different from the emotional intention of that performer. This is Socrates' main complaint in Plato's *Phaedrus* – that the written record does not allow us to interface and interrogate with the author of the words. Now this can certainly also be levelled at say, a bard performing Homer, or an actor reciting Shakespeare, but in that case, there is at least the perception of the performer's own interpretation, communicated by the multisensory means discussed above. Although different people in the audience may still have a variety of responses, there can be no doubt that some of the most thrilling moments in a live performance is when almost everyone seems to react together, holding a collective breath, recoiling at the same time, or laughing together. Literacy does not offer that kind of collective experience. With literature the reader is on their own, and although it can be an incredibly informative, immersive, and even an empathetically emotional experience, we must acknowledge that reading is significantly different than watching words performed live. Reading *is not* performance.

Classical Greece offers us an opportunity to observe a predominantly oral performative culture responding to the social and cultural changes that an increased access to literature offers. Rosalind Thomas has made the point that literacy means vastly different things in distinct cultural contexts, stating that “in some, writing means bureaucracy, control, and oppression by the state, in others an enabling skill that frees an individual's creative potential.”³⁷ She also notes a change in reading ability during the fifth century BCE where it increasingly benefited the elite to learn to read and write. However, for most Athenians in the fifth century the level of “functional literacy” needed to actively participate in the institutions of the democracy was the ability to read names and some other basic information such as local places. Thus, the main form of written public communication consisted of simple lists.³⁸ This means that of the 5–6000 people who attended the Athenian theatre at that time, probably mostly all male and citizens, apart from the invited ambassadors from the allied states, many would be considered by modern Euro-American standards to be at best semi-literate.³⁹

We see political and cultural tensions surrounding literacy in fifth century Athens in the drama of the period. In Aristophanes *Knights*, presented at the Lenaia Festival in 424, a working-class sausage-seller is told that he will make an excellent political foil for the powerful populist politician Cleon, as it will take a new

³⁷ Thomas 2009, 14.

³⁸ A fragment of Euripides *Theseus* (*TrGF* 382 = Athenaeus 10.454b-c) shows a shepherd trying to understand the written name “Theseus” by describing the shape of the symbols of the letters.

³⁹ Following Rosalind Thomas, Manuela Giordano has remarked that “Athenian people were not either fully literate or illiterate, but rather there were “graded variables” in reading performance throughout the fifth century”. Giordano 2025, 287–88.

demagogue to remove the old one. The sausage-seller demurs, claiming that he is not educated enough and can barely write, but he is told that this is a qualification for the role as “a demagogue should neither be an educated or a good man but ignorant and base.” (188–192). The joke reveals that at the start of the last quarter of the fifth century a decent level of literacy was already viewed as essential for a prominent role in the higher echelons of Athenian society.

By the time Aristophanes *Frogs* was staged in 405, we get the sense that book ownership is becoming a new fad and that more Athenians are actively reading, not just political notices, but what we would now call literature – poetry, epic and plays. In the comedy, Dionysus describes himself as reading Euripides’ tragedy *Andromeda* while standing on the bow of a speeding trireme (53). This has been viewed as an early reference to silent reading, however the term used is *ánagignôskontí*, which, as already mentioned, means to “know again” and implies a live recital.⁴⁰ Plus, the fact that this is a joke and the idea of anyone being able to unfurl a papyrus scroll and read it amongst the headwinds of a moving ship is clearly meant to be ridiculous. However, there is a much more direct reference to literacy later in the play when the chorus sing how the audience will have no problem following the intricacies of the finer points of Aeschylean and Euripidean drama “as everyone has a book and gets all the clever stuff” (1114). Again, this is a joke, and it certainly does not mean that the audience members are all sitting there with books resting on their laps, but it does indicate that some people in Athens are now reading tragedy. This is important, as we have no evidence at all from the fifth century of any authorial dramatic texts. In fact, the portrayal of playwrights in comedy always shows them composing their work as an act of performance and never writing a script.⁴¹ These are not copies of a playscript but written “recordings” of oral performances.

In 403, after Athens’ defeat in the Peloponnesian War and the restoration of the democracy, the assembly voted to adopt the Ionic alphabet. Several fragments of a comedy by Callias, known now as *The Alphabet Play* makes the 24 members of that chorus the letters of this new linguistic system, which added *eta* and *omega*.⁴² In one scene one of the chorus women says she is pregnant but is too bashful to spell the name of her child:

⁴⁰ See Pancotti 2024, who has written that “The first semantic definition of what was probably the earliest verb for ‘to read’ may reflect a precise cognitive moment located at the beginning of the relationship between the Greeks and writing (191).

⁴¹ For example, Aristophanes’ *Acharnians* (393–418) and *Thesmophoriazousae* (95–175). In Plutarch’s *De Audiendo* we hear how he teaches his lines to his chorus without a script, by call and response (15).

⁴² Callias *PGC* test. 7 = Ath. 10. 453c. See Gagné 2013.

There's a big letter that stands up straight and emerging from its middle on either side are small parts that lean backward.
Then there's a circle with two tiny feet.

She seems to be envisioning the letters Ψ (psi) and Ω (omega), which might be a sexual pun as psi could be said to resemble a penis and omega an open vagina. It is funny stuff, especially considering the novelty of omega. Yet it also shows us that Callias can still draw a great deal of humour from the notion of a hapless grammar teacher trying to get Athenians to read.

Plato's fourth century comments on reading spoken by his version of Socrates suggest that literacy has not yet become completely normalized in Athens, although the amount of written documentation used in fourth century Athens far surpasses what we find in the fifth. Yet according to Bagnell and Criore "the vast majority of the ancient population was unable to write."⁴³ Despite this we find ancient literacy education practices being cited as evidence to bolster one side of the other in our so called "Reading Wars." This is a long-standing debate about the best way to teach literacy, either by phonic "decoding," where the student first learns each letter and its sound and then puts them together, or reading contextually, where comprehension of the entire meaning of a sentence is the goal. Helen Adadzi, citing Criore's evidence of ancient syllabary lists found in Greek communities in Egypt, has written that "[t]he answer to the twenty-first century reading crisis may lie in second-century practices, such as decoding, that apparently most human brains could perform." However, even Criore noted how many of the student compiled syllabaries we have are full of mistakes and that many ancient pupils "we not always up to them".⁴⁴ Judging by the fact that very few people in antiquity ever achieved anything like what we would consider literacy, perhaps the ancient literacy methods are best left alone.

This binary either/or approach to reading acquisition and even the dichotomy of orality and literacy has been challenged by Ellis and Bloch who have applied a predictive cognitive model to literacy and surmised that oral language acquisition and reading and writing ability employ the same mental mechanisms.⁴⁵ They note that reading is not innate to humans as it has only been practiced for 6000 years and for most of that time by very few people. Extending this principle, language is therefore also not innate to humans and has only been fully developed for perhaps 80,000 years. This broadly agrees with Donald's mimetic theory, which posits that spoken language grew out of symbolic communication that emerged in gestu-

⁴³ Bagnell / Criore 2015, 6.

⁴⁴ Criore 2001, 165.

⁴⁵ Ellis / Bloch 2021, 157–188.

ral form. This developed into language to enhance increasing interpersonal and intergroup communication to maximize cooperation – as human cultures grew larger so did the repertoire of communicative expression and writing allowing for messages to be transferred to far more people, across much further distances, and even to transcend time. Yet without the accompanying contextualization of any human voice, hence Socrates' complaint. Like an e-mail or text message that we might misinterpret and project our worst fears onto, re-animating writing in our minds is never a passive process. Like gestures and speech, writing is also dependent on a predictive process. Therefore, rather than viewing literacy in contrast to orality, as if orality were always there, we should instead perceive both as social constructs and products of our predictive minds.

A vivid demonstration of our predictive relationship to literature is demonstrated by the following sentence:

WHAT I IF TOLD YOU
THAT YOU READ THE TOP LINE INCORRECTLY?

Many of you who read the top line perceived that it said, "What *if* I told you." Look again and you will see that it says, "What *I if* told you." Most of you made a prediction as you read the line. You perceived it holistically before you parsed every letter; you made an educated guess, and you came to a prediction informed by your prior knowledge. In a social sense your prediction was quite right: the line is grammatically incorrect, but in terms of "decoding" most of us did not read what it said on the page. Reading is predictive. Here is another:

yu cn raed this evn thogh wdrs r wonrg and messd up⁴⁶

This example is self-explanatory as our predictive mechanisms make sense out of minimal amounts of textual information. Furthermore, eye tracking studies have shown that we do not see every word when we read.⁴⁷ Reading operates in the same way as any other external sensory perception – we tend to skip over words we predict should be there in terms of sentence sense-making, and we spend more time on long words and words we do not recognize. Our top down attentionally becoming activated by these kinds of literary "prediction errors" which become minimized as our knowledge of vocabulary, syntax, and verbal cadence increases. This is why when we listen to unfamiliar languages being spoken, even ones we may be able to read, we are usually unable to separate the words

⁴⁶ Rayner / Chace / Slattery *et al.* 2006, 241–255.

⁴⁷ Mézière / Yu / Reichle *et al.* 2023, 425–449.

being spoken and instead hear what seems like a continuous “white noise” of unintelligible utterances.⁴⁸

Now we have established the primacy of prediction when it comes to oral communication and literacy it should follow that other mechanisms of prediction will also affect language learning. Seth and Friston have shown that when a prediction error occurs, we expend free energy to investigate and resolve it.⁴⁹ We have already set out how this is a process of active inference involving embodied movement, but in many cases, it can also be an emotional one, where our predictive mechanisms trigger an affective response priming us for extreme movement, whether that be fight, flight or freeze. Clark posits that predictive processing does not use the so-called appraisal theory of emotions, where the mind interprets the sensory information happening in the body, but rather a more cohesive activist approach, where our emotions are actively created by our interactions with the world around us in what he calls “continual reciprocal interactions between brain, body, and world.”⁵⁰

As reading is a product of our predictive brains, negative emotions can have grave consequences when it comes to teaching it. For example, in a study of oral and written language learning in multilingual South Africa Bloch and Mbolekwa noted how reliance of education methods from a colonial past, where indigenous languages were not valued, has had detrimental impact on learning by students from those communities.⁵¹ This can be partially explained by either a lack of emotional engagement with the story-based material itself, as it reflects cultural memes that fail to resonate with the student, or negative emotions towards those memes that can deleteriously affect language learning. Countering this problem of cultural inequality in language learning, Ellis and Bloch show how play is highly effective as an early learning tool for literacy. It is a means by which both humans and animals learn to behaviourally experiment, explore fictitious possible words, and regulate their emotions. Play is a form of active predictive learning and far older than our ability to speak or read. This brings us back to performance

48 Andy Clark points to sine wave speech pattern records where we hear only the frequency of a spoken line. At first there are just unintelligible beeps and whistles. Then when a clip of the spoken sentence the speech pattern was extracted from is played and we hear the sine wave again, we hear it clearly. After several minutes listening to these sine wave recordings and their corresponding speech recordings we start becoming able to comprehend the sine wave clips as we our predictive mechanism learns more and more percepts to compare to the sensory information we are receiving. Clark 2024, 21–22.

49 Seth / Friston 2016.

50 Clark 2015, 235.

51 Bloch / Mbolekwa 2021, 101–137.

as fundamental to inter-personal communication. Play leads to “symbolic thinking, exploring, and discovering alternative options and their outcomes, and hence leads to creative thinking and understanding” and it “underpins literacy learning”.⁵²

Plato, also knew the social and cultural value of play, writing in *Laws* that “every young creature is incapable of keeping either its body or its tongue quiet, and is always striving to move and to cry, leaping and skipping and delighting in dances and games.”⁵³

For Aristotle, play is a basic form of mimesis, which he viewed as innate, and comments in *Poetics* that for most of us as children it is through play that we test the boundaries of prediction. According to Andersen *et al.* this is a way in which we learn to manage surprise, which in cognitive terms is the moment of prediction error in an extreme form.⁵⁴ Yet if the surprise is too extreme, we run the risk of generating negative emotions, rejecting it, and instead seeking the comfort of what we know. Andersen *et al.* demonstrate this point with the example of a simple game of peek-a-boo with an infant: over and over again the child will take delight in each time their playmate's face pops out from behind their hands. Yet if a random, unexplained element is introduced, such as not emerging from behind the hands, appearing from a totally different space, or replacing the face with something else, then the infant is likely to react very negatively and suddenly burst into tears. This kind of surprise overwhelms the mind's predictive system and becomes frightening instead of delightful.

Aristotle comments on this very thing in *Poetics*, where he makes it clear that a narrative needs to grab our attention and arouse our sense of τὸ θαυμαστόν (amazement).⁵⁵ He suggests using surprisal devices such as *peripetia* (reversals) and *anagnorisis* (recognitions), and that it is these unexpected events that provoke the emotions and lead to catharsis. However, Aristotle warns that these surprisals must also be predictable, not that the audience should see them coming, but rather that they make sense and seem probable (*eikos*). The cognitive mechanisms at work in the predicting and sense making of novelty and surprisal in both oral story-making such as the theatre, which Aristotle is talking about, and literature such as a novel, are much the same. The difference being is that up until very recently all oral stories were shared at least between storyteller and recipient, if not multiple recipients, whereas the reception of literature is always a solitary expe-

52 Ellis / Bloch 2021, 169.

53 Plato, *Laws* 653d–654a.

54 Andersen / Kiverstein / Miller *et al.* 2023, 462.

55 Aristotle *Poetics* 1450b35–1451a6.

rience, normally devoid of any external sensory experience, beyond the materiality of the book or screen itself.

Returning to Plato's *Laws*, he felt that play was made divine by the gods who "granted the pleasurable perception of rhythm and harmony, whereby they cause us to move and lead our choirs, linking us one with another by means of songs and dances; and to the choir they have given its name from the "cheer" implanted therein."⁵⁶ This is a bit of an etymological stretch to extract χορός (chorus) χαρά, (joy) but his general point is well made – it is through collective performance that we play and therefore learn, suggesting that "education owes its origin to Apollo and the Muses." This leads to Plato's famous statement that the person who cannot sing and dance in a chorus is uneducated.⁵⁷

This returns us to the point made earlier about orality being a shared, even collective, experience, just as play is. Of course, we can play Solitaire or video games and children play with toys and dolls alone, but the former games are ways to challenge the performance of our past selves to say, beat that high score, and child's solitary play is frequently about the creation of characters and companions. We seek out forms of collectivity even when alone, and one could certainly make a case that reading literature is a method by which we experience the worlds of others. Advances in neuroscience over the past two decades can shed light on our propensity for collectivity. One past issue with brain scanning technologies is that they had been restricted to measuring one participant responding to stimuli and had not been able to consider the cognitive implications of human-to-human neural synchronicity. One of the early advances in this area that has since been called "Relational Neuroscience"⁵⁸, was by Hasson *et al.* in a 2004 "hyperscanning" study (the simultaneous brain scanning of two or more individuals). Here the blood oxygen levels in the brains of 5 subjects were measured using fMRI while they each watched the same 30-minute film clips.⁵⁹ This seminal study concluded that "[t]he results reveal a surprising tendency of individual brains to "tick collectively" during natural vision." There was a synchronization of brain activity in the same areas of the brain at the same time, keyed to the scenes in the movie clip, particularly during emotionally arousing moments.

De Felice, *et al.* have detailed four main cognitive modalities where interpersonal dynamics occur between people: the first is conceptual alignment, which is

⁵⁶ Plato, *Laws* 2.653d.5–654a.7.

⁵⁷ Plato, *Laws* 2.654b-c.

⁵⁸ De Felice / Chand / Croy *et al.* 2024.

⁵⁹ Hasson / Nir / Levy *et al.* 2004.

when cultural belief systems either mesh or conflict. For example, a hyperscanning study by Yeshurun *et al.* showed that brain responses in the default mode network, responsible for imagistic thinking, were similar among people who shared analogous viewpoints, but different from those with opposing opinions.⁶⁰ The next modality they describe is neural brain synchronicity, which can be the generation of the same brain waves between co-participants and the activation of the same areas of the brain when people experience uniform external stimuli. The next modality is behaviour, which is joint action or attention, gesture coordination and phonetic convergence through speech or song, which is discussed above. Finally, they list physiology and endocrinology, such as shared breathing rates, heartbeats, and hormonal and neurochemical production, such as cortisol and dopamine. Future advances in Relational Neuroscience will take a multimodal approach helping us to further understand how humans inter-react with one another when they experience the same external stimuli.

Performance has been a central element in many hyperscanning studies. A 2023 EEG (electroencephalograph) study measured the brain activity of 4 guitarists playing together and four audience members watching them and recorded the moments when their brains synchronized (during particularly rhymlical and emotional moments in the music) and when they uncoupled (during applause for the musicians but not for the audience).⁶¹ EEG is particularly useful for Relational Neuroscience studies as it involves the participants wearing a mesh of electrodes on their heads to record the brain's electrical activity or brain waves. This means the experiments are not confined to a large fMRI or MEG machine and the restrictive confines of an imaging lab.

Relational Neuroscience can also help us understand more about the effects of orality in a group setting. A 2024 study by Chang *et al.* has approached the issue of dynamic neural alignment between listeners to the same story.⁶² This study examined both listener-to-listener neural coupling and between listener-to-speaker and found that the closer the listeners mirrored the neural activity of the storyteller the more they “clustered” in that they had the same or remarkably similar neural responses to each other. The neuroscientists call this “the herding effect” likening the storyteller to a shepherd corralling a flock. This phenomenon was at its most pronounced when the listeners reported that they were most engaged by the narrative content. They concluded that there is a “dynamic, multibrain functional network between the speaker and the audience.”⁶³

⁶⁰ Yeshurun / Swanson / Simony 2017, 307–319.

⁶¹ Müller / Lindenberger, 2023.

⁶² Chang / Nastase / Zadbood 2024.

⁶³ *Idem*, 7.

This kind of neural dynamism in receiving oral information is particularly marked during person-to-person dialogue, where to be effective and understood, each participant must engage in “pattern switching” to take in the other person or people they are conversing with. This is more complex than just the mirroring of each other’s intentions, what we might term as “simple mimesis.” Instead, as Hasson and Frith have shown, such social interactions “requires implementing complementary actions and achieving synergies”.⁶⁴ Engaging in dialogue involves our perceptual systems of active inference in a fluid continuum of cognitive prediction.⁶⁵ This concept of action orientated speech processing is borne out by hyper-scanning research where a 2020 study found neural synchronicity between listeners auditory temporal cortex and the speaker’s larynx/phonation area.⁶⁶ When the listeners reported not comprehending the speaker, this neural synchronicity decoupled. Therefore, the motor action of the speaker’s articulatory system becomes aligned with the listener’s even though the listener is not actively speaking or even mouthing the words being spoken. This essential “liveness” of the speaker, even when recorded and replayed “moves” the listener.

The findings coming from the field of Relational Neuroscience strongly indicate the interpersonal nature of orality and even its health benefits, such as one study that measured the lowering of stress producing levels of enzymes and hormones in amateur choral singers performing together.⁶⁷ Neuroscientific studies carried out on people reading literature are more inconclusive. Reading has been shown to increase attention and focus as well as empathy for others, and even slightly improve social cognition,⁶⁸ However, Best has suggested that these can also be taken somewhat negatively as this immersion in fictive story worlds can, in some cases, result in real world monitoring errors with the suggestion that “avid readers of fiction may experience difficulties in separating experientially-based knowledge from that which has been derived from fiction”.⁶⁹

This might be hard for us to accept. Most of you reading this paper probably love literature, I know I do, but recent massive digital proliferation of words directly in our emotional peripersonal space as invasive text alerts, breaking news bulletins, urgent messages, endless e-mails, dense user agreements, confounding online fillable forms, countless complicated passwords and inflammatory tweets might give us pause for thought. This brief analysis of the performative

⁶⁴ Hasson / Frith 2016.

⁶⁵ Pérez / Davis 2023.

⁶⁶ Liu / Zhang / Zhou *et al.* 2020.

⁶⁷ Bullack / Gass / Nater 2018, 223.

⁶⁸ Dodell-Feder / Tamir 2018, 1713.

⁶⁹ Best 2020. For an opposing view see Keen 2022.

importance of orality might lead us to consider that digital literacy has pushed the space between us too far. 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.

UNESCO positions literacy as a basic human right stating that “acquiring and improving literacy skills throughout life is an intrinsic part of the right to education and brings with it huge empowerment and benefits”.⁷⁰ There can be no doubt that in our literate dependent society this is surely correct, but does this mean that the value of orality needs to therefore be placed in a subordinate position culturally, economically, and educationally? Cannot both be afforded equal importance as vital byproducts of human inter-personal communication? In our canonization of literacy as a significant mark of an advanced culture should we not also ask the important question, does literacy lessen human collectivity, empathy, and cooperation? It might even sometimes be detrimental to our mental health, especially if that is all there is. Our new dependence on digital media suggests as much.⁷¹ Increasingly digital applications are moving away from text-based platforms into short bursts of video imagery, which directly provoke our pre-literacy cognitive systems that process gestures and facial expression while also over-stimulating our dopaminergic neurochemistry. Once again, the problem is that we are experiencing a distilled version of play, without any co-presence. There is no empathy, no give and take, no learning the needs of others, and no embodiment, except the tap or swipe of a finger, and an ever-decreasing attention span.

Humans need to play together or at least see plays together, we are performative beings. Is literacy democratic because it offers access to stored information and power structures? Or does it diminish interactional synchronicity and collective action? Does it offer top-down information without the bottom-up sensorial perception we experience when we are in the presence of an oral communicator?

One way to perceive literacy is as a material tool. The cognitive archaeologist Lambros Malafouris has revived Henri Louis Bergson's use of *homo faber*, the “maker of things” stating “[n]o other species has been or can be identified as a *species* on the basis of its relationship with tools and material culture”.⁷² To be sure, the human brain needs a large amount of protein and glucose that can only be accessed and processed by external mechanisms like fire, tools, and cooperation. In 2001, Andy Clark extended this concept and declared us “natural born

⁷⁰ <https://www.unesco.org/en/literacy> Last accessed December 20th, 2024.

⁷¹ McGorry / Mei / Dalal *et al.* 2024.

⁷² Malafouris 2013, 153.

cyborgs” in that our cognition extends to those tools and external social and cultural practices that we depend on for our basic survival.⁷³ Now with artificial intelligence technologies crafting our literature and our almost total reliance on digital technologies in the palm of our hands, perhaps we should look back to Čapek’s and Asimov’s warnings about the rise of robots and wonder of instead of autonomous human-like bipeds we have become the bio-bots, being led around by the texts, instant messages, and e-mails ping-pong from our soon to be more intelligent than human mobile phones.⁷⁴

The ancient Greeks can offer us another paradigm. This was a culture that placed an enormous value on the social value of collective mimesis. In the archaic Hymn to Apollo a chorus of young women dancing at the god’s shrine at Delos sing (*Homeric Hymn to Apollo* 156–165):

πρὸς δὲ τόδε μέγα θαῦμα, ὄου κλέος οὔποτ’ ὀλεῖται,
 κοῦραι Δηλιάδες, ἑκατηβέλεταο θεράπναι:
 αἶ τ’ ἐπεὶ ἄρ’ πρῶτον μὲν Ἀπόλλων’ ὑμνήσωσι,
 αὐτίς δ’ αὖ Λητώ τε καὶ Ἄρτεμιν ἰοχέαιραν,
 160μνησάμεναι ἀνδρῶν τε παλαιῶν ἠδὲ γυναικῶν
 ὕμνον αἰείδουσιν, θέλγουσι δὲ φῦλ’ ἀνθρώπων.
 πάντων δ’ ἀνθρώπων φωνὰς καὶ βαμβυλιαστῶν
 μιμείσθ’ ἴσασιν: φαίη δὲ κεν αὐτὸς ἕκαστος
 φθέγγεσθ’: οὔτω σφιν καλὴ συνάρηρεν ἀοιδή.

Then there is this great marvel, of fame which never will perish—
 it is the Delian girls, handmaids of the great Far-shooter;
 these, whenever at first in a hymn they have lauded Apollo
 also Leto the goddess and Artemis shooter of arrows,
 calling to memory tales of the men and the women of old times,
 straightway a hymn they sing, enchanting the nations of humanity.
 They know how to impersonate (*mimesthai*) all people’s voices and all their
 musical vocalizations, and each would imagine themselves as
 sounding the words—so suited to them is their beautiful singing.
 (transl. adapted from Rodney Merrill 2010).

Of course, we can only learn from the wisdom of these ancestors because somebody wrote their lyrics down. When the Delian choristers sing of enchanting the nations of humanity it is because they know how to use mimesis. Here they are articulating orality’s Theory of Mind in that it operates within the mutual co-presence created between performer(s) and audience. The 14th/15th century Japanese Noh master, Zeami called this *riken-no-ken* (“sight outside of sight”), which was

73 Clark 2001, 17–24.

74 Čapek 2020 (1921), Asimov 2004 (1950).

the joint perspective shared between performer and audience. Zeami wrote that this led to *kenshodōshin*, the becoming of one mind with the audience and an almost perfect manifestation of the role of the expert Noh performer.⁷⁵

We all know the modern cultural value of literacy. But in the current upheaval of this digital turn let us choose not to neglect the co-presence, social cohesion, sense of well-being, emotional empathy, and basic humanity inherent in the performance of orality. Let us never forget that humans possess an innate need to be social and to *play*.

References

- Andersen, M. M. / Kiverstein, J. / Miller, M. / Roepstorff, A. (2023), "Play in Predictive Minds: A Cognitive Theory of Play", in: *Psychological Review* 130, 462–479.
- Anderson, M. / Cairns, D. / Sprevak, M. (eds.) (2019), *Distributed Cognition in Classical Antiquity*, Edinburgh.
- Asimov, I. (2004), *I, Robot*. Vol. 1. Silverthorne, (ed. or. 1950).
- Bagnall, R. / Criboire R. (2015), *Women's Letters from Ancient Egypt, 300 BC-AD 800.*, Ann Arbor.
- Best, J. (2020), "Reading literary fiction: More Empathy, but at What Possible Cost?", in: *North American Journal of Psychology* 22, 269–288.
- Bloch, C. / Mbolekwa, S. (2021), "Apprenticeships in Meaning: Transforming Opportunities for Oral and Written Language Learning in the Early Years", in: E. J. Erling / J. Clegg / C. M. Rubagumya / C. Reilly, (eds.), *Multilingual Learning and Language Supportive Pedagogies in Sub-Saharan Africa*, London, 101–137.
- Bosten, J. M. (2022), "Do You See What I See? Diversity in Human Color Perception", in: *Annual Review of Vision Science* 8, 101–133.
- Bullack, A. / Gass, C. / Nater, U. M. / Kreutz, G. (2018), "Psychobiological Effects of Choral Singing on Affective State, Social Connectedness, and Stress: Influences of Singing Activity and Time Course", in: *Frontiers in Behavioral Neuroscience* 12, 223.
- Calvo-Merino, B. / Glaser D. E. / Grèzes, J. / Passingham, R. E. / Haggard, P. (2015), "Action Observation and Acquired Motor Skills: an fMRI Study with Expert Dancers", in: *Cerebral Cortex* 15, 1243–1249.
- Čapek, K. (2020), *RUR*. Standard Ebooks, (ed. or. Prague 1921).
- Carney, J. (2020), "Thinking *avant la lettre*: a Review of 4E Cognition", in: *Evolutionary Studies in Imaginative Culture* 4, 77–90.
- Chang, C. / Nastase, S. A. / Zadbood A. / Hasson, U. (2024), "How a Speaker Herds the Audience: Multibrain Neural Convergence over Time During Naturalistic Storytelling", in: *Social Cognitive and Affective Neuroscience* 19, nsae059.
- Clark, A. (2001), "Natural-born Cyborgs?", in: *International Conference on Cognitive Technology*, Berlin-Heidelberg, 17–24.
- Clark, A. (2015), *Surfing Uncertainty: Prediction, Action, and the Embodied Mind*, Oxford.

⁷⁵ Raz 1976, 266–267.

- Clark, A. (2024), *The Experience Machine: How our Minds Predict and Shape Reality*, Random House, 21–22.
- Criboire, R. (2001), *Gymnastics of the Mind: Greek Education in Hellenistic and Roman Egypt*, Princeton.
- Davies, S. (2013), “Music-to-listener Emotional Contagion”, in: T. Cochrane / B. Fantini, and Klaus / R. Scherer (eds.), *The Emotional Power of Music: Multidisciplinary Perspectives on Musical Arousal, Expression, and Social Control*, Oxford, 69–176.
- De Felice, S. / Chand, T. / Croy I. / Engert, V. / Goldstein, P. / Holroyd, C. B. / Kirsch, P. (2024), “Relational Neuroscience: Insights from Hyperscanning Research”, in: *Neuroscience & Biobehavioral Reviews* 169, 105979.
- Dodell-Feder, D. / Tamir D. I. (2018), “Fiction Reading Has a Small Positive Impact on Social Cognition: a Meta-analysis”, in: *Journal of Experimental Psychology: General* 147, 1713.
- Donald, M. (2001), *A Mind So Rare: The Evolution of Human Consciousness*, New York.
- Ellis, G. / Bloch C. (2021), “Neuroscience and Literacy: an Integrative View”, in: *Transactions of the Royal Society of South Africa* 76, 157–188.
- Gagné, R. (2013), “Dancing Letters”, in: R. Gagné / M. Govers Hopman, (eds.), *Choral Mediations in Greek Tragedy*, Cambridge, 297–316.
- Garner, Jr, Stanton B. (2018), “Kinesthetic Resonance”, in: B. Stanton Garner, Jr. (ed.), *Kinesthetic Spectatorship in the Theatre: Phenomenology, Cognition, Movement*, Hamilton (QLD), 145–183.
- Giordano, M. (2025); “Textualizing Athens: The Eion Herms between History and Neuroscience”, in: *Mnemosyne* 78, 273–297.
- Harford E. E. / Holt L. L. / Abel T. J. (2024), “Unveiling the Development of Human Voice Perception: Neurobiological Mechanisms and Pathophysiology”, in: *Current Research in Neurobiology* 6, 100127.
- Hasson, U. / Frith Ch. D. (2016), “Mirroring and Beyond: Coupled Dynamics as a Generalized Framework for Modelling Social Interactions.” *Philosophical Transactions of the Royal Society B: Biological Sciences* 371, 20150366.
- Hasson, U. / Nir, Y. / Levy I. / Fuhrmann, G. / Malach, R. (2004), “Intersubject Synchronization of Cortical Activity During Natural Vision”, in: *Science* 303, 1634–1640.
- Hostetter, A. B. / Alibali M.W. (2019), “Gesture as Simulated Action: Revisiting the Framework”, in: *Psychonomic Bulletin & Review* 26, 721–752.
- Iqbal, Z. J. / Shahin, A. J. / Bortfeld H. / Backer, K. C. (2023), “The Mcgurk Illusion: a Default Mechanism of the Auditory System”, in: *Brain Sciences* 13, 510, <https://doi.org/10.3390/brainsci13030510>.
- Jenson, D. / Iacoboni M. (2011), “Literary Biomimesis: Mirror Neurons and the Ontological Priority of Representation”, in: *California Italian Studies* 2, <https://doi.org/10.5070/C321008945>.
- Keen, S. (2022), *Empathy and Reading: Affect, Impact, and the Co-creating Reader*, London.
- Korka, B. / Widmann, A. / Waszak, F. Á. / Darriba, Á. / Schröger, E. (2022), “The Auditory Brain in Action: Intention Determines Predictive Processing in The Auditory System—A Review of Current Paradigms and Findings”, in: *Psychonomic Bulletin & Review* 29, 321–342.
- Kulik, V. / Reyes, L. D. / Sherwood, C. C. (2023), “Coevolution of Language and Tools in the Human Brain: An ALE Meta-Analysis of Neural Activation During Syntactic Processing and Tool Use”, in: *Progress in Brain Research* 275, 93–115.
- Liao, S. / Yu, L. / Kruger, J.-L. / Reichle, E. D. (2024), “Dynamic Reading in a Digital Age: New Insights on Cognition”, in: *Trends in Cognitive Sciences* 28, 43–55.

- Liu, L. / Zhang, Y. / Zhou, Q. / Garrett, D. D. / Lu, C. / Chen, A. / Ding, G. (2020), "Auditory–Articulatory Neural Alignment Between Listener and Speaker During Verbal Communication", in: *Cerebral Cortex* 30, 942–951.
- Mahaney, R. A. (2014), "Exploring the Complexity and Structure of Acheulean Stoneknapping in Relation to Natural Language", in: *PaleoAnthropology*, 586–606.
- Malafouris, L. (2021), "How Does Thinking Relate to Tool Making?", in: *Adaptive Behavior* 29, 107–121.
- Malafouris, L. (2013), *How Things Shape the Mind: a Theory of Material Engagement*, Cambridge, Mass.
- McGorry, P. D. / Mei, C. / Dalal, N. / Alvarez-Jimenez, M. / Blakemore, S. J. / Browne, V. (2024), "The Lancet Psychiatry Commission on Youth Mental Health", in: *The Lancet Psychiatry* 11, 731–774.
- Meineck P. (2019), "Mask as Mind Tool", in: Anderson / Cairns / Sprevak (2019), 71–91.
- Meineck, P. (2018), "The Remains of Ancient Action: Understanding Affect and Empathy in Greek Drama", in: R. Kemp / B. McConachie (eds.), *The Routledge Companion to Theatre, Performance and Cognitive Science*, London, 66–74.
- Merrill, R. (2010), "The Homeric Hymn to Apollo", in Pepper, T. (ed.), *A Californian Hymn to Homer*, Washington DC, 211–234.
- Merleau-Ponty, M. (1964), *The Primacy of Perception: and Other Essays on Phenomenological Psychology, the Philosophy of Art, History, and Politics*, Evanston (IL).
- Metsala, J. L. / Sparks, E. / David, M. / Conrad, N. / Deacon, S. H. (2021), "What Is the Best Way to Characterize the Contributions of Oral Language to Reading Comprehension: Listening Comprehension or Individual Oral Language Skills?", in: *Journal of Research in Reading* 44, 675–694.
- Mézière, D. C., / Yu, L. / Reichle, E. D. / Reichle, E. D. / Von Der Malsburg, T. / McArthur, G. (2023), "Using Eye-Tracking Measures to Predict Reading Comprehension", In: *Reading Research Quarterly* 58, 425–449.
- Müller, V. / Lindenberger, U. (2023), "Intra-and Interbrain Synchrony and Hyperbrain Network Dynamics of a Guitarist Quartet and Its Audience During a Concert", in: *Annals of the New York Academy of Sciences* 1523, 74–90.
- Newen, A. / De Bruin, L. / Gallagher, Sh. (eds.) (2018), "Introduction", in: *The Oxford Handbook Of 4E Cognition*, Oxford, 3–17.
- Olsen, S. (2017), "Kinesthetic *Choreia*: Empathy, Memory, and Dance in Ancient Greece", in: *Classical Philology* 112, 153–174.
- Pancotti, M. (2024), "Riconoscere la scrittura come oggetto grafico", in: *Mètis* 22: 191–213.
- Paquette, N. / Dionne-Dostie, E. / Lassonde, M. / Gallagher, A. (2018), "Voice Perception in Newborns and Infants", in: S. Frühholz / P. Belin (eds.), *The Oxford Handbook of Voice Perception*, Oxford, 191–211.
- Pérez, A. / Davis, M. H. (2023), "Speaking and Listening to Inter-Brain Relationships", in: *Cortex* 159, 54–63.
- Previc, F. H. (1998), "The Neuropsychology of 3-D Space", in: *Psychological bulletin* 124, 123–164.
- Rayner, K. / Chace, K. H. / Slatery, T. J. / Ashby, J. (2006), "Eye Movements as Reflections of Comprehension Processes in Reading", in: *Scientific Studies of Reading* 10, 241–255.
- Raz, J. (1976), "The Actor and His Audience. Zeami's Views on the Audience of the Noh", in: *Monumenta Nipponica*, 31, 51–274.

- Roberson, D. / Davidoff, J. / Davies, I. / Shapiro, L. R. (2008), "Colour Categories and Category Acquisition in Himba and English", in: N. Pitchford / C.P. Biggam, (eds.), *Progress in Colour Studies: Volume II. Psychological Aspects*, Amsterdam, 159–172.
- Sanchez, S. / Dingler, T. / Gu, H. / Kunze, K. (2016), "Embodied Reading: A Multisensory Experience", in: *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, 1459–1466.
- Seth, A. K. / Friston K. J. (2016), "Active Interoceptive Inference and The Emotional Brain", in: *Philosophical Transactions of the Royal Society B: Biological Sciences* 371, 20160007.
- Shamma, S. / Patel, P. / Mukherjee, Sh. / Marion, G. / Khalighinejad, B. / Han, C. / Herrero, J. / Bickel, S. / Mehta, A. / Mesgarani, N. (2021), "Learning Speech Production and Perception Through Sensorimotor Interactions", in: *Cerebral Cortex Communications* 2, no. 1: tgaa091.
- Shiota, M. N. (2024), "Basic and Discrete Emotion Theories", in: *Emotion Theory: The Routledge Comprehensive Guide*, London, 310–330.
- Thomas, R., (2009), "Writing, Reading, Public and Private 'Literacies': Functional Literacy and Democratic Literacy in Greece", in: R. Thomas / W. A. Johnson / H. N. Parker (eds.), *Ancient Literacies: the Culture of Reading in Greece and Rome*, Oxford, 13–45.
- Uomini, N. Th. / Meyer, G. F. (2013), "Shared Brain Lateralization Patterns in Language and Acheulean Stone Tool Production: A Functional Transcranial Doppler Ultrasound Study", in: *PLoS one* 8, e72693.
- Yeganeh, H. (2022), "Orality, Literacy and the 'Great Divide' in Cultural Values", in: *International Journal of Sociology and Social Policy* 42, 564–582.
- Yeshurun, Y. / Swanson, S. / Simony, E. / Chen, J. / Lazaridi, Ch. / Honey, Ch. J. / Hasson, U. (2017), "Same Story, Different Story: the Neural Representation of Interpretive Frameworks", in: *Psychological Science* 28, 307–319.
- Young, K. (2021), "Synesthetic Gestures: Making the Imaginary Perceptible", in: *The Senses and Society* 16, 89–101.
- Zlatev, J. (2020), "Pantomime as The Original Human-Specific Communicative System", in: *Journal of Language Evolution* 5, 156–174.
- Zunshine, L. (2024), "Don't Be Too Good at Reading Other People's Minds", in: *Emotion Review* 16, 117–126.

Cristóbal Pagán Cánovas

Oral Poetics and Multimodal Language Models

Abstract: The contribution investigates the role of oral traditions in contemporary debate, by expanding the timespan of its analysis, in order to include the innumerable generations of oral performers that preceded Homer, along with the work on multimodal large language models that is revolutionizing the world. It argues that the next step in this revolution cannot solely rely on the alpha-numeric technologies behind current generative AI, but will also require the modelling of oral, multimodal communication in its full richness and complexity. Oral traditional performances are key, because they have been shaped through cultural evolution to maximise human cognition for multimodal performance, and as a result they are as structured as it gets, thus allowing for insights into the learning processes aimed at recognizing and exploiting patterns of communicative behaviour.

Keywords: AI; multimodal communication; oral traditions; cognitive science.

Oral-traditional poetic performance, shaped over tens of thousands of years, is central to understanding human multimodal communication and cognition. The contrast of ancient oral practices with multimodal large language models shows the potential of oral poetics. Its contribution can be crucial for advancing AI, linguistics, and cognitive science. To realize this potential in the quest for understanding human meaning-making, research on oral traditions needs to create adequate datasets and develop theoretical frameworks that incorporate the advances of the cognitive sciences.

1 San Bushmen Under the Kalahari Moon

I begin my courses on poetics, communication, or linguistics by discussing a scene that can help us imagine the origins of the human. San bushmen are singing and dancing around a fire at sunset. Children of various ages, their parents, their grandparents, maybe also a great-grandmother, and others, who are probably relatives as well, are gathered on a sand dune in the Kalahari Desert, under the rising moon. I count sixteen people in total. Almost naked, they sing, dance, clap, talk, smile, cry (the youngest child)... They exchange glances, look at the dancers, the fire, the sky, or simply into the clear night.

We play a video with such a scene to illustrate the point.¹ The scene captured in the video might as well have taken place tens of thousands of years ago.² Then we examine this situation as a primeval example of human multimodal communication. It depicts a typical situation in which gesture, language, and music may have arisen.³ The participants have only their bodies and their orally transmitted knowledge to communicate stories, emotions, cultural background, and any other sort of meaning. But the seemingly basic elements they have to work with are quite enough to perform crucial social interactions, which bind them as a family and a community. We can sense the keen attention in the eyes of the children as they interiorize the songs and the words. In their faces we see the excitement for participating in this moment, shared with the generations present and with the ancestors going back to the remote past. Yes, this is how it must have begun. And we can also see that this is one more link in the chain that through them connects that remote past with their successors, including ourselves.

But wait a minute. How far ahead in that chain may this moment be? Let us take a closer look. Details are then revealed that make us rethink the primitivism of the scene. The adults are not merely covering their genitals with animal skins and using rough blankets to protect themselves from the night chill and the dew. The women are also wearing necklaces made of multiple beads around their necks, and some of them also wear other ornaments in the intricate patterns in their hair. The men are wearing ankle bracelets, apparently made of ivory or of large animal teeth. They shake them rhythmically as they dance around the fire. It is mainly the men who dance, while almost all the women and children remain seated, doing most of the singing and clapping.

So we have specialization of social roles in the performance. Probably outside of it too. Once they get up in the morning, the activities of the various participants are likely to differ as well. This suggests a certain degree of economic development. We also have traces of craftsmanship and probably commerce. The complex attire and hairdressing require many hours of labour by someone with enough leisure and the right expertise. The materials for the ornaments may have been obtained from distant locations. In fact, some of the earliest findings in the archaeological record for our species indicate that, even before *homo sapiens* left

1 https://www.youtube.com/watch?v=dTL_TdONVBs provides a video for illustrative purposes only, as material for class discussion and for the sake of argument in this paper. Its authenticity has not been independently checked.

2 A good overall picture of the long diachrony of the San and of their cultural background is provided by Thomas 2007.

3 There is a vast and rapidly-growing research on their common origins. Good starting points are: McNeill 2012; Patel 2010.

Africa for the first time, hunter-gatherers across the continent were part of complex networks of trade, which disseminated materials, products, techniques, and knowledge.⁴ The San, for one, had a much richer material culture than their image of desert people may suggest, going back at least 44,000 years.⁵ Rock art in the area has been dated back to 73,000 years from the present.⁶ Findings from ochre workshops suggest aesthetic activity even older than the paintings.⁷ We have every reason to believe that cave paintings, engravings, and other aesthetic manifestations of material culture were meant to support performances as richly multimodal as the scene under the moon illustrated by our video, if not richer.⁸

The complexity of the apparently primeval scene is now unveiled. Song, language, dress, dance, and all the manifold fluctuations of voice and motions of body that constitute human multimodal communication are already in place, inextricably intertwined, and coordinated with utmost mastery. Although the communication seems fully direct and natural, it is still mediated by the technologies, the preparation, and the planning that made the garments, ornaments, and hairdressing possible. Then there are all the complexities of social interaction, which situates the various participants in different roles, poses, and positions around the performative space. Their spatial disposition and communicative behavior must also be guided by the conventions of the poetic genre at hand, the religious background, and quite probably the time in the year and its place within their cosmology. Not to mention the intricate patterns of melody, rhythm, and word of their speech and songs, which must be deeply structured in order to be memorable and meaningful. The grammar, lexicon, metrics, or phrasing deployed can be expected to show no less complexity than those of seemingly more advanced cultures. It is always full-fledged language and verbal art that we encounter across societies of hunter-gatherers around the world. We have no evidence of intermediate stages of linguistic development or poetic craftsmanship.⁹

Now that we look closely, we find the marks of long, deeply rooted traditions everywhere. Our bushmen under the Kalahari moon are starting to look less and less primeval. If, as we said we could, we push this scene many tens of thousands

4 McBrearty and Brooks 2000.

5 See d'Errico *et al.* 2012. See also Lewis-Williams 2013 and https://www.bradshawfoundation.com/south_africa/san_rock_art/index.php.

6 Henshilwood *et al.* 2018. See also “The African Rock Art Digital Archive,” at <http://www.sarada.co.za/#/library/>.

7 Henshilwood / d'Errico / Watts 2009.

8 Miyagawa / Lesure, / Nóbrega 2018.

9 Fauconnier / Turner 2008.

of years into the past, even before the first cave paintings that we have in Southern Africa, such a performance would still require previous cultural evolution over multiple generations. We would need to go back over 100,000 years, maybe a lot more, depending on when we believe the first members of our species to have appeared.¹⁰ We soon realize that it is extremely hard for us to imagine a situation at the real origin, with no traditions behind, where all these elements are disperse and about to be put together for the first time.

It is, nonetheless, a good way to start thinking about the powers of our minds, shaped by the interaction between bodies and environments, but with an additional spark that allows us to transcend the moment. Human beings have an outstanding capacity for integrating disparate, misaligned elements into a single, coherent experience, both in the here-and-now (the rich multimodality perceivable and actionable in the event) and from a mental world (the stories, ideas, and so many other meanings negotiated, enacted, and constructed as the social interaction unfolds). We can observe this in any human behaviour, regardless of technological, social, and cultural differences.¹¹

2 Indiana Jones De-aged

Now, at the other extreme in practically all aspects (social, geographic, diachronic, technological, cultural, economic), consider a very recent example of multimodal poetics that has captivated audiences from around the world. *Indiana Jones and the Dial of Destiny*, an epic movie from 2023, uses generative artificial intelligence to give eighty-year-old actor Harrison Ford the appearance, bodily motion, and voice he used to have when he was in his late thirties. Think for a moment about the cultural and technological evolution that underlie such a technological feat. We would need many pages just to describe the people, expertise, industries, research, investments, computation, coordination... that have converged to make it possible for director James Mangold and his team to pull this trick in cinematographic storytelling.

But the trick works so well precisely because it exploits the cognitive capacities for multimodal integration that we all share, the same mental abilities that made the gathering of the San bushmen possible. The technology is supporting

10 For an overview of the state of the art on the evolution of the genus *homo*, see Lahr 2021. For the problems in defining precise characteristics for our species, see Schwartz 2016.

11 Researchers such as Koestler 1964, Mithen 1998, or Boden 2009 have identified this capacity as key to the human mind, although only Fauconnier / Turner 2002 have so far provided a thorough theoretical framework for its study.

and guiding our minds as we weave a vast network of meanings and connect it to a compressed scene at human scale.¹² The de-aged Harrison Ford in the flashback, with the set and costumes carefully reconstructing 1944 Paris, with the signature motif by John Williams softly playing in the background, are all meant to activate the audience's sense of membership of the Indiana Jones epic tradition, of which this is the fifth movie. This is by no means novel, but rather fundamental to our cognition. Let us not forget that a flashback with a younger version of the hero, subsequently considered from a moment in his future in which a much older self or an unknown narrator are telling the tale, and integrated within a long narrative structure encompassing multiple themes and episodes, was something that Homer could already manage quite well, just using his voice and body, probably along with a musical instrument (a lyre-like one: a φόρμιγγξ or κιθάρα).

The Homeric tradition goes back well over three thousand years from now. Surely many others before Homer, through hundreds of generations, were able to do the same. We can also see such sophisticated patterns in multiple oral performers around the world today. Both the oral poetry and the film are building on the same cognitive abilities for integrating disparate elements into a coherent multimodal event, which can be at least partially imaged, or “seen with the mind's eye,” and is integrated within a network of interconnected memories, knowledge, and emotions.¹³

A central goal shared by neuroscience, cognitive science, AI, linguistics, and poetics should be to understand what is there in our minds that makes possible the vast gamut of imaginative products alongside cinema and “deep fake” simulation: narratives, ideas, representations, political systems, languages, and so many more.¹⁴ We still know very little about how those cognitive abilities work, how we evolved them, how we develop them throughout the life span. But there is one thing we can be certain of: they have been honed throughout tens of thousands of years of singing and dancing. For all that time, little support was available for them outside the enactment of oral performances, embedded within a tradi-

¹² Fauconnier 2005; Turner 2006.

¹³ For imageability and cognition see, for example: Kosslyn / Thompson / Ganis 2009; Pylyshyn 2002; Nanay 2018. For the importance of human imagistic capacities in conceptual integration and early cognitive development, see: Mandler / Pagán Cánovas 2014; Mandler 2004; Mandler 2010. Some studies of these imagistic capacities at work in literature: Collins 1991; Esrock 1994; Pagán Cánovas 2010; Pagán Cánovas 2015; Pagán Cánovas /Valenzuela / Santiago 2015; Pagán Cánovas 2016. A pioneer study on the mind's eye in oral epic poetry is Bonifazi 2008.

¹⁴ An all-encompassing argumentation, linking mental integrative abilities to the origin of homo sapiens, can be found in Turner 2014; Mithen 1996 and Mithen 1999 also point at integrative capacities as fundamental for the evolution of the human mind. On the role of simulation, see Giordano in this volume.

tion. These performances would have been rich in multimodality (sometimes also including material support from paintings, ornaments, attires, objects, and so forth) and undoubtedly poetic, that is, with the expression being, at least partially, a goal in itself and not just a means to an end.¹⁵

As if the title *From Homer to Neuroscience* did not already sound ambitious and attractive enough, I am here seeking to expand its diachrony on both ends, in order to include the innumerable generations of oral performers that preceded Homer, along with the work on multimodal large language models that is revolutionizing the world as these lines are being written. I will argue that the next step in this revolution cannot solely rely on the alpha-numeric technologies behind current generative AI, but will also require the modeling of oral, multimodal communication in its full richness and complexity. Oral poetic traditions are key, because they have been shaped through cultural evolution to maximize human cognition for multimodal performance, and as a result they are as structured as it gets, thus allowing for insights into the learning processes aimed at recognizing and exploiting patterns of communicative behaviour. But, in order to become mainstream in the study of language and cognition, of mind and brain, and of natural and artificial intelligence, the communities involved in researching, preserving, curating, and developing oral poetic traditions must act now.

3 Oral Traditions, Writing, and Generative AI

Oral traditional performance is the real thing. We can safely say that it has been the main form, both of art and of organized social interaction, for all cultures and all individuals, anywhere in the world, for well over 90% of our time on earth.¹⁶ In this story spanning over 100,000 years, perhaps quite a lot more, writing in any form only makes its appearance about 5,000 years from now. For half that time or more, depending on the region, the writing system did not afford a reasonably faithful reproduction of speech, nor did it have enough systematicity and discreteness to foster extended literacy.

Alphabetic writing including separate letters for both consonants and vowels and therefore allowing for the representation of articulatory sequences in any language, was invented less than 3,000 years ago. It then gradually expanded from Greece to Rome and the rest of the world, although syllabaries and logographic script are still more widely used than the alphabet in most of Asia. Need-

¹⁵ A good presentation of this diachronic perspective in Foley 2002.

¹⁶ Pagán Cánovas 2020, 5–6; Foley 2004.

less to say, the presence of writing does not mean it is used widely in a given society. Alphabetic writing was indeed game-changing with respect to the writing systems from Mesopotamia or Egypt, which were restricted to an elite of professional scribes. However, generalized literacy regardless of social status has been rare before the twentieth century beyond a few countries in Europe. Even today, more than half of the world's population are either completely illiterate or have reading and writing skills that barely go beyond the primary school level. Therefore, half of humankind are nowadays still unable to engage fluently with texts. They live in a fundamentally oral culture.¹⁷

While writing is undoubtedly a turning point, quite probably *the* turning point, in the history of civilization, multimodal technologies have always accompanied it, from manuscript illumination to theatre props, from costumes and scenery for scripted performances to charts, graphs, and the many other visualizations of data and concepts in documents. In fact, the most disruptive communication technologies in the past two centuries have sought to enhance our orality and multimodality, from photography, the telephone, the radio, cinema, and television to social media, video games, video and audio capabilities on portable devices, video-conferencing, “deep-fake” video and audio simulators, or the latest multimodal generative-AI models, such as PaLM or Gemini.¹⁸ Unsurprisingly, embodied, multimodal minds strive to design embodied, multimodal technologies. In fact, some of these technologies are giving a somewhat unexpected boost to oral traditions, allowing performers, folklorists, and researchers to easily record, share, and archive performances.¹⁹

Large language models (LLMs), such as GPT-4²⁰ or LLaMA,²¹ have recently reached a power and accuracy that has set off a revolution of so-far unpredictable consequences. LLMs use neural networks (statistical models that imitate some properties of biological neural networks), mainly transformers,²² to process text. The mathematical and statistical basis of LLMs, what is generally known as machine learning, has not undergone any fundamental breakthroughs in the last few years, except perhaps for the development of transformers themselves. On the other hand, the computational technologies and engineering techniques behind LLMs have been developing at great speed. Now LLMs can be trained

17 <https://genderdata.worldbank.org/indicators/se-adt/>.

18 Driess *et al.* 2023; <https://palm-e.github.io/>; Gemini Team *et al.* 2023; <https://deepmind.google/technologies/gemini/>.

19 Ong 1982; Foley 2002; Turin 2013; Turin / Wheeler / Wilkinson 2013.

20 <https://openai.com/gpt-4>.

21 <https://ai.meta.com/blog/large-language-model-llama-meta-ai/>

22 Vaswani *et al.* 2017.

on amounts of text which would require thousands of human lives to read, which results in these models “learning” billions of parameters (factors weighing various variables of the data to identify patterns and correlations). This is allowing for the development of ever-larger models that are becoming increasingly better at predicting the next token, that is, at picking the right word or phrase to complete an appropriate linguistic sequence.

LLMs, and any other models of generative AI, are digital technologies. We could also class them as alpha-numeric systems, since they are based on the manipulation of strings of symbols that can be expressed in binary code. They are one more great achievement of the revolution initiated by the Greek adaptation of the Phoenician alphabet about 2,800 years ago, probably one or two generations before the Homeric poems were written down,²³ and quite probably, although this is of course merely an educated guess, over 100,000 years after oral poetic traditions first appeared. As a technology born from the alphabetic revolution, it is natural for LLMs to be almost fully text-based, at least initially. Strings of letters can be treated as a sequence of symbols that can each be assigned a mathematical value, rendering datasets that are straightforwardly amenable to statistical treatment, while at the same time they provide a proxy to linguistic communication, at least to some aspects of it.

Texts are also the most standard means for the transmission of knowledge in our time, although audiovisual materials keep gaining ground. Let us not forget that oral traditional performance has been the actual cognitive currency of the species for 100,000 years or more. After all, although the transition from a fully-oral culture to a text-based one is probably the biggest revolution in the history of humankind, the alphabet is only a very simplistic summary of one of the many aspects of linguistic communication: the articulation of speech. Seeking to improve human-machine interaction and human cognitive performance, many in the generative AI community are rapidly turning their attention towards oral, fully-multimodal communication.

These are among the most important challenges for pushing these technologies forward:

- Become multimodal: build foundation models that integrate information from different sources (text, image, video, audio, code) into the same architecture, allowing direct “translation” from one modality to another.

²³ There has been a very long discussion on the details of the appearance and the relation between the raise of writing and poetic performance. Some good introductions to the discussion are: Powell 1996; Powell 2007; Yunis 2003.

- Automatically detect the patterns of human multimodal communication, that is, the meaning, expectations, and intentions of participants in an oral exchange.
- Build models that require smaller amounts of data, in the fashion of “natural” intelligence. Animals and people, even plants,²⁴ only need limited exposure to their environments to adjust their behaviours. Human children acquire a functional mastery of language after 20–40 months of oral communication, not after thousands of years of reading. This means adding culture and full-fledged multimodality.

An overarching goal cutting across these and other major challenges is to improve the quality of the training datasets, alongside the ability of the models to connect patterns in the multimodal signal with structures of thought and meaning. Feeding the algorithms with ever-larger amounts of text, images, or even videos, can only get the field so far. There is a growing need to select more adequate data, in order to serve the specific goals of each particular modeling task. More sophisticated human annotation would also be a great factor to improve pattern detection. If generative AI is going to imitate the learning of living beings at all, it needs to embrace the full complexity of perception and action of multisensory bodies in rich physical environments. In the case of humans, alongside full multimodality and embodiment, models need to capture the deep structuring of culturally-guided behaviours and the intricate patterning of human meaning, all based on the higher-order cognitive operations that neuroscience and cognitive science still struggle to grasp.

Perhaps the main theoretical implication of language-engineering technologies is how they expose the deep structuring of linguistic communication. Even when these technologies are only dealing in the very reductive representation that text provides, their success suggests that written communication is patterned down to a level that allows for these models to capture statistical regularities. It is up for discussion whether these models are actually “learning” world models of some kind beyond superficial statistics,²⁵ or merely leveraging their great power to identify and apply textual patterns to a variety of text-based tasks.²⁶ In any case, what their success is showing us is that words and phrases, alongside any other linguistic patterns at least partially captured by textual representation,

²⁴ Calvo / Lawrence 2022.

²⁵ Gurnee / Tegmark 2023.

²⁶ Halevy / Norvig / Pereira 2009.

must have intricate statistical regularities in their usage, which can now be detected through the right quantitative techniques, applied to datasets of the right size.²⁷

Oral communication must be even more deeply structured, as it allows for the swift interactions that we see across its multiple uses and contexts. The successes of multimodal-signal processing and generation, including the initial versions of multimodal LLMs, support this hypothesis. This also suggests that we are only beginning to grasp the intricacy of the patterning of the manifold modalities that get integrated into full-fledged multimodal communication. In the next section I outline how oral traditions can help tackle some of the apparent paradoxes that multimodal computing and the science of multimodal communication need to face.

Moreover, just like the cognitive sciences are increasingly interested in creativity and aesthetics, LLMs do not shun literature, but embrace tasks such as generating literary texts in a particular style or tradition, or even creating scripts that can then be “performed” by virtual agents. In fact, various sorts of conflicts, from legal battles on copyright issues to actors and screenwriters going on strike, are rapidly originating from the application of machine-learning techniques to poetic datasets.²⁸ Beyond the social or economic impact of such technological developments, it is quite clear that addressing creative examples, where the attention to the details of the linguistic expression and the awareness of meaning nuances are enhanced, unveils structuring processes that can significantly improve language modeling. In the province of cognitive science and neuroscience, having a deeper quantitative understanding of literary texts, with their particular combinations of words and phrases and their stylistic and aesthetic goals, can be key to exposing the cognitive operations that make human beings what they are.²⁹ Exposing these operations through cases that take them to their limits sheds light on the cognitive processes that underlie the creation of the new, ad-hoc meanings that emerge in any act of everyday human communication.³⁰ Creativity is the holy grail of research on mind, language, and generative AI.

Now, as the attention turns more and more towards the oral and the multimodal, we encounter a scarcity of oral poetic data that contrasts with the wealth of literary texts at our disposal. This is due to social, cultural, historical, and legis-

²⁷ Baayen *et al.* 2019; Milin *et al.* 2016; Pirrelli *et al.* 2020.

²⁸ Lang 2023; Fjeld / Mahari / Epstein 2023; Weidinger / Isaac 2023. See also: <https://cla.co.uk/about-us/copy-right/principles-for-copyright-and-generative-ai/>.

²⁹ The great development of research on poetics and cognition would be impossible to summarize in a few references. Some key examples particularly apt at showing the importance of literature for the study of cognition are: Turner 1996; Fabb 1997; Hogan 2003; Miall 2006; Tsur 2008. A good overview of 20th-century work is Richardson / Steen 2002.

³⁰ Pagán Cánovas 2022.

tic factors. As they lack the fixity of text, multimodality and orality are both less prestigious and harder to study, archive, and curate. For example, while, as we saw, well over 90% of the poetic production of our species has been oral, it is safe to say that 99% of research on poetics focuses exclusively on written traditions. A quick look at literature departments in universities around the world will support this statement. In the last section I suggest that this must change and quickly, if the Humanities are to take this opportunity of being part of the current revolution in both the study of language and the development of language-based technologies.

4 Multimodal Paradoxes

Chatbots, robots, or avatars powered by LLMs are already faster and more efficient than humans in many text-based tasks, such as writing various kinds of summaries, generating a variety of formulaic texts, e.g. real-state descriptions or legal documents, reading the news, or even conducting some interactions based on clichés, for example in customer service. However, the communicative activities that are both preferred and easily-handled by humans, such as a heated debate over sports or politics, flirting, a casual conversation over drinks, or the role-play games of children, keep proving to be beyond the powers of artificial systems. AI struggles with multimodality and improvisation, while natural cognition thrives in them. Processing multiple modalities in a communicative signal poses a daunting computational challenge. The computing capabilities required to tackle text are minute compared with those of speech recognition, given the richness of the acoustic signal. Throw in visual data, and the computing needs grow exponentially.

It is the opposite for humans. First, written communication requires a long learning period, involving institutionalized education or intense mentoring. Even when that is quite generalized, fluency is not attained by half of the world's population, as we saw. On the other hand, oral communication and the rich traditions supporting it are mastered by all cognitively-normal humans without exception, and to a considerable degree even by individuals with severe brain impairments or mental illnesses. Moreover, in most cases meaning flows more easily and attractively if a text is performed: read the speech with the right intonation and rhythm, recite the poetry, stage the play, film the script.

Second, in oral communication meaning is generally facilitated as we move forward along the complexity gradient.³¹ Or, to reverse the argument for clarity, as the multimodal richness of full-fledged face-to-face interaction is reduced, the conversation gets slower and less fluent. A simple experiment is to try to have a conversation without gesturing at all or without looking at each other. This also becomes apparent if we go down the multimodality gradient of communication technologies: videoconference, telephone call, text with images and icons, bare text.

Moreover, humans show this opposite curve in their performance despite the fact that all these modalities come misaligned in perception and show disparate, often contradictory structure, shaped by different semantic systems.³² Integrating the manifold cues of human multimodal communication is cognitively light-years away from the deer that smells the wolf, hears its howl, sees sudden motion in the bushes, perceives alertness in the deer nearby, and subsequently activates a fleeing mechanism involving a number of sensorimotor routines. The deer is integrating perfectly salient and compatible non-semantic cues, each reinforcing the next and pointing at the same stimulus albeit from a different modality, every cue clearly standing out, easy to segregate from other perceptions and all straightforwardly bound together in long-term memory as sharing the same referent: the presence of the predator. In these cases of multisensory facilitation or enhancement, multimodal integration of cues associated to the same mental entity results in the perception of an object or agent present in the here and now. The integration of disparate, misaligned, and complex cues during human multimodal communication requires semantic meaning interpretation inserted in a narrative or semantic structure, activation of disparate elements in memory (categories, social frames, cultural background), connection of identities across different moments and scenarios, and many other intricate cognitive operations.³³

The cues of gesture, gaze, prosody, and the articulation of speech in human communication, not to mention melody or attire or dance in oral performance, each provide very different, sometimes contradictory information, which requires various mental capacities and cultural backgrounds. In cognitive and perceptual terms, interpreting an illustration or a figure has little to do with reading its caption. Each task requires a set of different, quite complex cognitive and perceptual operations. Then integrating both modalities as part of the same message is yet

³¹ Holler / Levinson 2019, 1–3.

³² Holler / Levinson 2019.

³³ For comparison between multisensory facilitation and multimodal integration in human communication, along with an extended list of references on the topic, see Holler / Levinson 2019, 2–3.

another great mental feat. Gesture, facial expression, and gaze, for example, typically do things that words do not do, adding layers of complexity rather than pointing in the same direction.

When all these various modalities are in place at their utmost complexity and interconnectedness, human communication not only thrives, but also attains almost inconceivable velocity.³⁴ The swiftness with which we regularly answer questions in an oral exchange, or the agility of turn taking, are both closer to the reaction time of an athlete waiting for the shot of the starting pistol than to the lapse that could be expected from linguistic processing and the subsequent motion of the relevant muscles and articulations. As we listen to speech, we are clearly doing so much more than “processing.”³⁵

First of all, we are discarding all irrelevant stimuli in the multimodal signal. We will not usually link, for example, the words we hear with the speaker’s incidentally scratching her hand as she utters them, or pausing to drink, or looking at someone who happens to pass by. As we do this, we also identify the perceptual features that do constitute cues, and bind them together in perception and action, even if they are quite disparate and do not contain any coded meaning when considered separately.³⁶ For example, we will integrate a gaze towards the interlocutor with a smile—up to a certain degree of curvature—with a raised palm and the aligning of neck and shoulders towards the interlocutor, and interpret the whole set of actions as a unified one, probably a greeting. The greeting emerges from the integration and does not reside in any of the actions separately. Even the raised palm, which can be considered an emblematic gesture, can have a number of other meanings: *farewell*, *stop*, *slow down*, *five*, *you are exaggerating*, and so forth.

As we are doing all this, we are also building a linguistic meaning, by somehow taking enough cues from the signal, especially—but by no means exclusively—from the speech articulation, to come up with the structures that we call words or phrases. If we are listening, we are also simultaneously activating a great variety of muscles and articulations across our body, to produce meaningful movements that respond to what is being said: nodding, facial expression, manual gestures, gaze motion, and many more.

If it is a conversation, we are also preparing to take our turn. As we deduce meanings by combining the perception of actions by the speaker with our own

³⁴ Levinson 2016; Holler / Levinson 2019.

³⁵ For a detailed examination of all the following processes, for which a very brief summary is provided, and for the theoretical approaches, methodological discussions, and inquiry into their phylogenetic and ontogenetic diachronies, see Holler / Levinson 2019; Levinson / Holler 2014; Gullberg / de Bot / Volterra 2008.

³⁶ Holler / Levinson 2019, 3–11.

expectations and response movements, we begin “thinking for speaking,” that is, organizing thought in ways that will allow us to produce a linguistic utterance.³⁷ Finally, as we do all this and we perceive that our turn may be starting, we activate the multiple motor systems involved in speech, gesture, and gaze, even before the speaker’s turn comes to an end and our turn begins.³⁸

All this, and more, happens in the most trivial communicative exchange. Oral-traditional performance is an extremely polished case of this multimodal activity, in which even richer information is introduced, following practices that have been refined through analogous communicative events in the past, along multiple generations. When we try to reduce these intricate interactions between people and their environments to the processing and production of symbols, we find that it is very hard to account for the fluidity and velocity of it all, not to mention building artificial systems that successfully engage in human communication. Holding all the information in memory requires storing endless multimodal form-meaning pairings and retrieving the right features across modalities for each moment, at lightning speed. Generating a system of rules, based on the induction of generic structure out of the complex multimodal signal, would need to face the almost unsurmountable processing challenges of cue segregation and binding. As a result, an LLM-powered chatbot can pass the bar examination, but we are nowhere near an artificial system that can sustain a realistic, everyday human conversation in its full multimodality.

5 The Need for Oral-traditional Poetic Performance

All the natural languages spoken today, along with the panoply of human actions that take part in linguistic communication, have been shaped by tens of thousands of years of oral tradition. Indeed, literacy and other technologies are also affecting the way people speak in our days, but these traditions are very recent in comparison to oral ones, and they do not override them. The English we speak today, for example, is indeed influenced by a few decades of digital technologies, but also by a few centuries of literature and, most fundamentally, by the thousands of years of oral communication in Germanic, Romance, and Indo-European populations and beyond, down to remote prehistory.

³⁷ Slobin 1987.

³⁸ Levinson 2016; Holler / Levinson 2019.

Oral-traditional poetic performance is thus definitely relevant for a diachronic understanding of language and communication. Now consider its role in the origins of linguistic interactions. Simulations seeking to replicate the conditions in which language originated usually start with interactions between two or three agents. The intention is to represent the conditions for minimal linguistic behaviours to emerge. But there is nothing private or minimal about language. On the contrary, it is socially maximal: its conventions are widely accepted and productively used across multiple contexts and by the community at large. It takes more than face-to-face dialogue to create a language: it requires a collective performance, a situation where the goals and needs of communication are communal and cultural rather than merely interpersonal.

We tend to think that language may have initially developed from interactions of a very limited scope and then scaled up to larger communities. On the contrary, what the vast oral diachrony of our species suggests is precisely the opposite: an achievement of social cognition that then finds its way to a great variety of contexts, including the private, face-to-face situations, where perhaps it was least needed. It is quite apparent from human and animal behavior that a shared language is not indispensable for many key aspects of relations between individuals, such as sex, cooperation for hunting large prey, the establishment of social hierarchies, or even highly-coordinated collective behaviours, like deciding when to start a mass migration and where to go. Instead, language is needed for the poetic—in an ample sense of the word—forging of songs, myths, beliefs, laws, and customs regulating human group behavior and binding human communities, alongside many other phenomena of organized social cognition that we see only in our species. For all we know, all these species-defining characteristics seem to have originated in the situation of collective, multimodal, poetic performance. It is in this public arena that we find both the pressure and the right habitat for sophisticated patterns of communication to emerge.

The defining characteristic of language, and its key evolutionary and cultural advantage, is that it fosters large-scale cooperation by allowing humans to fluently communicate with complete strangers, as long as they all share the same tradition. This institutionalization and dissemination of language requires speech acts that go beyond 2–5 participants, which is arguably the number that can be handled by dialogic interaction. If more people are to simultaneously engage in any kind of meaningful communication, it needs to be coordinated in terms of self-reflective speech, in which turn-taking and the structuring of the messages are organized to fulfill certain expectations and to give room to innovation within the boundaries of intelligibility. The organization, expectations, innovation, and definition of what is intelligible are dynamically shaped by the tradition, which results from multiple and connected experiences of performance. Without a tra-

dition of oral performances that show awareness of what is being said and how—rather than loose improvisation—it is very hard to imagine how we could have the full-fledged languages and cultures found across hunter-gatherers and industrial societies alike, or, for that matter, the tightly-knitted human communities. It takes self-reflective public discourse to stabilize and disseminate what gets called a linguistic tradition, which can then be used for dialogue and to many other ends.

Among the key characteristics of oral poetic performance, as observed by Parry-Lord and other scholars, the following are of particular interest to the study of natural and artificial cognition:³⁹

- *No fixity.* At least not the fixity of an established text, but the relative stabilization afforded by combining the fluidity of performance with the weight of custom and tradition. No two occasions are the same, and hence no two performances will be exactly the same. Even the most carefully scripted performances in an oral tradition, such as rituals or ceremonies, are not scripted in the way writing would afford, but structured by the accumulation of multiple performances that preceded the present one.
- *No verbatim memorization or “storage.”* Improvisation, instead, but always based on patterns interiorized through participation in the performance itself.
- *Even richer multimodality than in an everyday oral exchange, usually adding music, dance, and costume.* But, once you get a feeling of the patterns through prolonged experience of the culture, all these various layers of complexity reinforce one another in their diversity, analogously to the multimodal integration that we see in face-to-face interactions.⁴⁰ Since the collective performance is self-aware, it strives to maximize its resources for creating meaning, saying as much as possible within the limited time and dynamicity of the social event, which cannot continue indefinitely or recur completely at random, and where turn-taking and the dynamicity of the interactions must be sanctioned by tradition to make the performance itself feasible. For as long as it lasts, an oral-traditional performance needs to find the right combination of multimodal resources to be as meaningful as possible and as deeply-rooted as possible in previous performative experiences.
- *Formulaicity and enhanced idiomaticity.* In the sense of more stability than in most other forms of oral exchange, such as conversations or cooperation for joint action, which are usually less organized and tend to show less awareness

³⁹ It would be impossible to cite all the oral poetics scholars who have contributed to these insights. Some of my main sources of learning have been: Lord 1960; Foley 1991; 2002; Janko 1998.

⁴⁰ For detailed analyses of case studies that show the relation between musical and linguistic patterns, see Bonifazi / Elmer 2012a; Bonifazi / Elmer 2012b.

of what is exactly being said. Not only the patterns of language, speech, or the other modalities will be more loaded with traditional expectations: the meaning structures will also show stabilization around themes, scripts or narrative patterns, motifs, and so forth. This does not mean that creativity does not happen all the time, but it will almost always be inspired on the possibilities and examples offered by the formulaic patterns. Producing shockingly innovative expressions that violate expectations, as in modern lyric poetry, is almost never the goal.

- *Immediacy and the highest cognitive demands.* The characteristics listed so far naturally stem from a situation that puts enormous pressure on the human abilities to integrate and coordinate disparate multimodal cues, without the planning afforded by writing and with a material support that, albeit often notable (cave paintings, attire, musical instruments, use of objects and the surrounding nature), does not compare with that of performances mediated by current technologies, such as cinema, theatre, or television. If we really want to understand human creativity in the wild, minimally mediated by supporting technologies, we need to study the oral performer's carefully organized, painstakingly learned improvisation techniques.

These key features of oral-traditional poetic performance all bear on the segmentation problem, or chunking problem, probably the central question for both the study of language and cognition and the development of artificial intelligence.⁴¹ When considering how to organize language and thought into chunks or units, we come across questions such as: How do we learn to organize our action into patterns that allow us to communicate? How do we handle those patterns in both production and comprehension? What is the nature of those patterns? How can we automatically detect those patterns in full-fledged multimodal communication, for example in video files of human interactions? And, in more general terms: How do we acquire language? How do we parse a signal so that we can learn its code and build a related meaning? How do speakers organize linguistic input so that they can reuse its forms effectively and innovatively?

If we do not pay attention to oral-traditional poetic performance, we would be ignoring what has constituted the cognitive and cultural currency of the species for 100,000 years or more. During that time, and to some extent even today, merely being able to participate in a dialogue does not make one a full member of a linguistic community. Ability to engage with the organized public speech is required. All other forms of speech are inspired on what gets stabilized in the poetic

⁴¹ Pagán Cánovas / Antović 2016a; Pagán Cánovas / Antović 2016b.

performance, or else the members of the community would not understand one another, and as a result there would be no community at large. Some analogies can be established with the way in which collective written expression is not defined or consolidated merely by personal correspondence, but by engagement with a literary, intellectual, and historical tradition constituted by specific documents. The multimodal poetic performance is the cognitive currency of oral traditions. Unlike written literature, but similarly to text-based art forms such as modern theatre, cinema, or classical music, oral-traditional performance requires constant and participative re-enactment. It needs to be cashed out on every occasion and cannot sit on a shelf waiting to be read or contemplated.

To unleash its full potential, the multimodal modelling of language requires an understanding of oral-traditional poetic performance. Ignoring it would mean leaving aside the most natural and universal manifestation of public speech. It is in the oral poetic performance that the tradition materializes and develops. It is there that the common language of a social group of any relevant size must be created and consolidated.

It is not only that, in a fully oral culture, no writing is available. There is also no symbolic or aesthetic activity whatsoever—music, painting, drawing, hair-dressing, attire, dance, or any other—that can be fully dissociated from the collective, multimodal poetic performance. In an oral culture there are no concerts or art collections or poetry recitals or fashion shows, at least not for their own sake. The music, the art, the poetry, or the costume, or any other aesthetic manifestation, only make sense as part of traditional performance. It is only in traditional performance that an individual can acquire the shared knowledge that lays the foundation of a culture, then to be applied and refined throughout many other types of interactions, including private conversations. And it is also only in the fluid and dynamic, but also traditionally-sanctioned, poetic performance that cultural change of any relevant impact can happen and be disseminated across a sizeable community.

6 Oral Poetics Needs to Provide Data and Theory...Now

As we saw, generative artificial intelligence, cognitive science, and neuroscience do engage with—and are increasingly interested in—literary texts, music, cinema, and other aesthetic manifestations that have emerged from the cognitive abilities honed throughout millennia of oral-traditional poetic performance. Researchers on natural or artificial intelligence approaching any of these fields will find at

their disposal multiple archives or ready-made datasets to perform quantitative analyses and to develop computational tools for analyzing those materials. These researchers will also find various theoretical paradigms and ongoing discussions on methods and theory, both seeking to establish generalizations about the art form itself and to connect it to research on the human mind, sometimes, and increasingly more so, also to AI.

The gap between the state of those disciplines and oral poetics will be apparent to all readers with expertise in oral traditions. I do not have room here to outline the current state of the art: only to provide a succinct wish list. Suffice it to say that video archives of a certain quality, providing access to the full-fledged multimodal experience of performances in a given tradition, do not come anywhere near in size or accessibility to the resources available for text-based materials, not only literature but also theatre, cinema, or television. Regarding theory, and incurring in oversimplification due to the lack of space, it is perhaps not fully inaccurate to state that the field has not gone much further than the Parry-Lord oral-formulaic theory.⁴² While Milman Parry and Albert Lord indeed carried out pioneering and visionary work, pointing at the heart of the chunking problem and of formulaic creativity, the origins of their theory go back almost one hundred years now—Parry published his first dissertations on Homeric formulaic style in 1928 and died in 1935. Considerable updating is required to incorporate the insights from several decades in linguistics, cognitive science, AI, and multimodality, both theoretically and methodologically, as well as to contribute to those fields with findings from research into oral-traditional performance.

Therefore, to initiate cooperation leading to empirical results, it is indispensable that the oral poetics community make video repositories widely available. These video collections need to be as large as possible and of the highest quality and authenticity possible. Sizeable audiovisual collections can now be automatically transcribed to create textual corpora that are amenable to multiple tools for natural language processing. These multimodal corpora need to be enriched with solid cultural data coming from fieldwork and research on the various traditions. A variety of multimodal tools can be applied to those corpora: automatic detection of visual patterns, position of key body points (allowing to reconstruct motion patterns), advanced audio analysis, and other resources for quite a comprehensive analysis of multimodal datasets.

Initiatives such as the speech transcription tools for 4,000 languages from Meta facilitate the use of language-engineering technologies for many oral tradi-

42 Parry 1971; Lord 1960; Lord 1991; Lord 1995.

tions.⁴³ There are also initiatives under way to help researchers and academics build and analyze multimodal datasets, such as the Red Hen Lab,⁴⁴ which develops large audiovisual collections and computational tools, or the forthcoming METADATA project, which will develop a platform for multimodal data processing, funded by the EU Erasmus Plus program and carried out by a consortium including the University of Murcia, Radboud University Nijmegen, the Max Planck Institute for Psycholinguistics, and Friedrich Alexander's University Erlangen-Nürnberg.⁴⁵

As urgent as the need to develop those empirical projects is to increase our theoretical understanding of oral storytelling, oral tradition, and oral-traditional poetic performance. First of all, the field needs to address the pressing questions about segmentation and other aspects of the theoretically fascinating multimodality and aesthetics of oral poetic traditions. We need a new generation of folklorists and oral poetics that go beyond preserving and analyzing a particular tradition and undertake situating oral poetics at a theoretical level comparable to that of literature, film, theatre, music, and the other manifestations ultimately stemming from oral-traditional poetic performance. At the same time, we have an opportunity to develop the theoretical frameworks for oral poetics hand in hand with the sciences of mind, brain, and natural and artificial intelligence. We need to use the computational tools, empirical methods, and theoretical approaches provided by those disciplines to analyze oral poetics under a new light. Of no less importance, we should also contribute insights from the study of the living laboratory of oral traditions. It is still not too late to situate oral poetics as a central discipline for the study not only of literature and the arts, but also of cognition, emotion, evolutionary anthropology, and natural and artificial intelligence. Students of oral traditions and of the multimodal poetic performances that shape them hold the key to the basic cognitive currency of the species.

References

Baayen, R. H. / Chuang, Y.-Y. / Shafaei-Bajestan, E. / Blevins, J.P. (2019), "The Discriminative Lexicon: A Unified Computational Model for the Lexicon and Lexical Processing in Comprehension and

43 "Preserving the World's Language Diversity Through AI" 2023: <https://about.fb.com/news/2023/05/ai-massively-multilingual-speech-technology/>. An international initiative for LLMs representative of EU languages is also in the making: https://language-data-space.ec.europa.eu/related-initiatives/alt-edic_en.

44 Steen *et al.* 2018; Uhrig 2018. See <https://www.redhenlab.org/>.

45 See <https://www.multi-data.eu/>.

- Production Grounded Not in (De)Composition but in Linear Discriminative Learning”, in: *Complexity* (January), 1–39. <https://doi.org/10.1155/2019/4895891>.
- Boden, M. A. (2009), “Computer Models of Creativity” in: *AI Magazine* 30 (3), 23–34.
- Bonifazi, A. (2008), “Memory and Visualization in Homeric Discourse Markers”, in: A. Mackay (ed.), *Orality, Literacy, Memory in the Ancient Greek and Roman World*, Leiden – Boston, 35–64.
- Bonifazi, A. / Elmer, D. (2012a), “Composing Lines, Performing Acts: Clauses, Discourse Acts, and Melodic Units in a South Slavic Epic Song”, in: E. Minchin (ed.), *Orality, Literacy and Performance in the Ancient World*, Leiden – Boston, 89–109.
- Bonifazi, A. / Elmer, D. (2012b), “The Meaning of Melody: Remarks on the Performance-Based Analysis of Bosniac Epic Song”, in: J. Harris / B. Hillers (eds.), *Child’s Children: Ballad Study and Its Legacies*, Trier.
- Calvo, P. / Lawrence, N. (2022), *Planta Sapiens: Unmasking Plant Intelligence*, London.
- Collins, Chr. (1991), *The Poetics of the Mind’s Eye: Literature and the Psychology of Imagination*, Philadelphia, PA.
- d’Errico, F. / Backwell, L. / Villa, P. / Degano, I. / Lucejko, J.J. / Bamford, M. K. / Higham, T. F. G. / Colombini, M.P. / Beaumont, P. B. (2012), “Early Evidence of San Material Culture Represented by Organic Artifacts from Border Cave, South Africa” in: *Proceedings of the National Academy of Sciences* 109 (33), 13214–13219. <https://doi.org/10.1073/pnas.1204213109>.
- Driess, D. / Xia, F. / Sajjadi, M. S. M. / Lynch, C. / Chowdhery, A. / Ichter, B. / Wahid, A. et al. (2023), “PaLM-E: An Embodied Multimodal Language Model.” arXiv. <https://doi.org/10.48550/arXiv.2303.03378>.
- Esrock, E. J. (1994), *The Reader’s Eye: Visual Imaging as Reader Response*, Baltimore – London.
- Fabb, N. (1997), *Linguistics and Literature*, Oxford – Malden, Mass.
- Fauconnier, G. (2005), “Compression and Emergent Structure” in: *Language and Linguistics* 6 (4), 523–538.
- Fauconnier, G. / Turner, M. (2002), *The Way We Think: Conceptual Blending and the Mind’s Hidden Complexities*, New York.
- Fauconnier, G. / Turner, M. (2008), “The Origin of Language as a Product of the Evolution of Modern Cognition”, in: B. Laks (ed.), *Origin and Evolution of Languages: Approaches, Models, Paradigms*, Sheffield, 133–156.
- Fjeld, J. / Mahari, R. / Epstein, Z. (2023), “Generative AI is a Minefield for Copyright Law” in: *The Conversation*, June 15. <http://theconversation.com/generative-ai-is-a-minefield-for-copyright-law-207473>.
- Foley, J.M. (1991), *Immanent Art: From Structure to Meaning in Traditional Oral Epic*, Bloomington.
- Foley, J.M. (2002), *How to Read an Oral Poem*, Champaign.
- Foley, J.M. (2004), “Comparative Oral Traditions”, in: Euskal Herriko Bertsozale Elkarte, Eusko Jaurilaritza, Gipuzkoako Foru Aldundia, Bizkaiko Foru Aldundia, *Ahozko Inprobisazioa Munduan*, Saint Sebastian, 19–38.
- Gemini Team / Anil, R. / Borgeaud, S. / Wu, Y. / Alayrac, J.-B. / Yu, J. / Soricut, R. et al. (2023), “Gemini: A Family of Highly Capable Multimodal Models” in: arXiv. <https://doi.org/10.48550/arXiv.2312.11805>.
- Gullberg, M. / de Bot, K. / Volterra, V. (2008), “Gestures and Some Key Issues in the Study of Language Development”, in: *Gesture* 8 (2), 149–179.
- Gurnee, W. / Tegmark, M. (2023), “Language Models Represent Space and Time”, in: arXiv. <https://doi.org/10.48550/arXiv.2310.02207>.

- Halevy, A. / Norvig, P. / Pereira, F. (2009), “The Unreasonable Effectiveness of Data”, in: *IEEE Intelligent Systems* 24 (2), 8–12. <https://doi.org/10.1109/MIS.2009.36>.
- Henshilwood, Chr. S. / d’Errico, F. / van Niekerk, K.L. / Dayet, L. / Queffelec, A. / Pollarolo, L. (2018), “An Abstract Drawing from the 73.000-Year-Old Levels at Blombos Cave, South Africa” in: *Nature* 562 (7725), 115–118. <https://doi.org/10.1038/s41586-018-0514-3>.
- Henshilwood, Chr. S. / d’Errico, F. / Watts, I. (2009), “Engraved Ochres from the Middle Stone Age Levels at Blombos Cave, South Africa” in: *Journal of Human Evolution* 57 (1), 27–47. <https://doi.org/10.1016/j.jhevol.2009.01.005>.
- Hogan, P. C. (2003), *Cognitive Science, Literature, and the Arts: A Guide for Humanists*, New York – London.
- Holler, J. / Levinson, S. C. (2019), “Multimodal Language Processing in Human Communication”, in: *Trends in Cognitive Sciences*, June, S1364661319301299. <https://doi.org/10.1016/j.tics.2019.05.006>.
- “Introducing Gemini: Our Largest and Most Capable AI Model” 2023. Google. December 6, 2023. <https://blog.google/technology/ai/google-gemini-ai/>.
- “Introducing LLaMA: A Foundational, 65-Billion-Parameter Language Model.” n.d. Accessed January 12, 2024. <https://ai.meta.com/blog/large-language-model-llama-meta-ai/>.
- Janko, R. (1998), “The Homeric Poems as Oral Dictated Texts”, in: *The Classical Quarterly* 48 (1), 1–13. <https://doi.org/10.2307/639747>.
- Koestler, A. (1964), *The Act of Creation*, New York.
- Kosslyn, S. M. / Thompson, W.L. / Ganis, G. (2009), *The Case for Mental Imagery*, Oxford – New York.
- Lahr, M. M. (2021), “The Complex Landscape of Recent Human Evolution” in: *Science* 372 (6549), 1395–1396. <https://doi.org/10.1126/science.abj3077>.
- Lang, C. (2023), “Generative AI, Copyrighted Works, and the Quest for Ethical Training Practices”, in: *Copyright Alliance* (blog), December 14, 2023. <https://copyrightalliance.org/generative-ai-ethical-training-practices/>.
- Levinson, S. C. (2016), “Turn-Taking in Human Communication – Origins and Implications for Language Processing”, in: *Trends in Cognitive Sciences* 20 (1), 6–14. <https://doi.org/10.1016/j.tics.2015.10.010>.
- Levinson, S. C. / Holler, J. (2014), “The Origin of Human Multi-Modal Communication”, in: *Philosophical Transactions of the Royal Society B: Biological Sciences* 369 (1651), 20130302. <https://doi.org/10.1098/rstb.2013.0302>.
- Lewis-Williams, J. D. (2013), *San Rock Art*, Athens.
- Lord, A. B. (1960), *The Singer of Tales*, Cambridge, Mass.
- Lord, A. B. (1991), *Epic Singers and Oral Tradition*, Ithaca – London.
- Lord, A. B. (1995), *The Singer Resumes the Tale*, Ithaca – London.
- Mandler, J. M. (2004), *The Foundations of Mind: Origins of Conceptual Thought*, Oxford – New York.
- Mandler, J. M. (2010), “The Spatial Foundations of the Conceptual System”, in: *Language and Cognition* 2 (1), 21–44.
- Mandler, J. M. / Pagán Cánovas, C. (2014), “On Defining Image Schemas” in: *Language and Cognition* 6 (4), 510–532. <https://doi.org/10.1017/langcog.2014.14>.
- Mcbrearty, S. / Brooks, A. S. (2000), “The Revolution That Wasn’t: A New Interpretation of the Origin of Modern Human Behavior”, in: *Journal of Human Evolution* 39 (5), 453–563. <https://doi.org/10.1006/jhevol.2000.0435>.
- McNeill, D. (2012), *How Language Began: Gesture and Speech in Human Evolution*, Cambridge.
- Miall, D. S. (2006), *Literary Reading: Empirical & Theoretical Studies*, New York etc.

- Milin, P. / Divjak D. / Dimitrijević, S. / Baayen, R.H. (2016), “Towards Cognitively Plausible Data Science in Language Research”, in: *Cognitive Linguistics* 27 (4): 507–526. <https://doi.org/10.1515/cog-2016-0055>.
- Mithen, S. J. (1996), “The Origin of Art: Natural Signs, Mental Modularity, and Visual Symbolism”, in: Maschner, H.D.G. (ed.), *Darwinian Archaeologies. Interdisciplinary Contributions to Archaeology*. Boston, MA, 197–217.
- Mithen, S. J. (ed.) (1998), *Creativity in Human Evolution and Prehistory*, London.
- Mithen, S. J. (1999), *The Prehistory of the Mind: The Cognitive Origins of Art, Religion and Science*, London.
- Miyagawa, S. / Lesure, C. / Nóbrega, V.A. (2018), “Cross-Modality Information Transfer: A Hypothesis about the Relationship among Prehistoric Cave Paintings, Symbolic Thinking, and the Emergence of Language”, in: *Frontiers in Psychology* 9. <https://doi.org/10.3389/fpsyg.2018.00115>.
- Nanay, B. (2018), “Multimodal Mental Imagery”, in: *Cortex; a Journal Devoted to the Study of the Nervous System and Behavior* 105, 125–134. <https://doi.org/10.1016/j.cortex.2017.07.006>.
- Ong, W. J. (1982), *Orality and Literacy*, London – New York.
- Pagán Cánovas, C. (2010), “Erotic Emissions in Greek Poetry: A Generic Integration Network”, in: *Cognitive Semiotics* 6. 7–32.
- Pagán Cánovas, C. (2015), “Cognitive Patterns in Greek Poetic Metaphors of Emotion: A Diachronic Approach”, in: J.E. Díaz-Vera (ed.), *Metaphor and Metonymy across Time and Cultures: Perspectives on the Sociohistorical Linguistics of Figurative Language*, Berlin – Boston, 295–318.
- Pagán Cánovas, C. (2016), “Rethinking Image Schemas: Containment and Emotion in Greek Poetry”, in: *Journal of Literary Semantics* 45 (2), 117–139. <https://doi.org/10.1515/jls-2016-0008>.
- Pagán Cánovas, C. (2020), “Learning Formulaic Creativity: Chunking in Verbal Art and Speech”, in: *Cognitive Semiotics* 13 (1). <https://doi.org/10.1515/cogsem-2020-2023>.
- Pagán Cánovas, C. (2022), “Authors: Cognitive Patterns and Individual Creativity”, in: P. C. Hogan / B. J. Irish / L. P. Hogan (eds.), *The Routledge Companion to Literature and Emotion*, London, 261–271. <https://doi.org/10.4324/9780367809843>.
- Pagán Cánovas, C. / Valenzuela, J. / Santiago, J. (2015), “Like the Machete the Snake: Integration of Topic and Vehicle in Poetry Comprehension Reveals Meaning Construction Processes”, in: *Psychology of Aesthetics, Creativity, and the Arts* 9 (4), 385–393. <https://doi.org/10.1037/aca0000024>.
- Pagán Cánovas, C. / Antović, M. (2016a), “Construction Grammar and Oral Formulaic Theory”, in: C. Pagán Cánovas / M. Antović (eds.), *Oral Poetics and Cognitive Science*, Berlin – Boston, 79–98.
- Pagán Cánovas, C. (2016b), “Formulaic Creativity: Oral Poetics and Cognitive Grammar”, in: *Language & Communication* 47 (March), 66–74. <https://doi.org/10.1016/j.langcom.2015.12.001>.
- “PaLM-E: An Embodied Multimodal Language Model”, n.d. Accessed October 13, 2023. <https://palm-e.github.io/>.
- Parry, M. (1971), *The Making of Homeric Verse: The Collected Papers of Milman Parry*, edited by A. Parry, Oxford.
- Patel, A. D. (2010), *Music, Language, and the Brain*. Oxford – New York.
- Pirrelli, V. / Marzi, C. / Ferro, M. / Cardillo, F. A. / Baayen, H. R. / Milin, P. (2020), “Psycho-Computational Modelling of the Mental Lexicon”, in: V. Pirrelli / I. Plag / W. U. Dressler (eds.), *Word Knowledge and Word Usage*, Berlin, 23–82. <https://doi.org/10.1515/9783110440577-002>.

- Powell, B. B. (1996), *Homer and the Origin of the Greek Alphabet*, Cambridge.
- Powell, B. B. (2007), *Writing and the Origins of Greek Literature*, Cambridge.
- “Preserving the World’s Language Diversity Through AI”, 2023, in: *Meta* (blog), May 22, 2023. <https://about.fb.com/news/2023/05/ai-massively-multilingual-speech-technology/>.
- Pylyshyn, Z. W. (2002), “Mental Imagery: In Search of a Theory”, in: *Behavioral and Brain Sciences* 25 (02), 157–82.
- Richardson, A. / Steen, F.F. (2002), “Literature and the Cognitive Revolution: An Introduction”, in: *Poetics Today* 23 (1), 1–8. <https://doi.org/10.1215/03335372-23-1-1>
- Schwartz, J. H. (2016), “What Constitutes Homo Sapiens? Morphology versus Received Wisdom”, in: *Journal of Anthropological Sciences* 94, 1–16.
- Slobin, D. I. (1987), “Thinking for Speaking”, in: *Annual Meeting of the Berkeley Linguistics Society*, September, 435–445. <https://doi.org/10.3765/bls.v13i0.1826>.
- Steen, F. F. / Hougaard, A. / Joo, J. / Olza, I. / Pagán Cánovas, C. / Pleshakova, A. / Ray, S. et al. (2018), “Toward an Infrastructure for Data-Driven Multimodal Communication Research”, in: *Linguistics Vanguard* 4 (1). <https://doi.org/10.1515/lingvan-2017-0041>.
- “The African Rock Art Digital Archive”, n.d. Accessed January 11, 2024. <http://www.sarada.co.za/#/library/>.
- Thomas, E. M. (2007), *The Old Way: A Story of the First People*, New York.
- Tsur, R. (2008), *Toward a Theory of Cognitive Poetics: Second, Expanded and Updated Edition*, Liverpool.
- Turin, M. (2013), “Orality and Technology, or the Bit and the Byte: The Work of the World Oral Literature Project” in: *Oral Tradition* 28/2, 173–186.
- Turin, M. / Wheeler C. / Wilkinson, E. (eds.) (2013), *Oral Literature in the Digital Age: Archiving Orality and Connecting with Communities*, Cambridge. <http://www.openbookpublishers.com/product/186>.
- Turner, M. (1996), *The Literary Mind: The Origins of Thought and Language*, Oxford – New York.
- Turner, M. (2006), “Compression and Representation”, in: *Language and Literature* 15 (1), 17–27. <https://doi.org/10.1177/0963947006060550>.
- Turner, M. (2014), *The Origin of Ideas: Blending, Creativity, and the Human Spark*, Oxford – New York.
- Uhrig, P. (2018), “NewsScape and the Distributed Little Red Hen Lab – A Digital Infrastructure for the Large-Scale Analysis of TV Broadcasts”, in: A.J. Zwierlein / J. Petzold / K. Boehm / M. Decker (eds.), *Anglistentag 2017 Regensburg: Proceedings*, in: *Proceedings of the Conference of the German Association for the Study of English* 39, Trier, 99–114.
- Vaswani, A. / Shazeer, N. / Parmar, N. / Uszkoreit, J. / Jones, L. / Gomez, A. N. / Kaiser, L. / Polosukhin, I. (2017), “Attention Is All You Need”, in: *arXiv:1706.03762 [Cs]*, December. <http://arxiv.org/abs/1706.03762>.
- Weidinger, L. / Isaac, W. (2023), “Evaluating Social and Ethical Risks from Generative AI”, in: *Google DeepMind*, October 19, 2023. <https://deepmind.google/discover/blog/evaluating-social-and-ethical-risks-from-generative-ai/>.
- Yunis, H. (ed.) (2003), *Written Texts and the Rise of Literate Culture in Ancient Greece*, Cambridge.

Ahuvia Kahane

New Dawns Forever: Orality and the Plasticity of Homer's Verse

But since iterability makes intention removed and split, the formulaic diction never reveals to the listener the fullness of its purpose in repetition: the mechanical force of repetition is never fully passive and the purpose in repetition is never fully active, present and activated.

(Pucci 1982, 21)

Abstract: This chapter argues for the irreducible complexity and plasticity of Homer's repetitive language. Every iteration of Homer's traditional diction, the essay argues, is "exceptional" and unique. Or, as historian Reinhart Koselleck says: "Every event produces more and at the same time less than is contained in its pre-given elements: hence its permanently surprising novelty". To argue its case, the chapter develops close readings of Homeric verse, while, at the same time, considering basic scientific perspectives, drawing on insights from studies of Homer and orality as well as neuroscience, cognitive linguistics, the natural and exact science and contemporary philosophical reflection.

Keywords: Exceptionality; dynamic systems; plasticity; complexity; quantum entanglement; difference.

1 Introduction. Dyads and Method

1.1

The oral and the literate are fundamental yet elusive modalities of expression.¹ In a 'minimalist' material sense, if we could suspend all cognitive, noetic, poetic, stylistic and historical attribution, we might perhaps describe 'orality' as the inscription of discourse in speech by the mouth and of 'literacy' as the practices surrounding the inscription of discourse by means of visual symbols. Such material reductionism is impossible, of course. But even if it were, orality and literacy

Note: This paper is for Piero Pucci. I am grateful to members of the Cambridge A-Caucus and the Bristol Orality and Literacy Seminars (2023) for their useful comments on early versions of this paper.

1 Some recent bibliographies in this volume and previous volumes, Ercolani and Lulli 2022, vols. I and II. Useful material in Olson / Torrance 2009, esp. Parts I and II; Hemphill 2011, etc.

would still be entangled in infinitely variable permutations.² Words that I may voice or mumble while writing this essay, for example, are actions that, in different measures, incorporate both ‘oral’ and ‘written’ elements.³ Similarly, say, with regard to the modality of Homeric epic and subject to a range of views about the manner and date of composition, we could speak of the various historical and performative elements of inscription by voice/mouth and by visual symbols involved in processes of composition, performance and reception.⁴ The *Iliad* and *Odyssey* as we have them have existed for millennia in written form even as most scholars assume that, in one way or another, the poems emerged from early contexts where written inscription was not used. The poems contain ‘formulaic’ repetitions, ring composition (A-B-C-C-B-A verse structures), ‘typical scenes’ and other formal features that are, by various accounts, associated with- or derivative from composition processes that are free from the use of written texts.⁵ Similarly, Homer’s verse is often performed – recited or read silently, to one’s self or to an audience – in contexts to which writing is central. Within the narrative of Homer’s epics, sung performance (by Phemius, Demodocus, etc.), whatever its relation to historical circumstances, is the standard.⁶ In the poems, no reference is made to writing or written texts, though the canonical *Iliad* famously mentions, if only in a brief and disputed manner, visual σήματα – the “baneful signs” of Belerophon (*Il.* 6.168).⁷ The cognates of certain lexical items in Homer’s verse appear in Mycenaean records in Linear B script (ἄναξ, *wa-na-ka*, etc.) and thus have at least some basic written provenance.⁸ Certain permutations of names in Luwian written inscriptions correspond, in the view of some scholars, to Homeric names

2 I use the term ‘entanglement’ in a technically-derived sense. See Barad 2007 in Section 6, below, and in the context of human behaviour; e.g., Hodder 2014, 19–20: “I define entanglement as the sum of four types of relationships between humans and things: humans depend on things (HT), things depend on other things (TT), things depend on humans (TH) and humans depend on humans (HH)”.

3 Some of this complexity is reflected, e.g., in Oesterreicher (*parlato-scritto, scritto-parlato*, etc.) in Bakker / Kahane 1997.

4 Views of the evolution of the text, e.g. in Ready 2019.

5 See, e.g., Edwards’ early bibliographies of work on the formula (1986; 1988); Foley’s bibliographies (in Foley 2010; etc.); for ring composition (more recently, Nimis 1999 and in Mackay 1999 – though such composition often in explicitly ‘literate’ authors); for ‘typical scenes’, see e.g., Clark 2004, amidst vast bibliographies.

6 Beck 2012 in Minchin 2012, etc.

7 See, e.g., in Stoevesandt / Olson 2016, 74–75 (German: Stoevesandt 2008); Graziosi / Haubold 2010, 179–180; also Kirk 1990, 181–182) with further references. See esp. Bassi 1997, 325–329.

8 More-recently, Janko 2017.

(Wilusa/Ilios).⁹ Some archaic Greek written texts, such as the 6th c. BCE Nestor's Cup inscription (Pithecusae, Ischia, 6 c. BCE) or the Idamemeus inscription from Kamyros seem to relate to Homeric epic, and, since the time of Pisistratus in the 6th century BCE, perhaps earlier, some written texts of heroic epic may have been in existence.¹⁰

My purpose here is not to rehearse such well-known facts nor to argue for any particular position in the scholarly disputes that surround them. The point, rather, is that whichever way we look at Homer, orality and literacy, even if considered in narrow, reductionist terms, we encounter inextricably complex modal entanglements. Furthermore, even states of reduced complexity are often incalculable. We will never know whether an *aidos* singing of Ἀτρεΐδης τε ἄναξ ἀνδρῶν καὶ Διὸς Ἀχιλλεύς (*Il.* 1.7) will have seen or recollected, or known, say, the word *wana-ka* inscribed in Linear B tablets which, regardless, record mostly shorter inventories, not long, formally structured poetic narratives like the Homeric poems. In phenomenological terms, cognition, even if stripped down to its bare material attributes, is always an event that incorporates recollection and anticipation.¹¹ There is thus an almost infinitely complex and often not fully determinable range of permutations by which voiced and visual verbal modalities interact.

1.2

Needless to say, it is impossible to separate material discourse from 'mind'. Since the 18th century (and well before that), since Vico, Wood, the Abbé d'Aubignac, Wolf and others, the study of orality has been directed at an understanding, not of abstract modalities of inscription, but precisely at those more elaborate performative, cognitive, stylistic, poetic and noetic aspects of the use of voice and visual symbols.¹² With 'mind' comes an incalculable increase in the complexity of what are already complex interactions.

In practical terms, scholars have long made some allowances for such complexity.¹³ And yet, projections of the abstracted dyad 'oral/literate' persist, as if

9 Korfmann 2005 and earlier work; recently, e.g., Schürr 2019 and Bryce 2008 and others in Faranton / Mazoyer 2017 and earlier volumes.

10 Watkins 1976; Faraone 1996 and extensive later literature on the Pithecusae cup; the Kamyros inscription: Jeffery 1990, etc.; more recently, Bettarini 2014.

11 'Recollection' and 'anticipation' as key philosophical terms, see, e.g., Husserl 2012.

12 Vico 1985; Wolf 1986, etc.

13 See Finnegan 1980; Bakker / Kahane 1997; Ercolani / Lulli 2022; etc.

we are dealing with two distinct modalities of expression. As Lowry Hemphill, for example, notes,¹⁴

The oral–written contrast ... has been associated from the start with controversial claims about the cognitive advantages of written language over oral communication as modes of representation and reasoning.

The same framework, of course, has also been associated, already in antiquity, with controversial ‘phonocentric’ claims about the cognitive advantages of oral language over written communication.¹⁵ Nevertheless, whether considered from one perspective or the other, the traditional binary of orality and literacy has not only “been slow to recognize ... the interdependence of speaking” but, as Christopher Canon and Matthew Rubery, for example, stress, forms “a dyad that, in effect, came into existence to ignore such interdependence.”¹⁶

1.3

Acknowledging such interdependence invokes many intricate questions of observation, organization, analysis, definition and presentation in voiced and written inscription as cognitive and historical events. At the core of the problem, I nevertheless want to suggest, are far more general, ontological, matters of principle and of the irreducible nature of events.

As Reinhard Koselleck, for example, says:¹⁷

Every event produces more and at the same time less than is contained in its pre-given elements: hence its permanently surprising novelty.

The unpredictability or “surprising novelty” of such events is, of course, the cause of difficulties whenever we study the world, or historical events or texts. Almost invariably, we attempt to contain such difficulty within closed, and thus manageable, instrumentally productive critical frames of, e.g., chronology, genre, gram-

¹⁴ Hemphill 2011, 70.

¹⁵ Already, e.g., in Aristotle (*De Int.* 16a. 3–5. See further below). The ancients rarely read silently (Knox 1968 and more recently, Burnyeat 1997; Johnson 2000; Livingstone 2011); etc. For *phonocentrism*, see, e.g., Derrida 1998, etc.

¹⁶ Canon / Rubery 2020, 351. Thus, e.g., Lord 1960; Ong 1982; Foley 1988, 1991a; etc., still widely cited and often assuming dyadic divisions. For critique, see Biakolo 1999; Kahane 2020; etc.

¹⁷ Koselleck 2004, 110.

matical rules, dyadic oral/literate structures, and so on.¹⁸ And yet, the very practice of containment, framing, definition and the formation of patterns, forces us to acknowledge that all such patterns are essentially incomplete. This is as true of history in general as it is of particular notions of Homeric orality or, say, in an even more pointed manner, the classification and analysis of formulaic diction. Exceptions emerge. The frame, the rule, the dyad always fail to align in full with the evidence, with close reading. Misalignment appears not only when we examine the evidence over time, across space, in different languages and cultures, but perhaps even more so when we examine the very same 'object' in the most minute, 'philological' manner. We are thus, as we shall see from our discussion of Homeric verse below, forever caught between the surplus and shortfall of events and our attempts to contain them. To understand Homeric orality, let me suggest, we must consider the place of exceptionality in our system as an organic element of the system itself.

1.4

We can, of course, exclude exceptionality from our notion of system, either practically or as a matter of method. We can treat exceptions and misalignment as the incidental marks of history, as 'noise' that is generated by imperfect knowledge, reasoning or measurement, as *parole* in relation to the core of *langue*, and so on.¹⁹ Nevertheless, to the degree that we acknowledge, for instance, Reinhard Koselleck's point (above) or, as we shall see, systematic arguments in a broad range of other relevant disciplinary discussions, we need to take a closer look at incidental process and at states of exceptionality, both as principle and as a practical method of approaching, in our case, the question of orality. That, again, is precisely the objective of this essay.

In what follows I will pursue some close readings of Homeric verse and of some discussions within the study of orality. Inseparably from such readings, we will consider questions of basic scientific perspective, drawing on insights from such fields of enquiry as neuroscience, cognitive linguistics, language development studies and more broadly the natural and exact science as well as contem-

¹⁸ Thus, e.g., Newtonian laws of motion and time, grammatical and phonological 'laws' or, in the case of Homeric diction, Parryan laws, considered below. A prominent example of such containment practice is attested in the chronological parsing of time; see, e.g., Markosian 2020; in relation to antiquity, see Kahane / Ashton forthcoming; Kahane forthcoming.

¹⁹ As, for example, de Saussure 2015. Methodological comments on such noise in classical science, e.g., in Nicolis / Prigogine 1989.

porary philosophical reflection. Such scientific insights, we must stress, are not united by ‘monolithic’ method. Science itself is sometimes ‘exceptional’. In a broad sense, however, many discussions within modern science, as indeed our own discussions, are linked by the attempt to understand the relations between pattern, frame, exceptionality and change in systemic terms.

2 Homer, Orality, Exception

2.1

The question of orality and, indeed, of orality in Homer, is organized precisely around the problem of exceptionality, its place within the frame or the ‘system’ and the notion of essence vs. that which is inessential. Consider, for example, Milman Parry’s famous definition of the formula:²⁰

In the diction of bardic poetry, the formula can be defined as an expression *regularly used, under the same metrical conditions*, to express an *essential idea*. What is *essential* in an idea is what remains after all *stylistic superfluity* has been taken from it. Thus the essential idea of the words ἦμος δ’ ἠριγένεια φάνη ῥοδοδάκτυλος Ἥως is ‘when day broke’ [my emphasis].

In this definition, the repetition of formal attributes (“regular use”) within identical formal contexts (“the same metrical conditions”), coupled with semantic conformity (the “essential idea”) and the dismissal of non-essential variation (“stylistic superfluity”) combine to exclude the idea of exceptionality from the notion of oral diction – diction whose purpose is to aid to composition in oral contexts. Indeed, Parry’s choice of the very term ‘formula’, an expression representing a uniform general rule or law, suggests precisely the exclusion of exceptions.

Parry’s definition above is only the starting point for his wider argument. He goes on to characterize in much more specific terms what he calls the *oral-traditional* style. In methodological terms, the exclusion of exception is here yet more pronounced. As, for example, in classical science (Newton, Maxwell, Laplace, etc.), Parry defines the oral-traditional style as a *system* governed by *laws*. These are, above all, the law of ‘economy’, or the avoidance of metrical redundancy within sets of formulae expressing an essential idea, and the law of ‘extension’, or the development of broad sets of discrete metrical allomorphs within sets.²¹ This sys-

²⁰ Parry 1971, 14. TE 13, .

²¹ Parry 1971, 6–7, 16–18, 34, 100, 246, etc.

tem, Parry argued, was necessary for the process of composition in performance contexts where writing was not available as a method of inscription and an aid to memory.²² The scope and consistency of the system and its determinant laws were fundamental features that, Parry argued, could not have been invented by single singer. Thus, in the absence of writing, the system, constituted and defined by its laws was proof of diction's development by a long tradition of singers.

2.2

Parry's methodological resistance to exceptionality was concomitant to his use of quantitative method and general principles of 'classical' science.²³ Needless to say, his system did not fully agree with the empirical evidence and some scholars would say that it attested to substantive misalignment. Already long ago, David Shive in *Naming Achilles* demonstrated that even the most prominent formulaic 'systems', the ones where a functional need is most evident, attest to substantive exceptions.²⁴ Parryan *economy and extension* are 'fragile', contingent patterns, not algorithmic laws. Perhaps more fundamentally, as Milman Parry's son Adam points out, Parry's own work demonstrates that²⁵

...in most cases [the] apparent deviations from the economy of the system are themselves best explained by the sense of analogy which controls the system as a whole and indeed created it in the first place.

Exceptionality, we must conclude, seems to be an *integral* property of formulaic systems in Homer. What's more, as often pointed out, systems characterized by Parryan economy and extension are not attested in other forms of poetry we know or assume to be wholly or partially oral.²⁶ Even the Serbo-Croat oral traditions invoked by Parry and Lord themselves do not attest to such systematic

22 Parry 1971, 6–7 “the simplicity of the system of epic language consists in the fact that corresponding dialectal or artificial elements are of unique metrical value; and the extension of the system lies in the great number of cases in which, to a given element of one dialect, one can oppose the corresponding element of another” (with ‘simplicity’ used instead of ‘economy’ 234. Discussion in Kahane 1994.

23 See, e.g., Sale 1996. ‘Classical’ here, referring not to antiquity, but to the early modern era and to ‘Newtonian’ science.

24 Shive 1987.

25 Parry 1971, xxviii. Neither father nor son drew the full methodological conclusions from such ‘deviations’. For a detailed discussion of the role of analogy in Parry's work, see Kahane 2021.

26 See Janko 1982, 277 n. 6. and Foley 1991b, 128 n. 8, somewhat grudgingly.

laws.²⁷ Let us also note again that, even if we do associate the qualities of economy and extension with orality, even if only ‘exceptionally’ in Homer, unless we allow for the organic connectedness of the oral and the written we are forced to ask why an obsolescent verbal system designed specifically for oral composition should have been preserved within a written mode of discourse, where it offers no clear functional advantages.²⁸ The very arc of tradition points to processes of change that are defined, not by strict need or practical circumstances, but by complex and not always apparent forces. So long as we continue to work within a binary frame of systematic rules and non-systematic exceptions, we face considerable critical difficulties. It is hardly surprising, then, that many contemporary scholars have set aside the debate over orality and have focused their efforts on other questions, such as the poetics of particular styles, the poetics of repetition or the resonance of thematic traditions, or have used the term orality in a casual, offhand and non-committal manner.²⁹

In contrast, internalizing the fact that the oral-formulaic system is preserved with substantive exceptions in the written text of Homer as we have it (in its present form – more or less since Hellenistic times) provides convenient answers. Either the system is inherently more complex, even in its most extreme performative circumstances, where knowledge of writing is minimal or even non-existent. Or, in the process of the transition from oral to written, the system of Homeric diction evolved to create its organic states of exception. In other words, the empirical evidence, however we view it, seem to confirm that the association of Parryan ‘laws’ with orality is at best partial, non-binding, non-universal, and, most importantly, *exceptional*.

27 Economy and extension are not present, for example, in Serbo-Croat epic and are not discussed in Lord 1960 whose examples (e.g., Ch. 3, pp. 47–49) attest to a wide variety of ‘non-economical’ usage, e.g., in two-syllable words for ‘horse’.

28 Finkelberg 2024 has suggested that the exceptions to Parryan formulaic systems do not invalidate the ideas of economy and extension or even their usefulness in non-literate contexts. Finkelberg nevertheless does not draw methodological conclusions about the nature of the system.

29 See details in Kahane 2018b, 78–79, also citing Finkelberg 2012, 63: “in recent decades, the number of scholarly publications on matters of formulaic analysis has sharply decreased, and the enthusiasm with which the essentials of oral formulaic theory were discussed in the 1960s has given way to expressed fatigue and a defensive, if not apologetic, attitude”.

2.3

This conclusion throws open the broader question of orality. Consider, for example, one of the seminal works in the field, Walter Ong's *Orality and Literacy. The Technologizing of the Word*. Where the Parryan frame is specific to Homer and highly technical, Ong's discussion, heavily reliant on Parry's argument and conclusions, associates the modalities of the orality and literacy with higher aspects of cognition and thought.³⁰

In *Orality and Literacy* (1982) Ong suggested that³¹

abstractly sequential, classificatory, explanatory examination of phenomena or of stated truths is impossible without writing and reading. Human beings in primary oral cultures, those untouched by writing in any form, learn a great deal and possess and practice great wisdom, but they do not 'study'.

As, for instance, Christopher Canon and Matthew Rubery in recent comments rightly note, for Ong,³²

...the oral and the literate were sorted into distinct "cultures," the literate succeeding the oral in a relation that almost always amounted to something like progress.

Ong's own work is perhaps the best example of such progressionism. An unabashed advocate of the superiority of 'advanced' literacy,³³ he himself offers a "sequential, classificatory, explanatory examination of phenomena ..[and] stated truths". There are, nevertheless, many reasons to doubt Ong's critical observations, not least his taxonomic dichotomy of "distinct cultures", his unexamined progressionism and his heavily Eurocentric perspectives his unexamined progressionism ("primary oral cultures ... untouched by writing) and his heavily Eurocentric perspectives.³⁴

³⁰ See Ong 1982, 20–26, 'Milman Parry's Discovery', and *passim*. Not surprisingly, Ong avoids all but brief mention of Parryan formal 'laws'.

³¹ Ong 1982, 8.

³² Canon / Rubery 2020, 351.

³³ Cf. Puchner 2017 who seems to credit writing with all philosophical, historiographic, poetic and religious achievement.

³⁴ See, e.g., Biakolo 1999; Kahane 2020.

2.4

To be fair, Ong's underlying assumption of differences between material, cognitive and performative contexts is undeniably right. For example, as a wide range of scientific arguments suggests, there are demonstrable differences between the way the brain processes discursive information in voiced communication and in communication that is based in the interpretation of written symbols and perhaps especially alphabetic scripts.³⁵ The brain, however, is an adaptive organ. It processes different sensory data differently. Patterns emerge and dissolve. Put precisely: in accordance with this basic premise, difference is always, well... 'different', not, as Ong would have it, a categorical divide between two abstract modalities each of which is in a state of permanent sameness.

The scientific principle is well established. In 1890, well before the emergence of contemporary neuroscience, William James suggested, with great foresight, that³⁶

[t]he phenomena of habit in living beings are due to the plasticity of the organic materials of which their bodies are composed.

James' embryonic notion of plasticity was picked up with vigour by neuroscientists since the end of the 20th century. The principle now commands wide scientific consensus.³⁷ In early childhood, but, significantly, throughout adulthood too, the brain retains its 'plastic' potential. As Kandel and Barres put it, "chemical synapses are functionally and anatomically modified through experience and learning".³⁸

2.5

Of course, there will have been times and places in history, for example in early societies in Greece, when communication by visual symbols was limited or even near non-existent. It is certainly the case that the use of visual symbols as a lan-

³⁵ See Petersson, Ingvar *et al.* Ong briefly mentions hieroglyphics, see 1982, 84, but otherwise speaks only of alphabetic scripts/writing.

³⁶ James 2007 (1890), 105.

³⁷ See Kandel / Barres / Hudspeth 2013.

³⁸ Kandel / Barres / Hudspeth 2013, 27. For an excellent, pointed discussion of learning processes as discussed in neuroscience and the representation of poetic performance in Homer, see Giordano 2022, in part. p. 193: "the Homeric model of communication brings to the fore the idea that learning, sharing knowledge and teaching are virtuously connected with enjoyment, an idea that brain research has increasingly confirmed".

guage system and of alphabetic scripts in particular is not attested in Ionia and in Greece until, say, the second millennium BCE.³⁹ But, with the gradual introduction of the Phoenician alphabet and proliferation in the use written language in Greece, the “experience and learning” of the creators of epic verse and its audiences will have changed.⁴⁰ As with synaptic structure, we have no reason to assume that such changes to experience and learning will have been uniform, consistent or moving with linear teleological purpose, nor governed by deterministic necessity or algorithmic laws across time, space, political, social and economic contexts. With changes in experience, we have every reason to assume, chemical synapses and thus the neural foundations of the use of discourse and eventually discourse itself, will have been “functionally modified”. Certain patterns pertaining to oral and literate modalities will have emerged. But precisely because of the dynamic nature of experience and synaptic development, because oral and written discursive modalities are almost always entangled, and because experience is not a monolith and is always the result of a complex interaction of forces, many of which are impossible to calculate, such patterns will have likewise at other times – or even within the same time frame and process – dissolved, attested to exceptions and evolved into other patterns in “permanently surprising” ways. Ong’s claim for a dyadic divide between ‘oral’ and ‘literate’ cultures and patterns of thought seems highly implausible.

Let us rephrase: Ong’s argument is not quiet wrong. It is, rather, a fragile construct, one of many, of historically embedded cultural positions. As with the evolution of living organisms, it is easier to assume slow, non-linear changes to experience, synaptic structure, perception and behaviour over space and time.⁴¹ Contingent patterns and exceptions to those patterns form and re-form in response to the essential surplus and deficit of events in experience and learning. As Paolo Pecere, for example puts it:⁴²

...neural plasticity allows the realization of functions in different areas of the brain, thus suggesting that the opposition between localized and global functioning of the mind has to be blurred.

³⁹ See, e.g., Steele 2017; Perna 2016 on Linear-A (from about 1800 BCE). Linear-B appears in the second half of the millennium.

⁴⁰ For the Phoenician alphabet in Greece, see McCarter 1996; Einarson 1967.

⁴¹ For evolutionary biology, see, e.g., Gould 2002.

⁴² Pecere 2022, 29.

3 The Plasticity of Language

3.1

Arguments from neuroscience about synaptic plasticity, from evolutionary biology or from the philosophy of history provide important underlying premises for our discussion. They are, however, too far removed from the immediate surface of language and, for our specific purpose, from the text of Homer – voiced or written – to provide an immediate methodological frame for the analysis of actual diction and, say, of orality in early Greek hexameter verse.

To move closer to inscribed language use and the diction of Homeric verse we need to look more closely at processes of verbal development, at the cognition of language and at those areas of cognitive linguistics that emphasise change and adaptive process over algorithmic process and general language rules.

3.2

Consider Étienne Bonnot de Condillac's early (1746) *Essai sur l'origine des connaissances humaines* (*Essay on the Origins of Human Consciousness*).⁴³ Language, Condillac suggests, is a contextualized *event*, initially emerging from embodied cries, gestures and actions as “natural signs”, in response to external stimuli and experience. When humans live together:⁴⁴

The frequent repetition of the same circumstances could not fail ... to make it habitual ... to connect the cries of the passions and the different motions of the body to the perceptions which they expressed ...

Condillac adds:⁴⁵

...when they had acquired the habit of connecting some ideas to arbitrary signs, the natural cries served as a model for them to make a new language.

Condillac does not comment on the relation between orality and written communication, let alone on language inscribed in alphabetic scripts. It is, however, clear

⁴³ Cf. important comments on Condillac in Pecere 2022.

⁴⁴ de Condillac 2001, 114–115.

⁴⁵ de Condillac 2001, 115–116.

from his words above that the concurrence of external circumstances, perceptions, motions of the body and thus of visual gesture, the passions, vocalized gesticulation, ideas and “arbitrary signs” are inseparably interlinked, not merely as events in the world, but as the foundations of language development. Significantly, here and repeatedly throughout his work, Condillac uses the term “arbitrary signs” (*signes arbitraires*), a hundred and fifty years before Ferdinand de Saussure (1916) and the birth of modern linguistics.⁴⁶ The *medium*, we might say, has no immanent substance and, *pace* McLuhan, is *not* the *message*.⁴⁷ It is also clear from Condillac’s statement that, in his view, there is no distinction or boundary between visual signs (“motions of the body”) and voiced signs (“cries of the passions”). Whatever the synaptic structure of the perceptions of sound and visual symbols and the differences between them, in the essential process of language development as Condillac describes it, auditory and visual stimuli are invariably entangled. Of course, it is impossible to assume (and contradictory to the basic evidence of experience and historical linguistics) that any habitual connection between ideas and signs and thus the process of the formation of language should reach equilibrium and any point and come to an end. Such experience and thus the synaptic structures that develop in the process are by necessity dynamic processes.

3.3

Condillac’s model of language development is simpler to accommodate than abstract, algorithmic language models and models of language cognition, such as, for instance, Chomskyan conceptions of innate, pre-external stimulus, hard-wired universal grammars or even Saussurian models of *langue* (the pre-existing, independent, abstract system of general laws and conventions that, in Saussure’s view, underpins all language use) and *parole* (individual instances of language use).⁴⁸ Empirical studies give very little support to the idea of hard-wired grammars or

⁴⁶ See, e.g., de Condillac 2001, 36: “I distinguish three kinds of signs. (1) Accidental signs, or the objects that some particular circumstances have connected with some of our ideas so that those ideas may be revived by them. (2) Natural signs, or the cries that nature has established for the sentiments of joy, fear, pain, etc. (3) Instituted signs, or those that we have ourselves chosen and that have only an arbitrary relation to our ideas,” and repeatedly throughout the work.

⁴⁷ In direct contrast to McLuhan’s (McLuhan 1964) much criticized medial essentialism and the idea that “the medium is the message”.

⁴⁸ See discussion in Kahane 2018a; Kahane 2018b.

even of universal grammatical categories.⁴⁹ In contrast, linguists such as Talmy Givon, William Croft and more recently, Adelle Goldberg, Joan Bybee, Clay Beckner, Michael Tomasello and others, have been developing more flexible, one might say plastic, ‘cognitive-functional’ models of language and language development that are broadly in agreement with, e. g., Condillac’s early ideas.⁵⁰ Symbols and ultimately language itself, cognitive-functional models argue, are developed by nothing more than the process of associating repeated actions, states, behaviours, etc., with certain signs. As Tomasello, for example, says, “The fundamental reality of language ... is people making utterances to one another on particular occasions”. Formal grammars (including, for example, the ‘grammar’ of orality as per e. g., Lord in *The Singer of Tales*⁵¹) are, in this sense, “derivative” or, more technically, “epiphenomenal”. Tomasello adds:⁵²

When people repeatedly use the same particular and concrete linguistic symbols ... in “similar” situations, what may emerge over time is *a pattern of language use*, schematized in the mind of users as one or another kind of linguistic category or construction. As opposed to linguistic rules conceived of as *algebraic procedures for combining symbols that do not themselves contribute to meaning*, linguistic categories and constructions are themselves *meaningful linguistic symbols*—since they are nothing other than *the patterns in which meaningful linguistic symbols are used to communicate*.

Thus,⁵³

...natural language competence consists of the mastery of all its items and structures, and these constitute a much more complex and diverse set of linguistic representations than the “core grammar” of formal approaches. They include the highly canonical (core), the highly idiosyncratic (periphery), and many things in between.

3.4

This simpler model offers many advantages in understanding language development and, to look again to Homer, in explaining the formation and function of archaic epic hexameter diction and its evolutionary descendants, in whatever mix of

⁴⁹ See, e. g., Dryer 1997; Lin 2017. More generally, Tomasello 2003; Bybee 2010; etc. Generative grammar continues, of course, to have its supporters, see, e. g., Kim 2018.

⁵⁰ Givón 1984; Croft 2001; Tomasello 2003; Bybee 2006; Beckner / Bybee 2009; Goldberg 2019; etc.

⁵¹ Lord 1960, 35–36. Lord nevertheless does recognize this principle in embryonic form. See also forthcoming 15th Orality and Literacy conference, ‘Special Grammar’ (Ada, OH, 24–26 June 2024).

⁵² Tomasello 2003, 5.

⁵³ Tomasello 2003, 6.

oral and written modalities. A singer wishing to express the “essential idea” of “it was daybreak” might use any one of many expressions that contain the lexical item ἠώς, “dawn”, attested in Homeric epic, as the moment might suit them, perhaps composing in the process of performance, where such expressions come to mind so as to allow the singer to keep the flow of spoken discourse. This process would not differ in kind from the process of producing speech in ordinary conversation.⁵⁴ In certain contexts, however, perhaps needing more help to keep the flow of verse in performance, the singer may call more heavily upon an expression such as Ὅφρα μὲν ἠώς ἦν καὶ ἀέξετο ἱερὸν ἦμαρ (*Il.* 8.66; 11.84; *Od.* 9.56) or in other contexts the singer may create or repeat a different pattern, perhaps ἦμος δ' ἠριγένεια φάνη ῥοδοδάκτυλος Ἥως (*Il.* 1.477, 24.788; *Od.* 2.1, etc.) that occupies a whole verse. Repetition in such cases is, however, not necessarily a symptom of tradition (see 3.5, below). It may, rather, be a symptom of the individual poet's exceptional circumstances. Repetition may at times be metrically expedient in circumstances of rapid oral composition in performance, but it is not necessarily defined by metrical expedience. The range of verbal variants available for expressing the idea of dawn and the absence of any apparent systematic rules such as ‘economy’ or ‘extension’ structuring the set of such variants are proof that, whether performed in pure ‘oral’ contexts or in any combination of voiced and written modalities, no extended cognitive or semantic attributes or their absence can be exclusively associated with- or disassociated from- the modality of composition and performance or reception of this idea.

3.5

Parry himself was aware *in nuce* of such variance. A few lines after providing his definition of the formula as exemplified by ἦμος δ' ἠριγένεια φάνη ῥοδοδάκτυλος Ἥως, he adds:⁵⁵

...the definition [as above] *in no way implies, and should in no way imply whether the formula belongs to the tradition or whether it is, on the contrary, the poet's creation.* For the Homeric formula is being considered here as a means of versification, and not in terms of its traditional or original character. It is an expression which, whatever may have been its history, made the process of versification easier for the poet or poets of the *Iliad* and the *Odyssey* at

54 Chafe 1982; Chafe / Danielewicz 1987, etc., argue for more ‘disfluency’ and redundancy in oral discourse. But the Homeric hexameter is carefully structured and partly written – thus, as we would argue, in an entangled modal state. For evolutionary processes in the development of epic diction, see, e.g., Nagy 1996 and his notion of crystallization.

55 Parry 1971, 15.

the moment when these poems were composed. *We can thus say without hesitation that the lines and the half-lines quoted above [precisely ἤμος δ' ἠριγένεια φάνη ῥοδοδάκτυλος Ἥως] are formulae; but we cannot say that they are traditional. Showing the regularity with which Homer makes use of certain formulae would in no way constitute a proof that these formulae are traditional [my emphasis].*

Parry here states with repeated emphasis that expressions such as ἤμος δ' ἠριγένεια φάνη ῥοδοδάκτυλος Ἥως “in no way implies, and should in no way imply” traditionality. They may well be “the poet’s own creation”, he says. Indeed, ἤμος δ' ἠριγένεια φάνη ῥοδοδάκτυλος is not a universal element of hexameter diction. Its usage is restricted to Homeric epic. The verse does not appear in the Homeric hymns, Hesiod, the extant fragments of epic, early or late, nor in any of the later Greek hexameter epics.⁵⁶ It otherwise appears only as a Homeric citation, mostly in ancient scholarly sources with direct reference to Homer and no other tradition.⁵⁷

3.6

Dawn is a regular, periodic phenomenon and one of the most common markers of chronological movement.⁵⁸ Yet Homeric narrative time does not progress at an even, periodic pace.⁵⁹ Not surprisingly, neither ἤμος δ' ἠριγένεια φάνη ῥοδοδάκτυλος Ἥως nor any other repeated (otherwise ‘formulaic’) expression is used in Homer to mark even ‘ordinary’ chronological movement in the course of the fifty two days of the *Iliad* or the forty two days of the *Odyssey*.⁶⁰ Nor is use of this *Formelverse* evenly divided – even by a rough parsing – between the *Iliad* and the *Odyssey*. In the *Iliad*, the verse is used only twice: at the beginning and end of the poem. In contrast, in the *Odyssey* it is used ten times as frequently.⁶¹ Whether the verse is “the poet’s own creation” or otherwise, whether, as Parry suggests, it facilitates versification, which it may, it is certainly not “oral-traditional” in the Parryan systematic sense. There is no evidence for even the vestiges of systematic diction that incorporates aspects of extension and economy for

56 See *Lfgre*, *LSJ*, etc. *sub vocc.* ἠριγένεια, ῥοδοδάκτυλος; in Bernabé 1996; Bernabé 2004; Bernabé 2005; Bernabé 2007.

57 In the scholia, in Eustathius and, in a direct quote in Heliodorus *Aethiopica* (3.4.1.1).

58 See recent discussions in Miller and Symons 2020.

59 Kahane 2020; more broadly, Kahane forthcoming.

60 See Kahane 2020.

61 2x *Il.*, 20x *Od.* For the data, see Kahane / Mueller / Berry / Parod (online).

the idea of “it was day”. Indeed, the system, as we have noted, is open to exception even in the most distinct and prominent cases. Even by ‘oralist’ standards, then, the evidence seems to allow for diversity in the use of this expression. Such diversity may include verse-making functions but also usage that accommodates lexicosemantic resonance and may invoke personification, narrativization and metaphoric functions rather than work simply as superfluous, ‘semantically bleached’ metrical fillers.⁶² As in ordinary speech and in language in general, some patterns of usage do form in such circumstances. To repurpose Tomasello’s words to our context: “When people repeatedly use the same particular and concrete linguistic symbols ... in “similar” situations”, what emerges are “*pattern[s] of language use, schematized in the mind of users*”.

We must here note the similarity between Tomasello’s language and Parry’s famous definition of the formula. Nevertheless – again we can invoke Tomasello’s words, “as opposed to linguistic rules conceived of as algebraic procedures for combining symbols that do not themselves contribute to meaning, *linguistic categories and constructions are themselves meaningful linguistic symbols*—since they are nothing other than *the patterns in which meaningful linguistic symbols are used to communicate*”. Defined, not by rule, but by plastic habit, practice and experience, affected by any number of contextual factors, many of which may not be fully calculable, the patterns of Homeric diction are – as with synaptic chemistry and the structure of the brain – organically subject to change.

4 Complexity

4.1

To the argument above we must add one more key methodological component: this is the technical principle of ‘complexity’. Complexity extends the premises embodied in neuroplasticity. It highlights the process of multi-factor interactive change and is a core tenet of empirical practice, method and critical theory in many disciplines in the natural and exact sciences, in the social sciences and, indeed, in the study of linguistic systems.⁶³ The principle of complexity also offers

⁶² Extending the term (see Traugott 2006) to describe Parry’s notion of reduced semantic function in the process of incorporation into the metrical ‘grammar’ of hexameter verse.

⁶³ From a vast bibliography, see Prigogine / Stengers 1984; Nicolis / Prigogine 1989; Byrne / Callaghan 2013; in language, e.g., Ortega / Han 2017. See further below. Disciplinary materials can be highly technical but see, e.g., Nobel Prize laureate Roger Penrose’s *The Emperor’s New Mind*

distinct advantages in describing that system of language which we call the Greek epic hexameter and its exceptions.⁶⁴

In ordinary parlance, complexity denotes complicated structure or a combination of many elements. However, in many scientific disciplines the term is used in a narrower sense to indicate ‘stochastic’, non-linear behaviour. Complexity emerges within so-called dynamic, interactive systems, in other words, within systems that cannot be sufficiently described by universal algorithmic rules or laws and whose behaviour is thus unpredictable. Such behaviour is, however, at the very core of the system rather than at its accidental peripheries. Complexity thus marks a general approach that attempts to account for exceptionality and the diversity of empirical phenomena in rigorous conceptual (often mathematical) but non-algorithmic terms.⁶⁵ As such, it is – this should now be obvious – of value to our own argument.

4.2

Consider briefly some of the principles of complexity, as expressed in the work of mathematician Edward Norton Lorenz.⁶⁶ Starting from the 1960s, Lorenz studied the foundations of atmospheric physics in an attempt to understand weather patterns. Such patterns cannot be understood or predicted by the application of the laws of classical (Newtonian) science. In an attempt to describe unpredictability of weather patterns mathematically, Lorenz set down a different methodological principle. In certain systems, Lorenz argued, minute differences in the initial interaction of elements can affect disproportionately large-scale differences to outcome. This principle was famously set out in a landmark 1963 paper describing the behaviour of complex dynamic systems and, for example, in a 1972 conference presentation entitled ‘Predictability: Does the Flap of a Butterfly’s Wings in Brazil Set Off a Tornado in Texas?’⁶⁷ The argument, developed both theoretically and em-

(2016). Penrose’s argument for quantum consciousness (Hamerhoff / Penrose 2014) is controversial, but important.

64 See Kahane 2018b, etc.

65 Actual maths are un-necessary and beyond the remit of this essay, but see briefly ‘Complexity Theory’ in *Encyclopedia of Mathematics (EoM)*: “The classification of mathematical problems into decidable and undecidable ones is a most fundamental one”. We must highlight again, however, that, as in the principle of complexity itself, so with its disciplinary use, certain aspects of exceptionality are important core components.

66 I avoid mathematical notation in this essay. See, e.g., Sparrow 1982.

67 Lorenz 1963; Lorenz 1972.

pirically in almost every modern scientific discipline, later came to be popularly known as the 'butterfly and tsunami effect'.⁶⁸

As Lorenz puts it, "two states differing by imperceptible amounts may eventually evolve into two considerably different states".⁶⁹ Since such imperceptible differences are likely to be attested many times at many stages of a process or event, for example, in meteorology, as weather patterns form to create a tornado or a tsunami, the general development of the process over time and of the system at-large can be highly unstable and unpredictable, thus, in more-technical terms, 'non-linear'. A storm may be destructive or mild, it may move in one direction or another, slowly or fast, and so on. Consider similarly the phylogenetic development of living organisms over time. Phylogenetic evolution moves not in a straight line or with teleological certainty, but by minute, chance 'mutations', as, for example, when ultraviolet radiation alters a base-pair in an organism's DNA sequence.⁷⁰ We can describe *some* of the stages of such development in retrospect. Yet technically, in contrast to outcomes determined by divine providence or, indeed, the laws of 'classical' Newtonian science, such changes are non-linear and unpredictable. Even in retrospect, at certain crucial moments, so the argument for complexity suggests, it is systemically impossible to apply an algorithmic calculation 'backwards' to provide cause-and-effect description of what has taken place.⁷¹ We cannot quite 'calculate' the past on the basis of the future nor the future on the basis of the past.⁷² In the specific case of Homeric diction, the implication of these ideas is that even when a repeated expression has been used, though we can interpret its function, literary, metrical, semantic, poetic or otherwise, we cannot determine the causes of such use in full or predict its use elsewhere.

68 See, e.g., Nolte 2018.

69 Lorenz 1963, 133. *This essay discusses 'deterministic, no-periodic' flows in what is commonly known as 'deterministic chaos'. Such chaos is technically deterministic but non-predictable. See, e.g., Werndl 2009. The matter lies well beyond the remit of this essay.*

70 For evolutionary biology, see, e.g., Gould 1980.

71 See, e.g., Nicolis / Prigogine 1989.

72 See famously 'Laplace's Demon' (Laplace 1951 (1825), 4): "An intellect which at a certain moment would know all forces that set nature in motion, and all positions of all items of which nature is composed ...would embrace in a single formula [*embrasserait dans la même formule*] the movements of the greatest bodies of the universe and those of the tiniest atom". We can, of course, produce many calculations with some practical efficiency. Ptolemaic astronomy required complex arithmetic but was capable of approximating the motions of the heavenly bodies even as its geocentric model was false.

4.3

What we should here stress in the context of our discussion of Homer is that the principle of complexity is increasingly central not only to our attempts to study the workings of the natural world or mathematical behaviour, but also the development and usage of discourse within language systems. As Berkeley linguist Claire Kramsch, for example, says,⁷³

...because the systems are open what arises may be in nonlinear relation to its cause. In other words, *an unexpected occurrence may take place at any time...*[my emphasis]

Language, as viewed from cognitive functional perspectives, is a historical phenomenon. Like other historical events it thus attests to what Koselleck (above), for example, has described as “permanently surprising novelty”. The linguistic system is dynamic and complex, never in equilibrium. At a physiological level, even if the rules of language were hard-wired in synaptic structure, as Chomskyan arguments suggest, such hard wiring would nevertheless be subject to the brain’s capacity for adaptive plasticity. Closer to the surface of language use, indeed at the surface of diction, Kramsch’s argument (Kramsch makes no reference to ancient epic, to Homer or to Greek, but the idea is fully applicable to our discussion) suggests that every iteration of a group of words, an expression, a formula, a metrical, semantic or narrative pattern in Homer, has the capacity to change the whole system:

The equilibrium [for example, in the case of Homer, of meaning assumed in the idea of ‘traditional reference/ referentiality’]⁷⁴ you thought you had reached in your prior state of knowledge gets disrupted as one new piece of knowledge reconfigures the whole picture [my emphasis].

From this perspective, formulaic repetition means *never* saying the same thing twice (even as we may want to do so...). It is an event that affects, as Koselleck might have said, “permanently surprising novelty”. This approach to repetition nevertheless helps us explain, all at once and without any contradiction or difficulty, generative aspects of Homeric diction, aspects of repetition, elements of *economy* and *extension* where they occur, no matter how imperfectly, and their possible compositional utility, *and* any instance of exception, exceptionality, nu-

⁷³ Kramsch 2012, 11.

⁷⁴ John Foley’s widely influential (but from our perspective, misleading) term (Foley 1999 Ch. 1: ‘Homeric Signs and Traditional Referentiality’).

anced, context-sensitive semantics. Orality, from this perspective, will never be the same again.

5 The New Dawn

5.1

Our argument is not simply a matter of general methodological reflections but of immediate value in close readings of Homer. Consider, for example the usage of ἠώς, “dawn”, in Homer.

The noun ἠώς, even on its own, is highly – though not exclusively – localized in terminal position in the verse.⁷⁵ Homer's dawns are perhaps most prominent in the expression in ἦμος δ' ἠριγένεια φάνη ῥοδοδάκτυλος Ἥως. This verse comprises roughly two fifth of the examples in which ἠώς is terminally localized.⁷⁶ The diction of dawn in epic diction thus clearly attests to patterning, though equally, with considerable exceptionality. This is precisely where we might explore at the dynamics of the system.

As Colin McLeod notes:⁷⁷

The phrase... is used only twice in the *Iliad*, in 1.477 and 24.788, at the end of the events concerning two figures who have roused such damaging passions in Achilles, Chryseis and the dead Hector. If 24. 790 is genuine, then again a line commoner in the *Odyssey* (three times) is reserved for the first and last book of the *Iliad* (cf. 1.57): it thus contrasts the fateful first assembly with the peaceful gathering which lays Hector to rest.

He concludes:

...Books I and 24 with their long and analogous lapses of time 'frame' the whole *Iliad*, whose main action occupies only three days. *This is not a purely formal or numerical matter since the events linked to these time-markers are in significant contrast* [my emphasis].

75 Terminal position (- - // [pos. 12]): 52/81 occurrences in Homer = 64%. Thus, attesting to significant exceptionality. The data: still O'Neill 1942; Porter 1951; also Jones and Grey 1972. See also Sansome / Fifield 2023 and the SEDES project, <https://digitalhumanities.org/dhq/vol/17/2/000675/000675.html>.

76 22/52 = 42%.

77 1984, 32. See, e.g., in Latacz / Nünlist / Stoevesandt 2009, 157 *ad* 1.477: “Dahinter könnte die Absicht”. [??] *stehen, strukturelle Entsprechung zu markieren*.

Let me rephrase this idea in methodological terms. In the *Iliad*, this repeated whole-verse Dawn expression marks, not the fungible invariant daily repetition of Dawn and the break of day but the unique, fateful and uneven flow of time and narrative in the poem. Indeed, as I have argued at length elsewhere, epic temporality in general is not a linear evenly-parsed clockwork ‘tick-tock’ movement.⁷⁸ Both ontologically and at the surface of narrative, Homeric time is a complex, dynamic and exceptional confluence of analeptic pasts, presents and proleptic futures, of Fates, prophecies, *digesis*, common myths, poetic traditions, as well as the cognition and knowledge of audiences and readers. Every new Homeric dawn attests to the permanently surprising novelty of Homer’s diction.

5.2

Consider the *Iliad*’s iterations more closely. The first instance of ἤμος δ’ ἠριγένεια φάνη ῥοδοδάκτυλος Ἥως in the *Iliad* marks, not simply the return of Chriseis (1.430–88), but also the dawn of the return of the Argives and their ship to camp after the journey. It is thus a kind of complex *double closure* to the *opening* of the poem (1.477–478):⁷⁹

ἤμος δ’ ἠριγένεια φάνη ῥοδοδάκτυλος Ἥως,
καὶ τότε ἔπειτ’ ἀνάγοντο μετὰ στρατὸν εὐρὺν Ἀχαιῶν·

But when the young Dawn showed again with her rosy fingers,
they put forth to sea toward the wide camp of the Achaians.

Every temporal point in the *Iliad*, we might say, is an exceptional confluence of events, moments and durations – never to be repeated. Chriseis will not be taken, held captive or returned again. Her return is part of the action that centres on the quarrel of Agamemnon and Achilles, whose reconciliation towards the end of the *Iliad* will not and cannot set back time, a time that will have moved inexorably towards Achilles’ withdrawal, the burning of the ships, the death of Patroclus, the death of Hector, irreversible mortality and the Fall of Troy.⁸⁰

⁷⁸ Kahane 2022; more generally Kahane forthcoming.

⁷⁹ Cf. Heliodorus’ *Aethiopica*, 1.1.1.1, which does begin with an allusive variant of the Homeric formula (later cited verbatim, *Aeth.* 3.4.1.1). Discussion in Kahane 2025. All Homer translations from Lattimore.

⁸⁰ As, e.g., with notions of ‘deterministic chaos’ (above, n. 69), we *can* trace some causal sequences (Briseis is returned, the plague is lifted). In retrospect, we know the outcomes of the *Iliad*’s traditional narrative, of course, just as, e.g., we know that a tsunami has occurred.

5.3

The second iteration of the Dawn formula in the *Iliad*, in the closing verses of Book 24, describes the funeral of Hector (24.784–789):

έννημαρ μὲν τοί γε ἀγίνεον ἄσπετον ὕλην·
 ἀλλ' ὅτε δὴ δεκάτη ἐφάνη φαεσίμβροτος ἠώς,
 καὶ τότε ἄρ' ἐξέφερον θρασὺν Ἑκτορα δάκρυ χέοντες,
 ἐν δὲ πυρῇ ὑπάτη νεκρὸν θέσαν, ἐν δ' ἔβαλον πῦρ.
 ἦμος δ' ἠριγένεια φάνη ῥοδοδάκτυλος Ἥως
 τῆμος ἄρ' ἀμφὶ πυρῆν κλυτοῦ Ἑκτορος ἔγρετο λαός.

Nine days they spent bringing in an endless supply of timber.
 But when the tenth dawn had shone forth with her light upon mortals,
 they carried out bold Hector, weeping, and set the body
 aloft a towering pyre for burning. And set fire to it.
 But when the young Dawn showed again with her rosy fingers,
 the people gathered around the pyre of illustrious Hector.

The total number of days over which the action of the *Iliad* occurs is impossible to set down precisely. Scholars often settle for fifty-one or fifty-two, but there are a number of indeterminate factors in such counting.⁸¹ Regardless, as McLeod (above) and others note, the main action of the poem is spread over just three days. Consider such detailed narration on the one hand alongside the compression of the eleven days of Hector's burial into just six verses and, on the other hand, against the un-narrated ten year duration of the Trojan war or the fact that the endpoint of this timespan, the sack of the city, is un-told in the *Iliad*, and we must allow that the poem's fundamental temporality is not a regular, fungible and numeric sequence of days.⁸²

But, precisely because Homeric time is not a fungible numeric sequence of identical, repeated events, we must carefully note the underlying *ordinal*, *numeric* sequence of days marked in *Iliad* 24.784–9. The Trojans, collect wood for *nine* days. On the *tenth* they set the funeral pyre alight. Then comes the crucial, numeric *eleventh* rise of Rosy-Fingered Dawn when Hector's bones are collected and buried.

⁸¹ See Taplin 1992, 15–18.

⁸² Kahane 2022.

5.4

We should first stress that even by Parry's narrow definition, the shorter noun-epithet formulaic element ῥοδοδάκτυλος Ἥως is *not* traditional. There is no formulaic system for the expression of the “essential idea” of “it was daybreak”. More importantly, usage here explicitly transgresses Parry's laws of formulaic economy and extension. In 24.785, just three lines before the iteration of the Dawn *Formelverse* in line 788, another Homeric noun-epithet combination, φαεσίμβροτος ἥως (“shining forth upon mortals”), a *hapax legomenon*, is used – thus *clearly not* a matter of technical convenience.⁸³ This noun-epithet combination is the exact metrical equivalent of ῥοδοδάκτυλος Ἥως, both nominative noun-epithet expressions occupying the exact same metrical *sedes* in the verse, from the so-called *hepthemimeral caesura* to the verse-end [/7-cons. S-S-L-S-S-L-X//], preceded by ἐφάνη (φάνη), beginning with a consonant and followed by the terminal ἥως/Ἥως.⁸⁴

Modern editors and translators of the text of Homer are keenly aware of the variants and alter their typographic formatting practice accordingly. In the earlier line, 785 West (as editor of the Greek Teubner text) and Lattimore (as translator in the University of Chicago edition) both use lower-case “dawn”. However, in the repeated whole-verse Dawn formula in 788 West, Lattimore and others capitalize ‘Dawn’.⁸⁵ This is literate editorial formatting practice, but as such it reflects and enhances the exceptional, *ad-hoc*, non-economical, non-systematic function of each of the two expressions used under exactly “the same metrical conditions”, here comprising, not one “essential idea”, but an existential distinction between a natural phenomenon and a goddess.⁸⁶ Once φαεσίμβροτος ἥως has been used, repetition of ἦμος δ' ἠριγένεια φάνη ῥοδοδάκτυλος Ἥως can never quite be “the same”. Or perhaps – viewed with an emphasis on the entanglement of material language, memory and thought – knowledge of the expression φαεσίμβροτος

⁸³ Cf. *Od.* 10.138 φαεσιμβρότου Ἡελίου and 10. ἥελιος φαεσίμβροτος. See Fraenkel 1949 and *LfgreE sub voc.*

⁸⁴ The nominative is most frequent, but the epithet φαεσίμβροτος, though a common composite with -βροτος, is rarely used more than once or twice and appears in a surprisingly broad range of authors (all verse, apart from ancient scholarly sources). The term *hepthemimeres* is modern. See West 1982.

⁸⁵ West 1998–2000; Lattimore 2011.

⁸⁶ To the degree that linguistic patterns and exceptions are conventionally marked, they may be embedded in synaptic patterns and behaviour at the microbiological level. See Morgan Short / van Hell 2023 (and Morgan Short / van Hell's Introduction, 1–11).

ἥως inevitably and reciprocally forces us to see ῥοδοδάκτυλος Ἥως and the whole-verse formula in a different light.

5.5

But let us think again about the text's linear, evenly spaced numeric progression of days, nine, ten, eleven Dawns. Here, we might assume, we have the perfect context for measuring fungible repetition one dawn after the next.

The verse ἦμος δ' ἠριγένεια φάνη ῥοδοδάκτυλος Ἥως, we should stress, poses *no* textual, formal, metrical, stylistic or ms. difficulty whatsoever.⁸⁷ Nevertheless, Martin West in the *apparatus criticus* to the text offers an unexpected interpretive comment: “*expectaveris δ' ἐνδεκάτη ἐφάνη*” to replace δ' ἠριγένεια φάνη. Thus, following West's suggestion, *ἦμος δ' δ' ἐνδεκάτη ἐφάνη ῥοδοδάκτυλος Ἥως, with ἐφάνη as in 785 to replace φάνη.⁸⁸ This proposal from an otherwise highly conservative scholar of unequalled erudition hints at yet another startling break with the idea of formulaic economy. It is not a ms. *lectio* (“reading”) nor quite an *emendatio* (“emendation”), but more, perhaps, by way of a *divinatio* (“divination”). It is otherwise unattested, as far as I am aware, in extant Greek epic, or Greek literature in general.⁸⁹

West's brief comment in the apparatus is telling. It suggests that the repeated, pre-eminent and prominent Homeric formula is not only ‘untraditional’, as Milman Parry would have it, but also *unexpected*. Crucially, *it is unexpected precisely because it is repeated verbatim in a context that clearly emphasises the notion of counting and where the generic “essential idea” must be modified in the mind of the poet and his audiences.*

On Martin West's authority, then, and, again, as Koselleck might have said, every formulaic repetition “produces more and at the same time less than is contained in its pre-given elements: hence its permanently surprising novelty”.⁹⁰ Repetition in epic diction, on the evidence of these verses, at least, means that in epic diction *every day is a new day*, the mark of singular *difference* and unique modalities of exceptionality.

87 Allowing that even Martin West (2000) collated only about half of some 2000 ms. and papyrological sources.

88 2000, 379 ad 24.788.

89 *Mutatis mutandis*, see, however, Galen. *In Hipp.* iii 17a.278.2, of symptoms improving on the 11th day.

90 West no doubt would have been bemused to be paired with Koselleck.

6 Conclusion. The Rule of Difference

6.1

With systemic exceptionality, comes the necessity of revising our view of what is ‘oral’ and what is ‘literate’. We must change our position, not because there are no differences between these modalities and elements, but precisely because, as a matter of principle, *there are always differences* between these modalities. Given the complex and not fully knowable conditions of production of this verse and of Homeric poetry, it is impossible to say where, in Homer’s diction of the dawn lies the balance of oral, orally derived, and literate material, let alone elements of cognition, noesis, poetics or history. Every iteration of the same expression is a historical occurrence. Each reading is a further historical event. Each contains both more and less than its elements and is thus inherently singular.

At the beginning of the the *De Interpretatione* Aristotle says (16a. 3–5):

Ἔστι μὲν οὖν τὰ ἐν τῇ φωνῇ τῶν ἐν τῇ ψυχῇ ἑπαθημάτων σύμβολα, καὶ τὰ γραφόμενα τῶν ἐν τῇ φωνῇ. καὶ ὡσπερ οὐδὲ γράμματα πᾶσι τὰ αὐτά, οὐδὲ φωναὶ αἱ αὐταί·

Words spoken are symbols or signs of affections or impressions of the soul; written words are the signs of words spoken.

This statement kicks off a famous *phonocentric* tradition which privileges sound and, indeed, the modern tradition of challenge to phonocentrism.⁹¹ But Aristotle’s opening gambit in the *De Int.* also suggests that in ontological terms, every inscription in language, whether in the mind, oral, orally derived or written, is a complex, interactive and entangled event.

6.2

When considering the relations between orality and literacy we are thus well advised to remember the fundamental lessons of contemporary science. As physicist and philosopher Karen Barad says in her widely influential book *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*.⁹²

⁹¹ See above, n. 15.

⁹² Barad 2007, 251.

Quantum entanglements are not the intertwining of two (or more) states/ entities/ events, but a calling into question of the very nature of two-ness, and ultimately of one-ness as well. Duality, unity, multiplicity, being, are undone. 'Between' will never be the same. One is too few, two is too many.

Quantum physics and philology are different, of course. Same difference...

References

- Bakker, E. J. / Kahane, A. (1997), *Written Voices, Spoken Signs: Tradition, Performance, and the Epic Text*, Cambridge, Mass.
- Barad, K. (2007), *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*, Durham, NC.
- Bassi, K. (1997), "Orality, Masculinity, and the Greek Epic", in: *Arethusa* 30, 315–340.
- Beck, D. (2012), "The Presentation of Song in Homer's *Odyssey*", in: E. Minchin (ed.), *Orality, Literacy and Performance in the Ancient World*, Leiden – Boston, 25–53.
- Beckner, C. / Bybee, J. (2009), "A Usage-Based Account of Constituency and Reanalysis", in: N. C. Ellis / D. Larsen-Freeman (eds.), *Language as a Complex Adaptive System*, Malden, Mass., 27–46.
- Bernabé, A. (1996), *Poetae Epici Graeci, Pars I*, Stuttgart.
- Bernabé, A. (2004), *Poetae Epici Graeci, Pars II, Fasc. 1*, Stuttgart.
- Bernabé, A. (2005), *Poetae Epici Graeci, Pars II, Fasc. 2*, Stuttgart.
- Bernabé, A. (2007), *Poetae Epici Graeci, Pars II, Fasc. 3*, Stuttgart.
- Bettarini, L. (2014), "Tra onomastica e poesia: rodio Ἰδαμενεύς in IG XII/1 737 (= CEG 459) e 904", in: *Glotta* 90, 46–70.
- Biakolo, E. (1999), "On the Theoretical Foundations of Orality and Literacy", in: *Research in African Literatures* 30, 42–65.
- Bryce, T. R. (2008), "An Historian's Observations on Troy and Homeric Tradition", in: M. Mazoyer (ed.), *Homère et l'Anatolie*, Paris, 31–45.
- Burnyeat, M. F. (1997), "Postscript on Silent Reading", in: *Classical Quarterly* N. S. 47, 74–76.
- Bybee, J. (2006), "From Usage to Grammar: The Mind's Response to Repetition", in: *Language* 82, 711–733.
- Bybee, J. (2010), *Language, Usage and Cognition*, Cambridge.
- Byrne, D. / Callaghan, G. (2013), *Complexity Theory and the Social Sciences*, London.
- Canon, C. / Rubery, M. (2020), "Introduction to 'Aurality and Literacy'", in: *Papers of the Modern Languages Association* 135, 350–365.
- Chafe, W. L. (1982), "Integration and Involvement in Speaking, Writing, and Oral Literature", in: D. Tannen (ed.), *Spoken and Written Language: Exploring Orality and Literacy*, Norwood, NJ, 35–54.
- Chafe, W. L. / Danielewicz, J. (1987), "Properties of Spoken and Written Language", in: R. Horowitz / J. Samuels (eds.), *Comprehending Oral and Written Language*, New York, 83–113.
- Clark, M. (2004), "Formulas, Metre and Type-Scenes", in: R. L. Fowler (ed.), *The Cambridge Companion to Homer*, Cambridge, 117–138.
- Croft, W. (2001), *Radical Construction Grammar: Syntactic Theory in Typological Perspective*, Oxford.
- de Condillac, É. B. (2001 [1746]), *Essay on the Origin of Human Knowledge*, Cambridge.

- de Saussure, F. (2015 [1916]), *Course in General Linguistics*, London.
- Derrida, J. (1998), *Of Grammatology*, Baltimore, MD.
- Dryer, M. S. (1997), "Are Grammatical Relations Universal?," in: J. Bybee / J. Haiman / S. Thompson (eds.), *Essays on Language Function and Language Type*, Amsterdam, 115–144.
- Edwards, M.W. (1986), "Homer and Oral Tradition: The Formula, Part I", in: *Oral Tradition* 1, 171–230.
- Edwards, M.W. (1988), "Homer and Oral Tradition: The Formula, Part II", in: *Oral Tradition* 3, 11–60.
- Einarson, B. (1967), "Notes on the Development of the Greek Alphabet", in: *Classical Philology* 62, 1–24.
- Encyclopedia_of_Mathematics, *Complexity Theory*.
https://encyclopediaofmath.org/wiki/Complexity_theory.
- Ercolani, A. / Lulli, L. (eds.) (2022), *Rethinking Orality I. Codification, Transcodification and Transmission of Cultural Messages*, Berlin – Boston.
- Faranton, V. / Mazoyer, M. (eds.) (2017), *Homère et l'Anatolie*. 3, Collection Kubaba Série Antiquité, Paris.
- Faraone, C. A. (1996), "Taking the 'Nestor's Cup Inscription' Seriously: Erotic Magic and Conditional Curses in the Earliest Inscribed Hexameter", in: *Classical Antiquity* 15, 77–112.
- Finkelberg, M. (2012), "Oral Formulaic Theory and the Individual Poet", in: F. Montanari / A. Rengakos / Chr. Tsagalis (eds.), *Homeric Contexts: Neanalysis and the Interpretation of Oral Poetry*, Berlin – Boston, 73–82.
- Finkelberg, M. (2024), "Homeric Formulae. Economy and Extension Revisited", in: *Yearbook of Ancient Greek Epic Online* 8, 49–62.
- Finnegan, R. (1980), *Oral Poetry: Its Nature, Significance and Social Context*, Cambridge.
- Foley, J. M. (1988), *The Theory of Oral Composition: History and Methodology*, Bloomington, IN.
- Foley, J. M. (1991a), *Immanent Art: From Structure to Meaning in Traditional Oral Epic*, Bloomington, IN.
- Foley, J. M. (1991b), *Traditional Oral Epic: The Odyssey, Beowulf, and the Serbo-Croatian Return Song*, Berkeley, CA.
- Foley, J. M. (1999), *Homer's Traditional Art*, University Park, PA.
- Foley, J. M. (2010), "Oral Traditions", in: M. Finkelberg (ed.), *The Homer Encyclopedia*, Malden, Mass., II, 607–610.
- Fraenkel, E. (1949), "Das Sein und seine Modalitäten (Etymologica und Verwandtes)", in: *Lexis* 2, 146–154.
- Giordano, M. (2022), "From Oral Theory to Neuroscience: A Dialogue on Communication", in: A. Ercolani / L. Lulli (eds.), *Rethinking Orality I. Codification, Transcodification and Transmission of Cultural Messages*, Berlin – Boston, 167–197.
- Givón, T. (1984), *Syntax: A Functional-Typological Grammar, vol. 1*, Amsterdam.
- Goldberg, A. E. (2019), *Explain Me This: Creativity, Competition, and the Partial Productivity of Constructions*, Princeton, NJ.
- Gould, S. J. (1980), "The Problem of Perfection, or How Can a Fish Mount a Clam on Its Rear End?," in: *Ever Since Darwin: Reflections on Natural History*, Harmondsworth.
- Gould, S. J. (2002), *The Structure of Evolutionary Theory*, Cambridge, Mass.
- Graziosi, B. / Haubold J. (2010), *Homer: Iliad Book VI*, Cambridge.
- Hamerhoff, S. / Penrose R. (2014), "Consciousness in the Universe", in: *Physics of Life Reviews* 11, 39–78.

- Hemphill, L. (2011), "Orality and Literacy in Sociolinguistics", in: R. Mesthrie (ed.), *The Cambridge Handbook of Sociolinguistics*, Cambridge.
- Hodder, I. (2014), "The Entanglements of Humans and Things: A Long-Term View", in: *New Literary History* 45, 19–36.
- Husserl, E. (2012), *Ideas: A General Introduction to Phenomenology*, New York, NY.
- James, W. (2007 [1890]), *The Principles of Psychology*, Cambridge, Mass.
- Janko, R. (1982), *Homer, Hesiod, and the Hymns: Diachronic Development in Epic Diction*, Cambridge.
- Janko, R. (2017), "The Greek Dialects in the Palatial and Post-Palatial Late Bronze Age", in: Giannakis / E. Crespo / P. Filos (eds.), *Studies in Ancient Greek Dialects: From Central Greece to the Black Sea*, Berlin – Boston, 107–130.
- Jeffery, L. H. (1990), *The Local Scripts of Archaic Greece: A Study of the Origin of the Greek Alphabet and Its Development from the Eighth to the Fifth Centuries B.C. / with a suppl. by Alan W. Johnston*, Oxford.
- Johnson, W. (2000), "Toward a Sociology of Reading in Classical Antiquity", in: *American Journal of Philology* 121, 593–627.
- Jones, F. P. / Grey F. E. (1972), "Hexameter Patterns, Statistical Inference, and the Homeric Question: An Analysis of the La Roche Data", in: *Transactions of the American Philological Association* 103, 187–209.
- Kahane, A. (1994), *The Interpretation of Order: A Study in the Poetics of Homeric Repetition*, Oxford.
- Kahane, A. (2018a), "Cognitive Functional Grammar and the Complexity of Early Greek Epic Diction", in: P. Meineck / W. M. Short / J. Devereaux (eds.), *The Routledge Handbook of Classics and Cognitive Theory*, London, 21–38.
- Kahane, A. (2018b), "The Complexity of Epic Diction", in: *Yearbook of Ancient Greek Epic* 2, 78–117.
- Kahane, A. (2020), "Method, Ethics and Orality: Ethnocentrism and Early Greek Epic", in: *Nigeria and the Classics* 32, 1–15.
- Kahane, A. (2021), "Disagreement, Complexity and the Politics of Homer's Verbal Form", in: P. Vasunia (ed.), *The Politics of Literary Form*, London, 23–48.
- Kahane, A. (2022), "Homer and Ancient Narrative Time", in: *Classical Antiquity* 41, 1–50.
- Kahane, A. (2025), *Epic, Novel and the Progress of Antiquity*, London.
- Kahane, A. (forthcoming). "Ancient Narrative Time", in J. Connolly / N. Worman (eds.), *The Oxford Handbook of Ancient Literary Theory*, Oxford.
- Kahane, A. / Ashton, S. (eds.) (forthcoming), *Time in Antiquity*, London.
- Kahane, A. / M. Mueller / C. Berry / B. Parod, *The Chicago Homer*, <http://homer.library.northwestern.edu/>.
- Kandel, E. R. / Barres, B. A. / Hudspeth A. J. (2013), "Nerve Cells, Neural Circuitry, and Behavior", in: E. R. Kandel, T. Schwartz, M. Jessell, S. A. Siegelbaum and A. J. Hudspeth (eds.), *Principles of Neural Science*, New York, NY, 21–38.
- Kim, J. (2018), "A Refutation of a Refutation of Universal Grammar", in: *Lingua* 2010–11, 122–124.
- Kirk, G. S. (1990), *The Iliad: A Commentary. Volume 2: Books 5–8*, Cambridge.
- Knox, B. M.W. (1968), "Silent Reading in Antiquity", in: *Greek, Roman and Byzantine Studies* 9, 421–435.
- Korfmann, M. (2005), "Die Arbeiten in Troia/Wilusa 2004 = Work in Troia/Wilusa in 2004", in: *Studia Troica* 15, 3–25.
- Koselleck, R. (2004), *Futures Past: On the Semantics of Historical Time*, New York, NY.
- Kramsch, C. (2012), "Why is Everyone so Excited About Complexity Theory in Applied Linguistics", in: *Mélanges CRAPEL* 33, 9–24.

- Laplace, P.-S. (1951 [1825]), *A Philosophical Essay on Probabilities*, New York.
- Latacz, J. / Nünlist, R. / Stoevesandt, M. (2009), *Homers Ilias Gesamtkommentar (Basler Kommentar), Band II Erster Gesang A*, Berlin – Boston.
- Lattimore, R. A. (2011), *The Iliad of Homer*, Chicago, IL.
- Lin, F. Y. (2017), “A Refutation of Universal Grammar”, in: *Lingua* 193, 1–22.
- Livingstone, N. (2011), “Silent Voices? Cultural Memory and the Reading of Inscribed Epigram in Classical Athens”, in: M. Bommas (ed.), *Cultural memory and Identity in Ancient Societies*, London, 26–42.
- Lord, A. B. (1960), *The Singer of Tales*, Cambridge, Mass.
- Lorenz, E. N. (1963), “Deterministic Non-Periodic Flow”, in: *Journal of the Atmospheric Sciences* 20, 130–141.
- Lorenz, E. N. (1972), “Predictability: Does the Flap of a Butterfly’s Wings in Brazil Set Off a Tornado in Texas?”, *The American Association for the Advancement of Sciences*, Washington DC, Dec. 29, https://static.gymportalen.dk/sites/lru.dk/files/lru/132_kap6_lorenz_artikel_the_butterfly_effect.pdf.
- Mackay, E. A. (ed.) (1999), *Signs of Orality: The Oral Tradition and its Influence in the Greek and Roman World*, Leiden.
- Markosian, N. (2020), “Time”, in: *The Stanford Encyclopedia of Philosophy*, Stanford, CA.
- McCarter, P. K. (1996), “The Early Diffusion of the Greek Alphabet”, in: M. S. Macrakis (ed.), *Greek Letters: From Tablets to Pixels*, New Castle, DE, 33–42.
- McLuhan, M. (1964), *Understanding Media: The Extensions of Man*, Cambridge, Mass.
- Miller, K. / Symons, S. L. (eds.) (2020), *Down to the Hour: Short time in the Ancient Mediterranean and Near East*, Leiden – Boston.
- Minchin, E. (ed.) (2012), *Orality, Literacy and Performance in the Ancient World*, Leiden – Boston.
- Morgan Short, K. / van Hell, J. G. (eds.) (2023), *The Routledge Handbook of Second Language Acquisition and Neurolinguistics*, London.
- Nagy, G. (1996), *Poetry as Performance: Homer and Beyond*, Cambridge.
- Nicolis, G. / Prigogine, I. (1989), *Exploring Complexity: An Introduction*, New York, NY.
- Nimis, S. (1999), “Ring-Composition and Linearity in Homer”, in: A. MacKay (ed.), *Signs of orality*, Leiden – Boston, 65–78.
- Nolte, D. D. (2018), *From Butterflies to Hurricanes*, Oxford.
- O’Neill, E. G. J. (1942), “The Localization of Metrical Word Types in the Greek Hexameter”, in: *Yale Classical Studies* 8, 105–78.
- Oesterreicher, W. (1997), “Types of Orality in Text”, in: E. J. Bakker / A. Kahane (eds.), *Written Voices, Spoken Signs: Tradition, Performance, and the Epic Text*, Cambridge, Mass.: 190–214.
- Olson, D. / Torrance, N. (eds.) (2009), *The Cambridge Handbook of Literacy*, Cambridge.
- Ong, W. J. (1982), *Orality and Literacy: The Technologizing of the Word*, London – New York.
- Ortega, L. / Han, Z. (eds.) (2017), *Complexity Theory and Language Development: In Celebration of Diane Larsen-Freeman*, Amsterdam.
- Parry, M. (1971), *The Making of Homeric Verse: The Collected Papers of Milman Parry*, Oxford.
- Pecere, P. (2022), “Words, Gestures, Brains and Caves. Remarks on the Material Bases of Language”, in: A. Ercolani / L. Lulli (eds.), *Rethinking Orality I. Codification, Transcodification and Transmission of Cultural Messages*, Berlin – Boston, 19–36.
- Penrose, R. (2016), *The Emperor’s New Mind: Concerning Computers, Minds, and the Laws of Physics*, Oxford.

- Perna, M. (2016), "La scrittura Lineare A", in: M. Del Frio / M. Perna (eds.), *Manuale di epigrafia micenea: introduzione allo studio dei testi in lineare B*, Padova, 87–114.
- Petersson, K. M. / Ingvar, M. / Reis, A., "Language and Literacy from a Cognitive Neuroscience Perspective", in: D. R. Olson / N. Torrance (eds.), *The Cambridge Handbook of Literacy*, Cambridge, 152–182.
- Porter, H. N. (1951), "The Early Greek Hexameter", in: *Yale Classical Studies* 12, 3–63.
- Prigogine, I. / Stengers, I. (1984), *Order out of Chaos: Man's New Dialogue with Nature*, New York, NY.
- Pucci, P. (1982), "The Proem of the *Odyssey*", in: *Arethusa* 15, 39–62.
- Puchner, M. (2017), *The Written World: How Literature Shaped History*, London.
- Ready, J. (2019), *Orality, Textuality, and the Homeric Epics. An Interdisciplinary Study of Oral Texts, Dictated Texts, and Wild Texts*, Oxford.
- Sale, M. (1996), "In Defense of Milman Parry: Renewing the Oral Theory", in: *Oral Tradition* 11–12, 374–417.
- Sansome, S. A. / Fifield, D. (2023), *SEDES: Metrical Position in Greek Hexameter*, in: *Digital Humanities Quarterly* 117 (<https://dhq.digitalhumanities.org/vol/17/2/000675/000675.html>).
- Schür, D. (2019), "Ist Troja das Wilusa der Hethiter? über Namensassoziationen und ihre fatale Rolle bei der Historisierung Hisarlıks", in: *Gephyra* 18, 33–57.
- Shive, D. (1987), *Naming Achilles*, Oxford.
- Sparrow, C. (1982), *The Lorenz Equations: Bifurcations, Chaos, and Strange Attractors*, New York, NY.
- Steele, P. M. (ed.) (2017), *Understanding Relations Between Scripts: The Aegean Writing Systems*, Oxford.
- Stoevesandt, M. (2008), *Homer's Ilias: Gesamtkommentar, Band IV: Faszikel 2*, Berlin – New York.
- Stoevesandt, M. / Olson, S. D. (2016), *Homer's Iliad: Book VI: 6: The Basel Commentary*, Berlin – Boston.
- Taplin, O. (1992), *Homeric Soundings: The Shaping of the Iliad*, Oxford.
- Tomasello, M. (2003), *Constructing a Language: A Usage-Based Theory of Language Acquisition*, Cambridge, Mass.
- Traugott, E. C. (2006), "Semantic Change: Bleaching, Strengthening, Narrowing, Extension", in: K. Brown (ed.), *Encyclopedia of Language and Linguistics*, 124–131.
- Vico, G. (1985 [1744]), *The New Science of Giambattista Vico*, Ithaca, NY.
- Watkins, C. (1976), "Observations on the Nestor's Cup Inscription", in: *Harvard Studies in Classical Philology* 80, 25–40.
- Werndl, C. (2009), "What are the New Implications of Chaos for Unpredictability?", in: *British Journal for the Philosophy of Science* 60, 195–220.
- West, M. L. (1982), *Greek Metre*, Oxford.
- West, M. L. (1998–2000), *Homeri Ilias*, Leipzig.
- Wolf, F. A. (1986 [1795]), *Prolegomena to Homer, 1795*, ed. by A. Grafton, Princeton, NJ.

Roberto Nicolai

The Clever Deception and Mirror Neurons

Abstract: The aim of my work is to have ancient poetic theory, in particular, ideas about the impact of poetry on listeners (Gorg. fr. 23; *Hel.* 8–11), interact with recent discoveries in neuroscience (mirror neurons). In both cases, an illusion or deceptive mechanism is highlighted that yields an increase in knowledge. Passages from ancient authors are also examined in which this mechanism becomes part of the theatrical or narrative dynamic while at the same time serving as a conscious instrument of metapoetic reflection (Aristoph. *Ran.* 907–922; Aesch. *Ag.* 988–1000; *Od.* 11. 333 ff.; 13.1 ff.).

Keywords: Mirror neurons; neuroscience; deception; poetry; increase in knowledge.

In the study of the the ancient theory of tragedy, scholarly literature has primarily focused on Aristotle's *Poetics*, with the notable exception of Oliver Taplin (*Greek Tragedy in Action*, 1978), who highlighted two pivotal passages from Gorgias.¹ From these two passages of Gorgias we shall begin.²

Note: This contribution is based on the paper presented on April 23, 2021, at the “LabOrality 2020–2021” organised at the University of Siena by M. Bettini, A. Ercolani, M. Giordano, L. Lulli, R. Palmisciano, and L. Sbardella. I would like to express my gratitude to Maurizio Bettini, Manuela Giordano, Luca Graverini, and Livio Sbardella for their insights during the seminar.

1 Taplin 1978, 167–171; see also LaCourse Munteanu 2012, 37–51; Grethlein 2023, esp. 154–160.

2 More than twenty years ago, I began investigating the mythical paradigms in tragedy, with particular attention to the dynamics of the paradigms within the tragedy in relation to the events portrayed on stage. I discussed this topic for the first time at our seminar at the University of Rome “La Sapienza”, a seminar founded by Luigi Enrico Rossi and now bearing his name, followed by a presentation in Sassari in 2005, and then in Alghero at a conference of the Associazione Italiana di Cultura Classica. The paper was published in “Sandalion” 2003–2005. In that article, I attempted to combine Gorgias’ physiology of emotions with the then-recent studies on mirror neurons: Nicolai 2003–2005; see also Nicolai 2009b and 2010. See also Budelmann / Easterling 2010, with examples drawn from *Agamemnon* and *Antigone*; Meineck 2011, dedicated to the role of the tragic mask; Noel 2019, on props in the *Oresteia*. An overview of the application of cognitive sciences to classical studies is provided by Meineck / Short / Devereaux 2019 and now by Novokhatko 2025. Specifically, theatre is the focus of Budelmann / Sluiter 2023. On the application of cognitive sciences to literature, see Zunshine 2010 and Zunshine 2015. The study of mythical paradigms in tragedy has accompanied me throughout the last two decades of my research, and it would take too long to list all the seminars where I have addressed this topic. Partial results have

Gorg. fr. 82 B 23 D.-K., *ap. Plut. glor. Ath.* 348c; *cf. aud. poet.* 15d

ἦνθησε δ' ἡ τραγωδία καὶ διεβοήθη, θαυμαστὸν ἀκρόαμα καὶ θέαμα τῶν τότε ἀνθρώπων γενομένη καὶ παρασχούσα τοῖς μύθοις καὶ τοῖς πάθεσιν ἀπάτην, ὡς Γοργίας φησὶν, ἦν δ' ἡ ἀπατήσας δικαιοτέρος τοῦ μὴ ἀπατήσαντος καὶ ὁ ἀπατηθεὶς σοφώτερος τοῦ μὴ ἀπατηθέντος, ὁ μὲν γὰρ ἀπατήσας δικαιοτέρος ὅτι τοῦθ' ὑποσχόμενος πεποιήκει, ὁ δ' ἀπατηθεὶς σοφώτερος· εὐάλωτον γὰρ ὑφ' ἡδονῆς λόγων τὸ μὴ ἀναίσθητον.

Tragedy flourished and was acclaimed – it was a marvelous spectacle for the ears and eyes of the men who lived in those times, which produced by means of stories and sufferings, “a deception”, as Gorgias says, “in which the one who deceives is more just than the one who does not deceive, and the one who is deceived is more intelligent than the one who is not deceived”. For the one who deceives is more just because he has done what he has promised, and the one who is deceived is more intelligent, for whoever is not insensible is easily captured by the pleasure of words (transl. A. Laks / G. W. Most).

Gorg. *Hel.* 8–11

εἰ δὲ λόγος ὁ πείσας καὶ τὴν ψυχὴν ἀπατήσας, οὐδὲ πρὸς τοῦτο χαλεπὸν ἀπολογήσασθαι καὶ τὴν αἰτίαν ἀπολύσασθαι ὤδε. λόγος δυνάστης μέγας ἐστίν, ὃς μικροτάτῳ σώματι καὶ ἀφανεστάτῳ θεϊοτάτῳ ἔργα ἀποτελεῖ· δύναται γὰρ καὶ φόβον παῦσαι καὶ λύπην ἀφελεῖν καὶ χαρὰν ἐνεργάσασθαι καὶ ἔλεον ἐπαυξῆσαι. ταῦτα δὲ ὡς οὕτως ἔχει δεῖξω· 9. δεῖ δὲ καὶ δόξη δεῖξαι τοῖς ἀκούουσιν· τὴν ποιήσιν ἄπασαν καὶ νομίζω καὶ ὀνομάζω λόγον ἔχοντα μέτρον· ἦς τοὺς ἀκούοντας τε εἰσῆλθε καὶ φρίκη περιφοβος καὶ ἔλεος πολὺδακρυς καὶ πῶθος φιλοπενθήσῃ, ἐπ' ἄλλοτριῶν τε πραγμάτων καὶ σωματίων εὐτυχίας καὶ δυσπραγίας ἰδίον τι πάθημα διὰ τῶν λόγων ἔπαθεν ἡ ψυχὴ. φέρε δὴ πρὸς ἄλλον ἀπ' ἄλλου μεταστῶ λόγον. 10. αἱ γὰρ ἐνθεοὶ διὰ λόγων ἐπωδαὶ ἐπαγωγοὶ ἡδονῆς, ἀπαγωγοὶ λύπης γίνονται· συγγινόμενῃ γὰρ τῇ δόξῃ τῆς ψυχῆς ἡ δύναμις τῆς ἐπωδῆς ἔθελε καὶ ἐπεισε καὶ μετέστησεν αὐτὴν γοητεῖᾳ. γοητείας δὲ καὶ μαγείας δισσαὶ τέχναι εὐρηγνται, αἱ εἰσι ψυχῆς ἀμαρτήματα καὶ δόξης ἀπατήματα. 11. ὅσοι δὲ ὅσους περὶ ὄσων καὶ ἐπεισαν καὶ πείθουσι δὲ ψευδῆ λόγον πλάσαντες, εἰ μὲν γὰρ πάντες περὶ πάντων εἶχον τῶν <τε> παροιχομένων μνήμην τῶν τε παρόντων <ἐννοίαν> τῶν τε μελλόντων πρόνοιαν, οὐκ ἂν ὁμοίως ὅμοιοι ἦν ὁ λόγος, οἷς τὰ νῦν γε οὔτε μνησθῆναι τὸ παροιχόμενον οὔτε σκέψασθαι τὸ παρὸν οὔτε μαντεύσασθαι τὸ μέλλον εὐπόρως ἔχει· ὥστε περὶ τῶν πλείστων οἱ πλείστοι τὴν δόξαν σύμβουλον τῇ ψυχῇ παρέχονται. ἡ δὲ δόξα σφαλερὰ καὶ ἀβέβαιος οὕσα σφαλεραῖς καὶ ἀβεβαίαις εὐτυχίαις περιβάλλει τοὺς αὐτῇ χρωμένους.

But if it was speech (*logos*) that persuaded and deceived her soul, it is not difficult to make a defense with regard to this too and to secure acquittal from the accusation in the following way. Speech is a great potentate that by means of an extremely tiny and entirely invisible body performs the most divine deeds. For it is able to stop fear, to remove grief, to instill joy, and to increase pity. I shall demonstrate that this is so. 9. But it is necessary to show this to the listeners by opinion too. I consider all poetry to be speech (*logos*) that possesses meter, and I give it this name. Those who hear it are penetrated by a terribly fearful shuddering, a much-weeping pity, and yearning, and on the basis of the fortunes and misfortunes of other people's actions and bodies their soul is affected by an affection of its own, by the medium of words. But now I shall pass from an argument (*logos*) to another one. 10. For in-

been published in a series of articles (Nicolai 2009a, 2009–2010, 2011, 2012), and a comprehensive work is very close to completion.

cantations divinely inspired by means of speeches (*logoi*) are bringers of pleasure and removers of pain. For the power of an incantation, when it is conjoined with opinion of the soul, beguiles it, persuades it, and transforms it by sorcery. For two arts have been discovered, those of sorcery and of magic, which are errors (*hamartēmata*) of the soul and deceptions of opinion. 11. Whoever has persuaded and also persuades whomever about whatever [scil. does so] by fabricating a false discourse (*logos*). For if all men, with regard to all things, had memory of the ones that have passed by, <understanding> of the ones that are present, and forethought for the ones still to come, then a similar speech would not be similarly [scil. deceptive], as things are in fact at present, insofar as it is easy neither to remember what has passed by nor to examine what is present nor to divine what is to come. So that about most things most people furnish themselves with opinion as a counselor for the soul. But opinion, being slippery and unstable, involves those who use it in slippery and unstable success (transl. A. Laks / G. W. Most).

In the two passages I have selected here Gorgias presents, in terms specific to his culture and language, a framework that can be compared to the one described by Budelmann and Easterling in *Reading Minds in Greek Tragedy*:³

Just as theatre spectators effortlessly accept that the *dramatis personae* possess no mental life beyond the text while simultaneously engaging with them imaginatively as if they were real human beings, so too does cognitive science shift its focus from the constructed nature of reality to the deeply ingrained human instinct to infer the thoughts and intentions of others, regardless of the richness or paucity of available cues. In other words, at the core of drama—and indeed of literature more broadly—lies its continual engagement with the very same mind-reading faculties that spectators and readers habitually employ in real life.

Clearly, one must exercise caution when applying the dynamics of mirror neurons to the theatrical experience, particularly when attempting to connect neural activity with conscious experience. On this crucial point, I wish to share Felix Budelmann's formulation:⁴

The connection between neural activity and conscious experience is elusive at best, and at the non-neural, phenomenological level there is certainly a substantive difference between the experience of doing something oneself and seeing or imagining somebody else do it. Mirror neurons are useful as an emblem of the intricate ties between motion enacted and motion perceived, and suggestive as traces of the pre-conscious dimension of action, but they do not give us a shortcut for capturing, let alone explaining, the experience of theatre-going.

The mechanism of deception that generates persuasion, as described by Gorgias, finds a precedent in a renowned passage from Homer. This is the *Dios Apate* in

3 Budelmann / Easterling 2010, 291–292.

4 Budelmann 2023, 8.

Book 14 of the *Iliad*. Let us read verses 214–217, in which Aphrodite speaks while offering the veil to Hera:⁵

ἦ, καὶ ἀπὸ στήθεσφιν ἐλύσατο κεστὸν ἱμάντα
 ποικίλον, ἔνθα δέ οἱ θελκτήρια πάντα τέτυκτο·
 ἔνθ' ἐνὶ μὲν φιλότης, ἐν δ' ἵμερος, ἐν δ' ὀαριστύς
 πάρφασις, ἣ τ' ἐκλεψε νόον πύκα περ φρονεόντων.

She spake, and loosed from her bosom the broidered zone, curiously-wrought, wherein are fashioned all manner of allurements; therein is love, therein desire, therein dalliance—be-guilement that steals the wits even of the wise (transl. A. T. Murray).

As in the passage from Gorgias' *Helen* (10: ἔθελξε), spells appear (14.215: θελκτήρια; cf. *Hel.* 10: ἐπωδαί) that affect the νόος; compare verse 217 with the references to ψυχή and δόξα in the Gorgian passage. The discourse that captivates, the πάρφασις,⁶ also appears here and should be compared to the power of λόγος in Gorgias. The idea that the spell also operates through poetry is a concept that can be found in the opening lines of Book 3 of Virgil's *Georgics* (1–5):

Te quoque, magna Pales, et te memorande canemus
 pastor ab Amphryso, vos, silvae amnesque Lycaeī.
 Cetera, quae vacuas tenuissent carmine mentes⁷,
 omnia iam volgata: quis aut Eurysthea durum
 aut inlaudati nescit Busiridis aras?

Thee too, great Pales, will I hymn, and thee,
 Amphrysian shepherd, worthy to be sung,
 You, woods and waves Lycaean. All themes beside,
 Which else had charmed the vacant mind with song,
 Are now waxed common. Of harsh Eurystheus who
 The story knows not, or that praiseless king
 Busiris, and his altars? (transl. J. B. Greenough)

5 For the nature of the 'veil', which cannot be identified with a belt, and for the Eastern parallels, see Janko 1992, 184ff. and Krieter-Spiro 2018, 108 ff.

6 On the connection of this term with the preceding ὀαριστύς, despite the absence of a conjunction, see Janko 1992, 185. Krieter-Spiro 2018, 110 places the punctuation mark at the end of v. 216, thus avoiding an explanation of the asyndetic link between the two terms. On πάρφασις, see Krieter-Spiro 2018, 110: "related to παράφημι 'encouragement, comfort', in an erotic context 'entertainment, seduction'".

7 This verse is interpreted by Servius as follows: "cetera quae vacuas t. c. m. hoc est fabulae, quae delectationi esse poterant, et occupare mentes curis solutas, iam descriptae a multis in omnium ore versantur. et aliter: legitur et 'carmine', et ut puto, rectius: non enim dicit 'cetera carmina' iam vulgata, sed 'cetera omnia' absolute, id est ceterae omnes res vulgatae".

Maurizio Bettini⁸ interprets *delectatio* in its etymological sense, meaning ‘to cast a snare’, a form of seduction, such as that of Aphrodite’s veil, which is obtained through the *carmen*, a combination of poetry and enchantment.⁹

When the first reports were published on the discovery of mirror neurons by Giacomo Rizzolatti,¹⁰ I was particularly struck by the mechanism of the 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. Mirror neurons generate knowledge through a physiological mechanism of deception. This is a dynamic that can be found in various fields of human physiology. Even vaccines, which have been widely discussed in recent times, deceive the human immune system. I quote from the website of the Bambino Gesù Hospital in Rome:¹¹

Vaccination mimics the initial infection with a specific purpose: to ensure that the immune system recognises the antigens of a microbe it has never actually encountered and prepares it for a swift and effective response. Therefore, we can consider vaccination as a genuine form of deception, a “fake infection.” In order to cause a “fake infection,” we thus need “fake microbes”: vaccines.

Knowledge itself is also based on forms of deception and simulation,¹² on representations, whether visual or verbal, that imitate reality or, if one prefers, create or recreate it: this is the *μίμησις* of Plato. A Russian poet, Fëdor Ivanovič Tjutčev, once said that “thought expressed is already a lie”,¹³ summarising in a single line a centuries-old debate in epistemology and the philosophy of language. I do not wish to – and indeed cannot – enter into the problem of the conventions in language or the relationship between language and reality, as discussed in Plato’s *Cratylus*.¹⁴ I will stop before this, at Gorgias: even in the realm of language, Gorgias, in his *Περὶ τοῦ μὴ ὄντος* (*On Nonbeing*), effectively framed the issue, clarifying that the question, rather than concerning the possibilities of knowledge, re-

8 I report an observation proposed by Maurizio Bettini during the seminar.

9 During the seminar, Luca Graverini drew attention to the poetics of magical deception in Horace’s *Ars Poetica* and the *mise en abîme* created by Apuleius, whereby in the *Metamorphoses* the author enchants through the very act of speaking about magic.

10 Among the several studies published in the last two decades, I would like to draw attention to Rizzolatti-Sinigaglia 2006, Iacononi 2008, and Rizzolatti-Sinigaglia 2008 and 2019.

11 <https://www.ospedalebambinogesu.it/vaccini-e-sistema-immunitario-99324/> Vaccini e sistema immunitario; last update 19.6.2024

12 For the various forms of simulation, see Giordano in this volume.

13 From *Silentium!* I used this quotation to introduce the seminar on forms of truth and forms of falsehood in Greek culture (Nicolai 2021).

14 For the *Cratylus*, see now Delle Donne 2024.

gards the possibility of communicating any knowledge that may have been acquired.¹⁵

Gorg. fr. 3bis Untersteiner *ap.* [Aristot.] *De Melisso, Xenophane, Gorgia* 980a 20-b 21

But even if they are knowable, how could someone, he asks, indicate them to someone else? (ὁ γὰρ εἶδε, πῶς ἂν τις, φησί, τοῦτο εἴποι λόγῳ;) For what one sees, how, he asks, could only communicate in speech (*logos*)? Or how could that thing become clear to someone who hears, but does not see it? For just as sight does not know sounds, so too hearing does not hear colors, but sounds: and someone who speaks utters a speech but not a color or a thing. So what someone does not think, how can he ask for it from someone else by means of speech, or how will he think it by means of speech or how will he think by means of some sign different from the thing, except, if it is a color, by seeing it, or, if it is <a sound, by hearing it? For on principle <someone who speaks> does not say <a sound> or a color, but a word; so that it is not possible to think a color, but to see it, nor a sound, but to hear it.

But even if this is possible, that he knows and that he says what he knows, then how will someone who hears understand the same thing? For it is not possible that the same thing be at the same time in multiple things that exist separately, for one would be two. And even if it were, he says, in multiple things and [these] were identical, nothing prevents [them] from seeming dissimilar, given that they are not similar everywhere nor in the same [scil. place]. For if they were in the same [scil. place], they would be only one [scil. individual] and not two.

But it is manifest that the same [scil. individual] does not even perceive similar things [scil. to what] he himself [scil. perceives] at the same time, but instead different things by hearing and by sight, and differently now and formerly. So that even less could someone perceive identically to someone else. So that therefore <if> something is knowable, no one could indicate it to someone else, since things are not speeches (διὰ τε τὸ μὴ εἶναι τὰ πράγματα λεκτά), and since no one thinks an identical thing to someone else (transl. A. Laks / G. W. Most).

Gorg. fr. 82 B 3 D-K. *ap.* Sext. Emp. *Adv. Math.* 7. 83–87

But even if it were apprehended, it would not be expressible for someone else. For if the things that are visible and audible and, in general, perceptible, those that exist externally and if among these the visible ones are apprehended by sight and the audible ones by hearing, and not reciprocally, how then can these be indicated to someone else? 84. For what we indicate by is speech (*logos*), but the things that exist and that are are not speech (ὃ γὰρ μνησόμεν, ἔστι λόγος, λόγος δὲ οὐκ ἔστι τὰ ὑποκείμενα καὶ ὄντα). So it is not the things that are that we indicate to other people, but rather speech, which is different from the things that exist. So just as what is visible could not become audible and vice versa, so too, since what is exists externally, it could not become our speech; 85. And not being speech, it could not be revealed to another person (οὕτως ἐπεὶ ὑπόκειται τὸ ὄν ἐκτός, οὐκ ἂν γένοιτο λόγος ὁ ἡμέτερος· μὴ ὦν δὲ λόγος οὐκ ἂν δηλωθεῖ ἑτέρῳ). Surely speech, he says, is constituted out of the external things that strike us, that is, from perceptibles. For from the en-

15 On the work of Gorgias, see Ioli 2010 and Ioli 2013. For a general framework of the issues raised by Gorgias' work, Bonazzi 2010, 39–50 is useful.

counter with flavor there come to us speech that expresses this quality, and from the occurrence of color that which expresses color. But if this is the case, it is not the speech that presents the external thing, but the external that indicates the speech. 86. And again: it is not possible either to say that speech exists in the same way as visible and audible things exist, so that the things that exist and that are could be indicated on the basis of a thing itself that exists and that is. For even if speech exists, he says, it nonetheless differs from all the other things that exist, and there is nothing that differs more than visible bodies and speeches. For what is visible is grasped by one organ, speech by a different one (εἰ γὰρ καὶ ὑπόκειται, φησὶν, ὁ λόγος, ἀλλὰ διαφέρει τῶν λοιπῶν ὑποκειμένων, καὶ πλείστῳ διενήνοχε τὰ ὀρατὰ σώματα τῶν λόγων· δι' ἑτέρου γὰρ ὄργάνου λεπτόν ἐστι τὸ ὀρατὸν καὶ δι' ἄλλου ὁ λόγος). So speech does not indicate the multitude of things that exist, just as these do not reveal their nature to each other. 87. These then being the aporias formulated by Gorgias, the criterion of truth is abolished, as far as is in their power. For there could not be any criterion of what neither is nor can be known nor has a nature such that it can be presented to someone else (transl. A. Laks / G. W. Most).

The autonomy of language, with respect to reality, paves the way for self-sufficiency of speech and literary forms,¹⁶ but in this reciprocity a fundamental aporia stands: if language does not and cannot fully encapsulate reality, then we inhabit an interstitial space between reality and linguistic representation. The instrument we employ – language – constructs its own autonomous reality, one that is simultaneously connected to external reality and to the very linguistic structures that have given rise to this new reality expressed in words.

Let us now return to the theatre: what in Gorgias is pure physiology, in Aristotle takes on new functions and, according to some interpretations, becomes almost a form of psychotherapy, with the theatre producing *catharsis* of the violent emotions aroused by tragic theatre.¹⁷ From this perspective, tragedy would be conceived by Aristotle as a kind of vaccine for the soul, which, in a homeopathic fashion and through simulation (as previously discussed), facilitates the transcendence of the passions and violent emotions that unsettle the ψυχή. In Gorgias, however, there is no mention of *catharsis*, whatever meaning assumes this term. The passions are forms of affection, and the illusion engendered by poetic discourse is no different from that induced by enchantments. By combining the passage from *Helen* with fr. 23, we deduce that the effect produced by the combination of μῦθοι and πάθη represents an increase in competence (σοφία).

¹⁶ For the importance of Gorgias in arriving at a definition of what is specific to literature, I indicate as a reference Nicolai 2014 and 2015.

¹⁷ In recent years, the theme of emotions in ancient cultures has become central to research. For theatre, see LaCourse Munteanu 2012 and Visvardi 2015; among the general studies, see Harris 2001; Konstan 2006; Braund-Most 2007; Chaniotis 2013; Cairns / Fulkerson 2015; Cairns / Nelis 2017; Cairns / Hinterberger / Pizzone / Zaccarini 2022.

With due differences, Gorgias is much closer to Rizzolatti than Aristotle is, who attributes to tragic theatre the overcoming of the passions – whatever one might mean by one of the most controversial words in Greek: *catharsis*. The issue lies not so much in the meaning of the term, ‘purification’, as in the identification of the scope and methods through which this purification occurs. To *catharsis* has been ascribed medical-therapeutic, religious, intellectual, or ethical-psychological values, a mixture of these various options or of some of them.¹⁸

Clearly, Gorgias had no knowledge of the existence of neurons, let alone mirror neurons, yet it is precisely his focus on physiology, identifying a mechanism of deception, that we now know to be active in the human organism, that makes his interpretation valuable. Gorgias was a contemporary of Sophocles and Euripides (arriving in Athens in 427 BCE), and he witnessed an emotionally engaged audience in the theatre, one that had an empathetic relationship with the characters portrayed on stage and their respective stories. Empathy and the cooperation of the audience play a fundamental role in the process described by Gorgias. He thus recognised that one of the vehicles for the message was emotion (πάθη), which is evoked by the μῦθοι presented on stage, but he also observed the reactions of the spectators, listened to their comments, and realised that the gain for the spectators was both cognitive and experiential (σοφία).

The term ψυχή frequently appears in Gorgias’ work to denote an organ of the human body – one that perceives and receives visions, words, and incantations. In this way, his description of tragedy seems far more incisive and closer to the reality of 5th-century theatre than Aristotle’s definition, which reduces the effect of tragedy to the *catharsis* of emotions. It is not possible in this context to address the emergence of ethics and psychology with Socrates and the Socratic schools, nor the relationship between σῶμα and ψυχή in the various forms it takes in Plato and Aristotle.¹⁹ I shall confine myself to observing that these areas of philosophical inquiry were expanded and refined during the 4th century, yielding significant implications for poetic theory. Aristotle’s formulation has enjoyed enormous success, yet it must be acknowledged that Aristotle’s reflection on theatre would not have been possible without Gorgias. It should also be recognised that the success of Plato and Aristotle has contributed to depriving us of an extraordinary intellectual heritage: that of figures such as Protagoras, Anaxagoras, Prodicus, and Hippias. The survival of two works by Gorgias and several fragments gives us an idea of how great the loss has been.

¹⁸ For an overview of the most recent interpretations, see Ford 2004, 310. Also, see LaCourse Munteanu 2012, 238–250, Ugolini 2016, Ugolini 2020, and Provenza 2022.

¹⁹ Among the many passages, I cite Plato’s *Cratylus* 400b-c and Aristotle’s *De Anima*.

I will now attempt to apply some recent discoveries in neuroscience to the theatre, beginning with a study by Manuela Giordano (*From Oral Theory to Neuroscience: A Dialogue on Communication*)²⁰ that focuses on the application of neuroscience to Homeric poems.

The first case I introduce pertains to attentive silence – both that of the spectators and that of the characters on stage. Aristophanes (*Ran.* 907–922) portrays Euripides mocking Aeschylus for the obstinate silences of some of his characters on stage.

Εὐριπίδης
καὶ μὴν ἑμαυτὸν μὲν γε τὴν ποίησιν οἷός εἰμι,
ἐν τοῖσιν ὑστάτοις φράσω, τοῦτον δὲ πρῶτ' ἐλέγξω,
ὡς ἦν ἀλαζῶν καὶ φένας οἷοις τε τοὺς θεατὰς
ἐξηπάτα μώρους λαβῶν παρὰ Φρυνίχῳ τραφέντας 910
πρῶτιστα μὲν γὰρ ἓνα τιν' ἂν καθῖσεν ἐγκαλύψας,
Ἀχιλλεῖα τιν' ἢ Νιόβην, τὸ πρόσωπον οὐχὶ δεικνύς,
πρόσχημα τῆς τραγωδίας, γρύζοντας οὐδὲ τουτί.

Διόνυσος
μὰ τὸν Δί' οὐ δῆθ'.

Εὐριπίδης
ὁ δὲ χορός γ' ἤρειδεν ὄρμαθούς ἂν
μελῶν ἐφεξῆς τέτταρας ξυνεχῶς ἂν οἱ δ' ἐσίγων. 915

Διόνυσος
ἐγὼ δ' ἔχαιρον τῇ σιωπῇ, καὶ με τοῦτ' ἔτερπεν
οὐχ ἦττον ἢ νῦν οἱ λαλοῦντες.

Εὐριπίδης
ἠλίθιος γὰρ ἦσθα,
σάφ' ἴσθι.

Διόνυσος
κάμαυτῷ δοκῶ. τί δὲ ταῦτ' ἔδρασ' ὁ δεῖνα;

Εὐριπίδης
ὑπ' ἀλαζονείας, ἴν' ὁ θεατῆς προσδοκῶν καθοῖτο,
ὀπόθ' ἢ Νιόβη τι φθέγγεται· τὸ δρᾶμα δ' ἂν διήει. 920

Διόνυσος
ὦ παμπόνηρος, οἷ' ἄρ' ἐφενაკιζόμεν ὑπ' αὐτοῦ.
τί σκορδινᾶ καὶ δυσφορεῖς;

Euripides
Well, of myself and what sort of poet I am,

I will tell at the end: but first I'll prove that this man
was an impostor and a cheat, and how he took the spectators and used to fool the dupes
reared with Phrynichos.

First, he'd wrap up and sit down someone or other,
An Achilles, or Niobe, not showing the face,
a facade of tragedy, not mumbling so much as this.

Dionysus

That's right, they didn't.

Euripides

And then the chorus boomed
four strings of lyric in a row nonstop: but they kept quiet.

Dionysus

And I enjoyed their silence; that pleased me
no less than the babblers now.

Euripides

Because you were stupid,
no doubt about it.

Dionysus

I think so too. Why did the so-and-so do this?

Euripides

From fraudulence, so the spectator would sit there waiting
for when Niobe would say something. And the play would go on.

Dionysus

Oh what a villain! How I was fooled by him!
Why do you stretch and act uncomfortable? (transl. M. Dillon).

We do not know for how long Niobe remained silent, alone on stage before the other characters and the chorus intervened, with the audience waiting in eager anticipation. I quote Manuela Giordano:²¹

Neuroscientific research on attention has highlighted the pivotal role played by expectancy, a state of mind consisting in being geared toward the oncoming of a certain event (the stimulus). When we are expecting something to happen, like a vision (a visual stimulus) or a sound (an auditory stimulus), our mind engages in a topdown process whereby high-level brain areas "alert" and hence modulate the activity of sensory-specific areas to perceive the stimulus in question.

²¹ Giordano 2022, 178.

We know how important anticipation is for the theatre, the tension created by the audience's expectation. Aeschylus addresses this in one of the most self-referential and metatheatrical choral songs of his work (*Ag.* 988–1000):

πεύθομαι δ' ἀπ' ὀμμάτων
νόστον, αὐτόμαρτυς ὦν·
τόν δ' ἄνευ λύρας ὁμως ὑμνωδεῖ.
θρήνον Ἐρινύος αὐτοδίδακτος ἔσωθεν
θυμός, οὐ τὸ πᾶν ἔχων
ἐλπίδος φίλον θράσος,
σπλάγχνα δ' οὔτοι ματά-
ζει πρὸς ἐνδίκους φρεσίν,
τελεσφόροις δίναις κυκλούμενον κέαρ.
εὐχομαι δ' ἔξ ἐμᾶς
ἐλπίδος ψύθη πεσεῖν
ἐς τὸ μὴ τελεσφόρον .

Of their coming home I learn with my own eyes and need no other witness. [990] Yet still my soul within me, self-inspired, intones the lyreless dirge of the avenging spirit, and cannot wholly win its customary confidence of hope. [995] Not for nothing is my bosom disquieted as my heart throbs against my justly fearful breast in eddying tides that warn of some event. But I pray that my expectation may fall out false [1000] and not come to fulfilment (transl. H. W. Smyth).

What is missing in the formulation given to the chorus is the courage infused by the expectation of favourable events, according to a phrase that reaffirms that of line 982, θάρσος εὐπειθές. Now, the two polar sentiments are terror and courage: between them lies a middle voice, ἐλπίς, which returns, after line 994, to line 999. The spontaneous funeral song is thus the song of anguished anticipation, in which a terror arising from within prevents courage from occupying the mind.

The silence of the listeners is connected to the enchantment (κηληθμός) in the famous Homeric verses in which the effect of song on the listeners is described (*Od.* 11. 333 ff.; 13. 1 ff.):

ὣς ἔφαθ', οἱ δ' ἄρα πάντες ἀκήν ἐγένοντο σιωπῇ,
κηληθμῷ δ' ἔσχοντο κατὰ μέγαρα σκιόεντα.

So he spoke, and they were all hushed in silence, and were held spell-bound throughout the shadowy halls (transl. A. T. Murray).

Gorgias captures this aspect of the effect of poetry on listeners/spectators when he implicitly associates the effects of poetry with those of spells (*Hel.* 10). This latter passage shows that anticipation is not limited to the anxiety experienced by those who foresee unfavourable events, but encompasses a broad range of emotions, such as the one described in *Gorg.* *Hel.* 8 ff. Moreover, it may be noted that the

spectator's or listener's perception engenders a form of pleasure, which ought to be understood in a physiological sense. From this perspective, passages that speak of *τέρψις*, the *delectatio* produced by song, should be reconsidered. The experiment that confirmed a higher production of endorphins in those watching a film corroborates the physiological foundations of the pleasure experienced by spectators at a dramatic performance but also allows us to identify some essential social dynamics within the theatrical experience. Indeed, the endorphin system is "central to social bonding and plays a crucial mediating role in creating cohesive, affective relationships".²² After forced confinement due to the pandemic, we have thankfully returned to the theatre and to the cinema, regaining the fullness of the experience offered by performances. Those who watch a theatrical performance or a film from the comfort of their sofa via television remain only half-spectators, lacking that social context, which is not an accessory to the experience, but the very essence of the theatrical experience itself.

A not insignificant consequence of this type of investigation concerns the boundaries between the so-called hard sciences and the humanities: the tendency to regard them as two separate and incompatible worlds (the two cultures of Charles Percy Snow)²³ may make sense from the perspective of the corporate-driven structure that dominates academia, which tends to turn disciplines into closed islands. However, it is senseless if, as Giorgio Pasquali teaches, there are "no severely delimited disciplines, compartments (*Fächer*), [...], but only problems that must often be addressed simultaneously using methods derived from a variety of disciplines".²⁴

It should be emphasised that boundary investigations are among the most productive and interesting inquiries. But in the case with which we are concerned, it is the deepest boundary that is involved: I am convinced that neuroscience could benefit from a dialogue with the humanities, and that the same could happen for our own disciplines. Given the vast expanse of contemporary knowledge, it would be utterly inconceivable to envisage a scientist, or sophist, capable of mastering all fields of science, as occurred in the 5th century BCE and as it continued until the eighteenth century. Nevertheless, I believe that the current phase of frantic specialisation fueled by the convenience of being the leading expert in very narrow research fields – publishing much and quickly – must eventually give way to a new era, one in which intellectual curiosity is rekindled, and interdisciplinary dialogue is truly valued.

²² Budelmann / Dunbar / Duncan *et al.* 2017, 236, cited by Giordano 2022, 191.

²³ Snow 1959.

²⁴ Pasquali 1952, XIV.

References

- Bonazzi, M. (2010), *I sofisti*, Rome 2010 = engl. transl., Cambridge 2021.
- Braund, S. / Most, G. W. (2007), *Ancient Anger: Perspectives from Homer to Galen*, Cambridge.
- Budelmann, F. (2023), *Introduction*, in: Budelmann / Sluiter 2023, 1–21.
- Budelmann, F. / Dunbar, R. / Duncan, S. / van Emde Boas, E. / Maguire, L. / Teasdale, B. / Thompson, J. (2017), “Cognition, Endorphins and the Literary Response to Tragedy”, in: *Cambridge Quarterly* 46, 229–502.
- Budelmann, F. / Easterling, P. (2010), “Reading Minds in Greek Tragedy”, in: *G&R* 57, 289–303.
- Budelmann, F. / Sluiter, I. (eds.) (2023), *Minds on Stage: Greek Tragedy and Cognition*, Oxford.
- Cairns, D. / Fulkerson, L. (eds.) (2015), *Emotions between Greece and Rome*, London.
- Cairns, D. / Nelis, D. (eds.) (2017), *Emotions in the Classical World: Methods, Approaches, and Directions*, Stuttgart.
- Cairns, D. / Hinterberger, M. / Pizzone, A. / Zaccarini, M. (eds.) (2022), *Emotions Through Time. From Antiquity to Byzantium*, Tübingen.
- Chaniotis, A. (2013), *Unveiling Emotions: Sources and Methods for the Study of Emotions in the Greek World*, Stuttgart.
- Delle Donne, C. (2024), *Artigiani di parole: Il linguaggio e la sua genesi a partire dal Cratilo di Platone*, Rome.
- Ford, A. (2004), “Catharsis: The Power of Music in Aristotle’s *Politics*”, in: P. Murray / P. Wilson (eds.), *Music and the Muses: The Culture of ‘Mousike’ in the Classical Athenian City*, Oxford, 309–336.
- Giordano, M. (2022), “From Oral Theory to Neuroscience: a Dialogue on Communication”, in: A. Ercolani / L. Lulli (eds.), *Rethinking Orality I: Codification, Transcodification and Transmission of ‘Cultural Messages’*, Berlin, 167–197.
- Grethlein, J. (2023), “Gorgias’ ἀράτη, Sophocles’ *Electra*, and Cognitive Criticism”, in Budelmann / Sluiter 2023, 153–172.
- Harris, W. V. (2001), *Restraining Rage: The Ideology of Anger Control in Classical Antiquity*, Cambridge, Mass.
- Iacoboni, M. (2008), *I neuroni specchio: Come capiamo ciò che fanno gli altri*, Turin.
- Ioli, R. (2010), *Gorgia di Leontini. Su ciò che non è*, Hildesheim.
- Ioli, R. (ed.) (2013), *Gorgia: Testimonianze e frammenti*, Rome.
- Janko, R. (1992), *The Iliad: A Commentary*, Volume IV: Books XII–XVI–16, Cambridge.
- Konstan, D. (2006), *The Emotions of the Ancient Greeks: Studies in Aristotle and Classical Literature*, Toronto.
- Krieter-Spiro, M. (2018), *Book XIV*, in: A. Bierl / J. Latacz (eds.), *Homer’s Iliad: The Basel Commentary*, Berlin–Boston.
- LaCourse Munteanu, D. (2012), *Tragic Pathos: Pity and Fear in Greek Philosophy and Tragedy*, Cambridge.
- Laks, A. / Most, G. W. (eds.) (2016), *Early Greek Philosophy*, VIII, *Sophists*, Part 1, Cambridge, Mass.
- Meineck, P. (2011), “The Neuroscience of the Tragic Mask”, in: *Arion* 19, 113–158.
- Meineck, P. / Short, W. M. / Devereaux, J. (eds.) (2019), *The Routledge Handbook of Classics and Cognitive Theory*, London.
- Nicolai, R. (2003–2005), “L’emozione che insegna: parola persuasiva e paradigmi mitici in tragedia”, in: *Sandalion* 26–28, 61–103.

- Nicolai, R. (2009a), “Ai confini del paradigma: παραδείγματα οικεία e antefatti paradigmatici”, in: *SemRom* 12, 1–19.
- Nicolai, R. (2009b), “Introduzione”, in: G. Sofia (ed.), *Dialoghi tra teatro e neuroscienze*, Rome, 9–10.
- Nicolai, R. (2009–2010), “Prima del processo: logiche giudiziarie nell’*Orestea*”, in: *Sandalion* 32–33, 5–31.
- Nicolai, R. (2011), “La crisi del paradigma: funzioni degli exempla mitici nei cori di Sofocle”, in: A. Rodighiero / P. Scattolin (eds.), “... *Un enorme individuo, dotato di polmoni soprannaturali*”. *Funzioni, interpretazioni e rinascite del coro drammatico greco*”, 1–36.
- Nicolai, R. (2012), “Mythical Paradigms in Euripides: the Crisis of Myth”, in: A. Markantonatos / B. Zimmermann (eds.), *Crisis on Stage: Tragedy and Comedy in Late Fifth-Century Athens*, Berlin, 103–120.
- Nicolai, R. (2014), “Gorgia e Isocrate: i poteri della parola e la scoperta della letteratura”, in: M. Tulli (ed.), *ΦΙΛΙΑ: Dieci contributi per Gabriele Burzacchini*, Bologna, 11–32.
- Nicolai, R. (2015), “Isocrate, Gorgias et Xénophon : réflexions sur le genre et la fonction des λόγος”, in Chr. Bouchet / P. Giovannelli-Jouanna (eds.), *Isocrate: Entre jeu rhétorique et enjeux politiques*, Lyon, 123–138.
- Nicolai, R. (2021), “ἀλήθεια / ψεῦδος. Forme della verità e forme della menzogna nella cultura greca: riflessioni introduttive”, in: *SemRom* n.s. 10, 1–18.
- Noel, A.-S. (2019), “What Do We Actually See on Stage? A Cognitive Approach to the Interactions between Visual and Aural Effects in the Performance of Greek Tragedy”, in Meineck / Short / Devereaux 2019, 297–309.
- Novokhatko, A. A. (2025), *A Guide to Classics and Cognitive Studies: Reviewing Findings and Results*, Berlin – Boston.
- Pasquali, G. (1952²), *Storia della tradizione e critica del testo*, Florence.
- Provenza, A. (2022), *Catarsi ed Ethos. La musica tra formazione del carattere e cura dei mali nella Grecia antica*, Palermo.
- Rizzolatti, G. / Sinigaglia, C. (2006), *So quel che fai. Il cervello che agisce e i neuroni specchio*, Milan.
- Rizzolatti, G. / Sinigaglia, C. (2008), *Mirrors in the Brain: How Our Minds Share Actions and Emotions*, Oxford.
- Rizzolatti, G. / Sinigaglia, C. (2019), *Specchi nel cervello: Come comprendiamo gli altri dall'interno*, Milan.
- Snow, C. P. (1959), *The Two Cultures and the Scientific Revolution*, Cambridge.
- Taplin, O. (1978), *Greek tragedy in action*, London.
- Ugolini, G. (ed.) (2016), “Catharsis, Ancient and Modern”, in: *Skené* 2.
- Ugolini, G. (2020), *Jacob Bernays e l'interpretazione medica della catarsi tragica*, con traduzione integrale del saggio di Bernays, *Lineamenti del trattato perduto di Aristotele sull'effetto della tragedia*, Naples.
- Visvardi, E. (2015), *Emotion in Action: Thucydides and the Tragic Chorus*, Leiden-Boston.
- Zunshine, L. (2010), *Introduction to Cognitive Cultural Studies*, Baltimore.
- Zunshine, L. (ed.) (2015), *The Oxford Handbook of Cognitive Literary Studies*, Oxford.



Part II: **Storytelling and the Narrative Mind**

Alberto Oliverio

The Narrative Mind. Narrating, Listening, Reading

Abstract: This paper explores the profound connection between storytelling, imagination, and human cognition. It argues that narration is a fundamental human instinct, acting as a “flight simulator” for social life by allowing individuals to vicariously experience complex emotional scenarios. The text differentiates between oral and written communication, highlighting how writing stimulates the imagination to compensate for the absence of non-verbal cues. It delves into the nature of analogical thinking, identifying it as a core cognitive process, particularly active in childhood and linked to the right cerebral hemisphere, which governs creativity and holistic thought.

Keywords: Storytelling; imagination; written communication; cognition.

1 Storytelling and Imagination

From an early age, even before being able to read, we are fascinated by the stories that are told to us by adults, to the point that Jonathan Gottschall (2012) author of *The Instinct to storytelling*, argues that narration is part of human nature and constitutes the space in which individuals practice using the most important skills of social life.

One of the advantages of narration, through listening or reading, is the possibility of living surrogate experiences, especially emotional, without exposing oneself in the first person. Stories are a sort of flight simulator for human social life, a way to outline scenarios, hypothesize behaviours, live the consequences of some choices but being safe, without risking yourself. In fact, narrative fiction offers us the opportunity to live strong experiences while remaining alive. Yet, when we are absorbed by a story, we lower our intellectual guard, we are emotionally touched, and this seems to leave us defenceless... Whether it is an essay, a pamphlet or a fictional story, the reader is contaminated by the thought of those who write, judge, hypothesize, disagree, get in tune...

However, reading implies a clear difference from oral communication. In writing, in fact, the importance of words grows according to the lack of some pre-verbal and non-verbal elements: during the reading we do not have the voice of the writer, nor his facial expressions, smiles, looks, gestures, so powerful in interpersonal exchange. More than in spoken language, which is completed by pauses,

intonations, facial expressions and gestures, writing must therefore be based on a series of expressive modalities and precious information to understand the writer's thoughts. The combination of words, rhythm and metaphors that stimulate the imagination and generate visual images are therefore important. In addition, the times of oral communication are much faster and leave less room for that temporal dimension typical of writing and reading. A written text, whether it is a story or a novel, outlines situations and landscapes, of the soul and nature, which underlie slower times since at any time the reader can take his eyes off the sheet and abandon himself to fantasy, complete with his imagination the suggestions that emerge from the text.

The writer is therefore somehow obliged to search for the right words, the right phrases. We immediately notice the detachment that exists between oral language and written language when we are subjected to the unspooled of some oral intervention that perhaps had been appreciated by the listeners, but which is almost incomprehensible, flat, and disorganized once transcribed.

2 Imagination, Analogy, and Imaginary

The child who listens to or reads a story, the adult who reads a story or a novel, activate the imagination, outline new scenarios, compare their experiences with those narrated, in other words give space to an analogical type of thought in which the narrated experiences are compared with their own experiences. Although 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.

Often, we tend to oppose logic to intuition, rigor and systematicity to fortuitous and "irrational" associations: analogical thinking has some of these apparently illogical characteristics and for this reason, probably, it has been considered as a minor form of thought, close to the inconsistencies of childhood. 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. The human mind, as we well know, is attracted to problems but this does not imply that a logical attitude still guarantees success, especially when it faces new and complex problems and, above all, unusual situations that arise for the first time and in which the variables are numerous and often elusive. It is in these situations that analogical strategies can lead to innovative solutions, visualize concepts in concrete form, let us glimpse a different dimension.

In its most schematic definition, analogical thinking involves passing from a known source – or reality – to an unknown target – or reality – while not logical,

in the sense that it is based on the usual rationality deductions, it implies a form of logic (ana-logical) that leads to the understanding of an unknown reality – the target of analogy. Analogical thinking is also the basis to produce creative ideas¹. An important aspect of creativity is the ability to pick up analogies between mental items that until a given moment do not seem to be associated. New ideas do not generally stem from deductive reasoning; on the contrary, very often ideas emerge from mental images. The use of analogies allows to grab similarities and relationships among objects, experiences and facts to fill a cognitive gap or to solve a problem through prior experience and knowledge. Analogies embody abstract concepts by building a mental model of a reality that otherwise cannot be easily represented since it is far from our senses. This strategy allows many informal artists to give body to concepts that would be otherwise difficult to translate. This embodiment of ideas that our senses do not seize, implies that our mind does not mirror a real world but artificially builds a new one.

Analogical thinking draws therefore from previous experiences and memories and generates new meanings. This approach increases the possibility to lead to creative results. An approach only based upon logics and on its strict rules does not in fact leave much room to those playful associations that are possible when we abandon ourselves to imagination and reduce logic control. There are two cortical regions that are involved in the production of analogies, associative and prefrontal cortex, the latter being much expanded in humans in relation to other mammals and primates. As indicated by its name, associative cortex makes possible an association between different components of the same experience

Already at the age of two a child gathers cubes of the same colour, isolating them from cubes of different colours because of their attributes, that is, similar characteristics. An 11-month-old baby expects two similar objects to have similar properties: for example, after seeing a ball playing because it contains a bell inside, he expects another ball to ring as well. At three years of age a child proves to be able to elaborate relationship mappings, that is, to pass from one reality to another as long as they resemble each other for the relationships they have between them: for example, if an object is hidden in a miniature piece of furniture that in turn is part of a small-scale model of a room, the child will look for it in the

¹ A central aspect of creativity is the ability to combine and mix in a new way an already existing “capital”, as to say to use the resources available as “bricks” to build new associations. As indicated by the mathematician Henry Poincaré, “To create means to make new combinations of useful associative items. Creative ideas show relations between facts that are already known but that are erroneously believed to be unrelated to each other”.

real furniture of the real room. At four years a child understands the existence of proportional mappings according to the scheme $A : B :: C : D$ (a loaf is to a slice like a lemon to a wedge) and appreciates forms of humour based on relational analogies. At the age of five, it carries out systemic mappings, and identifies higher-order relationships, based on similar causes. For example, he understands the analogy of the fox and the grape, that is, the fact that in the face of impossible choices one pretends to be no longer interested in that reality. At the age of six, he is finally able to solve complex problems based on proportional analogies and unfamiliar contents, while his ability to generalize and identify similar attributes, cause-effect relationships in different situations is constantly growing. In short, developmental psychology indicates that the human mind is characterized by successive analogical stages (Oliverio 2008).

One of the characteristics of analogical thinking is to depend mainly on the right hemisphere, the hemisphere responsible for an overall approach (Gestalt), home to visual nervous activities typical of states of relaxation and daydreaming. While the left hemisphere, home to most linguistic activities, is involved in logical-deductive processes and uses sequential logic, the right hemisphere is at the centre of analogical processes, imagination and is involved in different aspects of creativity.

Imagination is not only useful for hypothesizing possible solutions or hypotheses but also for outlining landscapes or fantastic scenarios, devoid of a certain number of connections with the rules of the reality in which we live or with the “laws” that adhere to them. The brain’s ability to form mental images, to recombine them into a sort of continuous kaleidoscope within which both logical and fantastic associations are made, is the basis of creativity, a capacity in which playful elements and logical processes merge without which there would be no possibility of providing divergent and innovative answers, to look at the usual reality with an unusual perspective, to extract new elements from trivial information. These activities largely depend on the right hemisphere, characterized precisely by its overall abilities, by its specificity in dealing with visual-spatial information, by its involvement in musical activities, by a divergent thought that is the basis of the imaginary, by complex emotional dynamics.

The production of analogies is based on the capacity for imagination, a kind of playful thinking that draws from previous experiences and memories to recombine them in new ways and generate new meanings. A playful approach to a problem increases the possibility of producing creative results, as indicated, for example, by Teresa M. Amabile (1983). Logical thinking, with its strict rules, does not leave much room for playful associations while these are possible when one indulges in imagination and silences the filter of logic. The thinking of creatives alternates between primary and secondary processes. The primary thought is typi-

cal of dreaming, reverie, psychotic states, and hypnosis. It is based on free associations, analogies, and concrete images, not on abstract concepts. Secondary thinking is abstract, logical, reality-oriented, typical of an alert consciousness. Cognitive neuroscientists agree that in the right hemisphere primary mental processes take place (free associations, reverie, dreams) while in the left hemisphere secondary ones prevail (logical-rational activities).

If we observe young children and their ability to look unconventionally at the reality around them, at their attempts to give explanations that satisfy their conceptions, if we consider the meaning of their play, the continuous setting up of stories and narratives, we realize that their mind is largely set up in analogical terms, dominated by primary processes, oriented towards those creative functions that we attribute to the right hemisphere. Cognitive neuroscience tells us that the child's thought is not so magical, as many psychologists claim, but a sort of volcano that erupts hypotheses subject to subsequent adjustments: like a scientist, the child tests reality using a predominantly analogical thought. The stories that adults read or invent for the benefit of children, enriching them with facial expressions and emotional intonations, are not only a journey into fantasy but are the basis of analogies, hypotheses, explorations of the possible². Once again, literary imagery is a flight simulator.

In fact, if one cannot find meaningful patterns in the outside world, the mind will try to impose them. Today, however, the comparison between traditional reading and the new media of communication outlines new scenarios and problems, largely linked to the difference that exists between imaginary and imagina-

2 Between the ages of 2 and 6–7 years, the phase of symbolic play gradually establishes itself, which involves the development of imagination and the ability to formulate hypotheses. Symbolic play also consists of repeating a behaviour pattern. In this case, however, the motor and vocal “schemes” are not directed at objects they are ordinarily applied to, but by analogy, to new objects or imaginary situations where the child “pretends” that such objects exist. For example, a two-and-a-half-year-old child may use a long stone instead of a comb, repeating the “scheme” of combing, or may pretend to wash their ears with imaginary water. Symbolic play thus allows the child to project onto other objects or beings’ schemes that are part of their habitual behaviour: therefore, they can make the doll, the teddy bear, and so on walk, jump, cry, eat, and so forth. Symbolic play, however, has not only a cognitive function but also an emotional aspect. The preschool-aged child often experiences small disappointments that contrast with their desires or expectations; for example, they may want to nail a nail into the wall as their father can, but no matter how hard they try, they cannot; they may want to bake a cake, drive a tractor, a train... all things they are not allowed to do in real life. Symbolic play, instead, allows any desire to be realized and thus serves a compensatory function. Precisely because of this characteristic, it can be considered a form of spontaneous psychotherapy, similarly to what happens when a child listens to a story.

tion or fantasy: while the first is a kind of organized trip, imagination is a path that must be built, step by step, and that mobilizes cognitive resources.

3 Thought and Language

Storytelling and reading refer not only to the imagination of the listener but also to a more general aspect, to the role of language in the structuring of thought. Thanks to language, the child can evoke situations that are not present and free himself from the narrow limits of the perceptual field, space, and time: events, objects, people, are inserted into a conceptual framework that, in childhood, enriches the knowledge that the child has of them.³ The possibility of verbally isolating the most relevant trait of an object can, for example, serve to better understand a problem and to make learning more stable. Moreover, language, by helping to define different aspects of reality, modifies perception, favours the elaboration of a different system of associations and becomes, as the psychologist Jerome Bruner (1990) also maintains, a sort of “amplifier” of thought.

At the beginning of language learning, passive understanding of words and phrases is broader than the active ability to express oneself. In other words, the child understands the meaning of the words before being able to pronounce them. In this phase he is also very sensitive to the intonations of the voice, to the presence or absence of emotionality in language, to the mimicry that accompanies the speech. Therefore, he can guess whether a sentence has been uttered seriously or as a joke, if an order demands to be carried out immediately or if a delay is implicitly allowed, if the interest that a stranger shows him is real or conventional. Therefore, a sentence of the adult has a charm that derives from the climate it can create, just as a short story creates in the child an emotional bond with the adult even before his understanding. Gradually, language maturation will broaden the child’s cognitive skills. For example, the child learns that, in addition to the words that help differentiate one object from another, there are those with a more general meaning that allow to indicate classes and categories, words that speed up communication and expand thought: orange and lemon, for example, are different objects, but both fall into the category of citrus fruits and in the broader category of fruits and in the even broader category of edibles.

All this shows how language does not only perform a communication function but also acts as a support and regulator of thought, as an instrument of encoding reality, and helps the child in his choices. Observing a child of 4 or 5 years while

3 Oliverio 2021b.

playing or drawing you can easily notice how often he speaks aloud to himself: in those moments he does not communicate with others but speaks for himself, to help himself in what he does. Lev S. Vygotskij (1962) has defined this language as “normative”, that is, a language that has little communication value, but serves to conduct reasoning or direct an action and that with age will turn into an inner language, fragmentary and abbreviated, devoid of sound traits, reduced at most to a mumbling on the lips.⁴

According to many psychologists, adults who use increasingly longer sentences and a rich vocabulary from the age of 3 of children not only promote their language skills but also promote their cognitive development. It is different to say to a 4-year-old child “put on the raincoat” or “put on a raincoat because it is raining outside and you could get wet”: listening to phrases of the second type, in fact, the child realizes the reasons for acting and the relationships that link the events together. According to the English linguist Basil Bernstein (1971), being exposed for years to a restricted linguistic code or, conversely, to an elaborate linguistic code, not only enhances linguistic competence but also the way of thinking.

4 Listening to the Words, Observing the Lips...

If we go back in time, to the first months of life, we observe that the linguistic sounds produced by adults induce an increasingly complex capacity for discrimination.

In all languages the meaning of words is based on the combination of a series of basic sounds, phonemes. Phonemes are like the letters of the alphabet: all spoken languages are based on several phonemes ranging from 10 to just over 100. Examining the approximately 6000 languages of the world it has been calculated that on average a language distinguishes and has about 30 basic phonemes, which are roughly the number of phonemes of Italian. Infants have the innate ability to

⁴ According to Vygotsky, language, symbols, and cultural tools act as mediators between the individual and the environment, serving as the primary vehicle through which children learn and develop their cognitive abilities. Language is not just a tool for communicating ideas; it is the very key to advanced thought, guiding and determining thinking and learning. Through words, children begin to shape their thoughts, reflect on past experiences, and plan for the future. Language allows them to internalise the knowledge of the surrounding society, incorporating cultural norms and linguistic conventions into their understanding of the world. Thus, language is not merely a form of expression; it is the foundation upon which understanding and complex thinking are built, and it is fundamental to the process of children’s learning and cognitive development.

react selectively to the phonemes and sounds of different languages, while adults have some difficulty perceiving the differences that exist between the sounds used in a foreign language: for example, a Japanese who learns English late has some difficulty perceiving the difference that exists between words like “rap” or “lap”, where the discrepancy is due solely to the presence of the letter ‘r’ or ‘l’. An adult European has difficulty discriminating against accents that, in the Mandarin language, differentiate the same vowel. The ability to grasp the distinctions between sounds used in a language other than one’s own is lost very early: at 6 months of age, Japanese and American babies are equally able to recognize the sounds “ra” and “la” as distinct. However, already at 12 months Japanese babies (raised in Japanese-speaking families) have lost this ability, while American babies become increasingly accurate at differentiating the two sounds.

When children see something new or hear a sound for the first time, their brain reacts to the novelty, while gradually ceasing to react if the images or sounds are repeated, as it has become accustomed to that experience (Friederici 2017). To highlight the brain reactions of children, a computer analyses the characteristics of the electroencephalographic pattern and, highlighting the variations of electric waves, can indicate when the brain has perceived – or not – the difference between two stimuli or experiences. More precisely, in American or Japanese children of 6 months the contrast between the sound “l” and the sound “r” produces changes in the electroencephalogram following the appearance of an electrical wave (known as ERP, or event related potential – electrical potential induced by the event) that occurs just 350 thousandths of a second after the perception of the two sounds. The presence of this wave indicates that the babies noticed the difference between the “r” and the “l”, while if the two sounds had been identical – or if the difference had not been caught – the wave would have manifested itself with a lower intensity – or not at all – due to habituation. In Japanese children of 12 months, who no longer perceive the discrepancy between the two sounds, the electroencephalographic reaction does not occur.⁵

A child’s brain therefore changes very early in relation to the typical sounds of the language he hears speaking, so that he listens to them through a kind of filter that progressively causes him to notice some differences and ignore others. It is the mother tongue that shapes the child’s perceptual system at an early age, underscores some phonetic contrasts and smoothes out others: and this occurs before he learns specific words. The perceptual system of children can be considered as a mass of plasticine that conforms to the mold of the tongue they will speak once the mold has stabilized it will adapt more easily to the sounds with which

5 Weber-Fox / Neville, 1996.

it matches than to the different ones. This explains why a Japanese child, who at first can grasp the differences that exist between “r” and “l”, will later have difficulty distinguishing words like “rap” and “lap”.

At the cerebral level, this phenomenon is explained by the progressive specialization of some neurons in the cortex to react to specific stimuli. The sounds of the mother tongue, that is, select groups of neurons that gradually respond more and more selectively to the basic sounds: the connections between the neurons associated with the sounds of a particular language are strengthened, while the neurons associated with the sounds of other languages progressively weaken (Kuhl, 2000)

Language learning also passes through another ability of young children, that of reading the movements of the lips and connecting them to sounds. To demonstrate this ability, evident since the age of 6 months, an experiment was carried out in which the mother stood in front of the child and posed her lips to a sound, for example the “g” of gruel, without pronouncing it. At the same time, a sound such as the “g” of gruel or a different sound, such as the “m” of mother, was produced through a loudspeaker: the child looked longer at the woman’s face when her lips posed at the pronunciation of the sound that corresponded to the one reproduced by the speaker rather than the different one. The ability to read lips lasts – and improves – in adulthood and facilitates the understanding of language: an adult who observes the face of a person who speaks enjoys a perception much higher than that which characterizes only listening. This increase in perception connected to lip reading facilitates our understanding: we can realize this if we think of the difference we find between listening to a person speaking softly in front of us and a low-volume telephone conversation.

When a child listens to an adult telling a story, no matter if it is the result of imagination or reading a book, he turns his gaze to the face of the narrator: not only to grasp the emotional expressions that “season” the story but also to observe the movements of the adult’s mouth, generally accentuated when the adult addresses a small child, but also facilitate one’s understanding of words through the reading of lip movements.

5 Writing and Reading

There is a remarkable evolutionary difference between the spoken and written word: while the origins of language sink their natural history in hundreds of thousands of years and depend on brain areas that reflect a long evolutionary history at the centre of our linguistic abilities, the origins of writing are much more recent, nothing in terms of the natural history of human beings. It is for this reason

that writing, invented just over 6000 years ago, does not depend on brain structures written in our genes: in such a short time it is not possible that nerve networks capable of supporting this function have evolved. 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. These areas respond to parameters such as top, bottom, right or left, criteria that are at the heart of our ability to trace the elementary signs of writing, from cuneiform to hieroglyphs, Cyprus-Minoan writing and so on. In essence, the areas of the parietal cortex were co-opted to write, they were used to perform a different function than the original one.⁶

Therefore, while language has developed through a long evolutionary process, through changes in cortical and subcortical characteristics that have mainly affected the left hemisphere, writing has much more recent historical origins and, as Stanislas Dehaene *et al.* 2011 argue, implies the ability to use some areas of the brain in a new way, different from the one for which they are programmed. This means, first, that written language must be taught explicitly and is less easily mastered than the spoken language that children learn effortlessly and through a limited number of explicit instructions.

Learning to read, as is well known, occurs after we have learned to speak. To read it is first necessary to know the letters of the alphabet and the meaning of a certain number of words. Secondly, it must be understood that written letters correspond to the sounds of spoken language and therefore divide a word into the phonemes that form it. But reading also involves a series of non-specific brain activities, ranging from attention to vision, to memory. The first requirement for reading is to pay attention, one of the executive functions that, together with working memory, implies an activation of the frontal lobes and the thalamus, the structure that filters stimuli selectively.⁷ The second step concerns the visual percep-

6 Dehaene argues that the human brain did not evolve with a natural predisposition for reading (writing appeared only six thousand years ago, and illiteracy characterised most of the population until a few decades ago). However, the brain has somehow adapted to writing and reading, thanks to so-called “neuronal recycling.” According to this theory, the architecture of our brain is governed by strong genetic constraints. Nevertheless, the circuits of our visual cortex possess a certain margin of adaptation to the environment, insofar as they are endowed with plasticity and a predisposition for neuronal learning. The same neurons, genetically predisposed to understanding shape and facial details, can also modify their selectivity to respond to artificial objects, fractal shapes, or even letters.

7 Oliverio, 2021a. The mind utilizes a temporary register, the working memory -or short-term memory-, through which information – whether it comes from the outside, such as a phone number, or from within, such as a plan of action – is kept alive for the necessary time. This temporary register depends on the activity of the prefrontal cortex, whose neurons have the particularity of remaining active for a span of time ranging from a few tens of seconds to a few

tion of words and depends on the visual cortex of the occipital lobe. At this point it is a question of giving meaning to words thanks to the mobilization of associative areas in which symbols (letters) are connected to the meanings of words. The task of understanding the “phonological” structure of a written word is simpler in those languages, such as Italian, where there is a certain correspondence between written and spoken codes, while in other languages, such as English, children have more difficulties, or it may be necessary to mobilize a greater number of brain areas to realize that written letters do not correspond to sounds.

From an evolutionary point of view, the basic structures that lead us to recognize words are already present in the visual system of non-human primates and serve to recognize objects, positive situations, and dangers. For example, a monkey must quickly detect a lion and although there are individual differences between lions, they have similar characteristics and a configuration that is recognized by the visual system of monkeys in all perspectives in which a predator presents itself (front, back, side, top, bottom ...). The relationship between vision and cognition implies that a few essential traits are sufficient to reconstruct a more complex whole. Now try to draw a capital letter A and lengthen the horizontal line a little so that it slightly exceeds the diagonal ones. Now insert a pair of points above the horizontal line, inside the triangle and reverse the drawing: the schematic head of a bull will appear... On the other hand, the letter A derives from the Greek letter alpha, emerged from the word *alf* that in the ancient Semitic language connoted the bull. Our brain, like a monkey looking at a lion, has no difficulty in recognizing the shape of an A upwards, downwards, sideways...

In nature there are various basic forms that recur frequently such as ovals and triangles that recombine to form complex objects such as faces. To the shapes that characterize natural objects, such as stones or trees that we recognize despite their infinite variations, we humans have added a series of icons, symbols that we use to quickly communicate a message, as happens in road signs, etc. All these symbols contain the minimum amount of information necessary for rapid recognition, an aspect that is exploited by cartoonists or cartoons. This same aspect, at a higher conceptual level, has been examined by Ernst Gombrich and by those art psychologists (Rudolph Arnheim, Ernst Kris and Gyorgy Kepes), who inspired by the psychology of perception and *Gestalt* have argued that perception depends on the organization of perceptions. Perception does not work atomistically but in to-

minutes, a sufficient time to remember the last event recorded in memory and to represent the situation being experienced.

tality.⁸ Gombrich, in his essay entitled *Meditations on a Hobby Horse and Other Essays on the Theory of Art*,⁹ indicates how there is a metaphorical relationship between reality and representation, between the broomstick used as a horse by children, and the real horse: it is a representation by “substitution” in which the child chooses the minimum image necessary to replace the toy with the object.

Artistic representation does not depend on mimesis, on the imitation of the external form of an object, but on choices of minimum requirements of the function of representing. “*The images – says Gombrich (1982) – are keys, capable by pure chance of opening certain biological or psychological locks, otherwise called they are false tokens, capable however of making the mechanism work*”. I would say that even written words, which once could have an aesthetic value, forged as they were by skilled and experienced calligraphers who are still present in the Arab world or in the Far East, could have this double value: and in any case, their ability to arouse images, even through rhythms, assonances, transliterations and repetitions – think of the prose of the group founded by Raymond Queneau and to which Georges Perec also belonged – is more than evident.

But where and how does the recognition of written words take place in the brain? To answer this question, it is necessary to understand how visual information is treated, so important in the human species that there are numerous areas specialized in the management of its different components. The visual information coming from the eyes reaches the thalamus – the nucleus that in the depths of the brain receives all forms of sensory stimuli – and is conveyed to the “striatal” visual cortex located above all on the inner surface of the cerebral hemispheres that extends slightly towards their posterior, occipital pole. Around the visual cortex there is a rather large area called the “extrastriatal” visual cortex, divided into several areas that contain spatial maps of the real world based on aspects of the visual scene such as colour, movement, shape, etc.¹⁰ The visual information that

8 Gombrich 1982. According to Gestalt psychology, what we perceive is not a sum of elements, but a synthesis of reality. In perceiving the external world, in short, we do not grasp simple sums of sensory stimuli, but we perceive the whole, which is something more and different from the mere sum of the elements. Gestalt Theory holds that the organization of the mind consists of structures or mental schemas that we have internalised and acquired through experience. We apply these organizational schemas to incomplete data and stimuli to quickly orient ourselves in the world.

9 Gombrich 1963.

10 In humans, vision is the most developed sense, with a significant portion of brain areas involved in recognizing and encoding visual stimuli. Visual stimuli are gathered by regions of the occipital cortex based on different characteristics. These stimuli come from the retinas of both eyes, where the visual receptors are located: cones, which are involved in daytime light reception, and rods, which are responsible for nighttime light reception. These stimuli are transmitted by each optic nerve to the brain, where they transform into moving, multi-coloured, recognizable,

goes from the striatal cortex to the extrastriatal cortex is conveyed to the parietal cortex where the visual recognition of the letters takes place.

This system makes it possible to recognize letters and words in their symmetrical and specular version that was already used in Egyptian hieroglyphs or ancient Greece: signs and letters that could be read in both directions as in a modern-day palindrome, whether radar or rotor or “No, it is open on one position” or this graceful French palindrome: “ESOPE RESTE ICI ET SE REPOSE”.

The tendency to mirror is very evident in the writing of children who, initially, can write the words in an inverted way: slowly they will learn to inhibit this tendency and to write in the “right” way. Our brain, in fact, contains an invariant visual recognition mechanism, which has evolved to recognize objects and faces, regardless of their orientation. This mirror generalization must be unlearned when we learn to read and write. In fact, we learn to recognize letters with the region that presents the greatest capacity for generalization in mirror images. It is not surprising that all children have difficulty with mirror letters, such as b and d, and that at an early stage of writing learning many children write in a specular way from bottom to top or from right to left.

The parietal region of the cortex is activated both in response to coherent strings of letters, i. e. words with meaning, and in response to unpronounceable strings of letters: this occurs in areas very close to those that are involved in face recognition, that is to say in a spatial function extremely important in all primates. Of course, the written word recognition system is easier in languages such as Italian, Spanish, or Finnish where there is a close correspondence between letters and sounds while in languages such as English, where the spelling is irregular, it is much more difficult to learn the correct spelling. This makes it difficult to find rules that explain how letters (graphemes) are converted into sounds (phonemes): for example, why the combination “ph” is pronounced differently in *physiology* and *uphill* or why two assonant words such as *bomber* and *bombard* (target) are written differently. This has led some linguists to hypothesize that there must be a direct way between reading and representing words, that is to say

and memorable images. The images are initially decoded by the thalamus and then sent to the primary visual cortex, or V1. Besides the primary V1 area, there are secondary areas that, through the V2 area, receive and decode specific characteristics of the stimuli. The brain allows us to see objects as they truly are despite distortions due to perspective, distance, or other factors: our mind integrates information with memory, using the correct images previously encountered throughout life. Continuous eye movements are essential to obtain a reliable perception of depth, ensuring the persistence of the image. Thus, vision is much more than a summation of information gathered by the eyes; it requires a wealth of information previously acquired, also through other sensory organs.

from orthographic input to representation in the so-called mental lexicon: this hypothesis is linked to the fact that depending on the severity of forms of acquired dyslexia, i. e. linked to brain damage, there is a deficit (alexia without agraphia) in which it is possible to understand spoken language and produce written language.

As already observed, the spoken word has its own more ancient naturalness, it is characterized by an immediacy that arouses strong reactions while the written word implies a greater emotional detachment: as simple as it seems to us, reading means activating the phonological representation of words dependent on the centres of language, their articulation that implies the activation of a kind of “internal voice”¹¹ -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. When stimuli are presented in the auditory mode (listening to words) phonological re-coding is not necessary. Reading therefore implies a massive use of the so-called working memory, listening is less demanding and requires, to use a computer analogy, less mnemonic resources and it is also for this reason that children prefer to listen to what is read by adults. Compared to reading, in short, the brain is less engaged in listening, freer to wander in the landscapes created by our imagination in response to the narration.

It is through listening that curiosity for reading is ignited: an adult who reads or narrates stories stimulates the curiosity of the child and “triggers” the desire to read, to proceed alone, freeing himself from those who accompanied him by the hand in the first explorations of the imaginary, in the first notions on the nature of reality, in the first questions about life. The habit of reading, in short, is strongly linked to an awareness on the part of the family and the school. It does not depend on a genetic fact, it is not something innate that derives from how our brain is programmed, as in the case of spoken language: even if reading is part of our curiosity, it provides bricks to the imagination, contaminates our experiences. But without a cultural transmission on the part of a parent, a grandparent, a teacher, reading, in an advanced civilization, would be limited to a function of service, to a world made up of essential messages.

¹¹ The internal voice during reading appears when we become more proficient at reading. When we first approach reading, we tend to read out loud. As we become more experienced readers, reading out loud gradually gives way to quieter reading; we begin to read in our heads (what is technically called endophase reading). This is when our internal voice emerges. For an experienced reader, it is easier to read silently: reading becomes faster and more flexible, one can go back to reread certain parts of the text, and there is the possibility to focus on what is considered most important.

6 Writing: an Extension of the Mind

When we think of writing we consider, of course, the role that it had and still has in the transmission of memories from one generation to another. Or we can meditate on that sort of self-analysis that involves the writer, whether a diary, an autobiography, or a novel. The hand quickly traces the words when we are certain of our thinking, or so we believe at that moment. Or linger when we are looking for memories or a concept or a different mode of expression. Or delete what we have just written on the paper, words that do not correspond to what we would like or that we consider inappropriate or not in line with our purposes. But writing is much more: it does not only have a dimension of service or aesthetics, but it is also a means to express our thoughts, it is instead an “extension” of the mind.

The development of the frontal lobes made flexible cognitive strategies and symbolic logic possible. Language is the fundamental “cognitive technology” that has given rise to an avalanche of developments: triggering a cooperation between brains and cognitive technologies from which technologically enriched environments have derived in which (new) brains and second-generation technologies produce a new environment in which a new type of brains learns and so on...

Daniel Dennett, one of the best-known contemporary philosophers of mind, speaks of human beings as “cognitive machines”, in the sense that they create and take advantage of external tools, including information technologies, which allow them to encode and manipulate reality; the latter, in turn, acts on thought by modifying it. It is therefore human beings who implement a cognitive context from which advantages derive, to the point that it is difficult to separate the two aspects, the internal, cerebral, and the external, inherent in the environment that we have modified through a cognitive technology typical of human beings based on “labels” with which we characterize abstract objects and concepts: words. 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. Without words, an abstract means by which we indicate objects and concepts, labels through which an idea is externalized, we would not be able to generalize and make real leaps of thought.

Many therefore wonder if all the characteristics of our mind should be traced within it or if the mind does not exist instead in an extended version, which is why instead of talking about software we should change our point of view and talk about *wideware*, an enlarged structure that depends on various cognitive technologies, such as language, able to expand and give new forms to human reason. This term, *wideware*, was first used by cognitive philosopher Andy Clark to

indicate a mind that originates from the meeting of brain, body, and external reality. It is a concept, that of *wideware*, in which mental functions are also defined by extensions such as language labels and the different writing media that have followed one another over the centuries, from clay tablets to notepads, to computers (Clark / Chalmers 1998).

According to cognitive psychologist James L. McClelland (1989) the cognitive strategies of human beings go beyond the boundaries of the mind as they can combine those operations of which their nervous system is capable with a set of external operations and tools, essential to reduce complex problems to simpler operations, adapted to the characteristics of theirs. For example, we can solve long multiplications using pen, paper, and numerical symbols: starting from these symbols and visualizing or “storing” them outside the mind, that is, pouring them on a sheet of paper, we can perform a series of symbolic manipulations that allow us to reduce a complex problem to a sequence of simpler steps. But in the same way, writing allows us to “pour” outside our mind, refining their form, those stories, reflections, poetic compositions that we could hardly elaborate in mind and even more difficult to keep in memory, despite the existence in the past of real living books.

The concept of extended mind is linked to the thought of the great psychologist Jerome Bruner (1990) according to which, from the early stages of development, human beings use amplifiers of their sensory and motor abilities, thus achieving much higher performance. These amplifiers are essential in the process of building the mind that is strongly dependent on symbolic activities and cognitive structures present at a certain stage of development. More than all other animal species, we use an enlarged non-biological structure thanks to which we process information and create extended cognitive systems whose capacities are very different and superior to those of the pure and simple brain. Language presents itself to us as the fundamental tool that has allowed, generation after generation, to produce new technologies and create environments conducive to learning. It is to language that the first forms of self-awareness are linked, the ability to elaborate reflections and hypotheses, the emergence of a philosophical thought that certainly did not need an environment characterized by sophisticated technologies to touch the depth of Aristotelian or Platonic thought. However, the development of cognitive technologies such as printing, typewriter, the telephone, the computer, the cinema, television and so on have created a different climate, a breeding ground in which the mind develops differently than in the past.

There is a circular motion in which technologies, produced thanks to the creativity of the mind, act in turn on it, shaping it, giving it new forms and abilities as now indicated by numerous studies in the field of neuroscience. Some of the technologies in which children are immersed today are mainly visual, based on a dif-

ferent logic and timing than those that characterize language and reading: they present enormous possibilities but must also be used wisely. The comparison between traditional reading and the new media of communication outlines new scenarios and problems, largely linked, as we have noted, to the difference that exists between imaginary and imagination or fantasy. The imaginary, for all its charm, is predominantly passive; imagination implies a creative activity of the mind, it is based on symbolic thinking, on the ability to know how to create an image of something, just as it happens in the mind of the reader and, in childhood, in the game, when one “pretends that”.¹²

Often, in the new media, the conformation of the message (scholars of perception would say its *Gestalt*) prevails over its individual stages. For example, in a videoclip, the classic spatial and temporal logic that characterizes the forms of linguistic communication becomes irrelevant to the global impression, to the emotion it arouses. This is the case for television advertising and other forms of audiovisual communication: times are fast, the succession of images and sounds very often involves an emotional, allusive message based on analogies, even if creative, which penetrates the mind leaving little room for its reworking. In reading, however, the reader lends images to words, times are slow, everything must be reworked: whether it is reading a book or listening to the words of a reader, very often an adult reading to a child, the written words trace a path that, gradually, as in the novel or in the story, opens landscapes and interpretations related to our memories and our processing capacity. It is therefore important to remember that there is a time for the development of language and a time for the digital world: you cannot immerse yourself in the latter without going through the former. Our brain, in fact, is defined by language and the initial stages of its development must find suitable nourishment.

References

- Amabile T. (1983), *The Social Psychology of Creativity*, New York.
 Bernstein B. (1971), *Class, Codes and Control*, London.
 Bruner J. (1990), *Acts of Meaning*, Cambridge, Mass. – London.
 Clark A. / Chalmers D. (1998), “The Extended Mind”, in: *Analysis* 58, 7–19.
 Dehaene S. (ed.) (2011), *Apprendre à lire. Des sciences cognitives à la salle de classe*, Paris.
 Dennet D. (1991), *Consciousness Explained*, Harmondsworth.
 Friederici A. (2017), *Language in our Brain. The Origins of a Uniquely Human Capacity*, Boston.

¹² Oliverio 2008, 2015.

- Gombrich E. H. (1982), *The Image and the Eye. Further Studies in the Psychology of Pictorial Representation*, London.
- Gombrich E. H. 1963, *Meditations on Hobby Horse and Other Essays on the Theory*, London.
- Gottshall J. (2012), *The Storytelling Animal: How Stories Make Us Human*, Baltimore.
- McClelland J. L. (1989), “Parallel Distributed Processing – Implications for Cognition and Development”, in: R. Morris (ed.), *Parallel Distributed Processing: Implications for Psychology and Neurobiology*, Oxford.
- Oliverio A. (2008), “Brain and Creativity”, in: *Progress of Theoretical Physics Supplement* 173, 66–78.
- Oliverio A. (2015), *Neuropedagogia. Cervello, esperienza, apprendimento*, Florence.
- Oliverio A. (2021a), “Rôle essentiel de la mémoire dans la formation de toute représentation”, in: G. Belaubre / C. Chenin, / V. Mastrangelo (eds.), *Les signatures neurobiologiques de la conscience*, Paris, 31–41.
- Oliverio A. (2021b), “Early Roots of Adult Mind”, in: *Formazione & Insegnamento* 19, 1–12.
- Weber-Fox, C. & Neville, H. J. (1996), “Maturational Constraints on Functional Specializations for Language Processing: ERP and Behavioral Evidence in Bilingual Speakers”, in: *Journal of Cognitive Neuroscience* 8, 231–251.
- Vygotskij L. S. (1962), *Thought and Language*, Cambridge, Mass.

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Storytelling and Greek Epic: How to Put the Experience in (Some) Order

Abstract: Starting from the premise that storytelling is a cognitive ability and not just the act of telling stories, this contribution proposes a reconsideration of archaic Greek epic poetry. The analysis aims at providing an in-depth understanding of the nature of Homeric poems as oral and traditional narratives.

Keywords: Storytelling; orality; Homeric poems; *mythos*.

Ἐν ἀρχῇ ἦν ὁ λόγος, καὶ ὁ λόγος ἦν πρὸς τὸν θεόν, καὶ θεὸς ἦν ὁ λόγος
In the beginning was the Word, and the Word was with God, and the Word was God
John 1.1, transl. New Revised Standard Version

στρεπτή δὲ γλῶσσο¹ ἐστὶ βροτῶν, πολέες δ' ἐνὶ μῦθοι
παντοῖοι, ἐπέων δὲ πολὺς νομὸς ἔνθα καὶ ἔνθα.
Glib is the tongue of mortals, and stories there be therein many
and manifold, and of speech the range is wide on this side and on that.
Il. 20. 248–249, transl. A. T. Murray, with adaptation

The aim of this essay is to show how, by understanding the complex and multifaceted nature of storytelling, we may better understand the essence and importance of archaic Greek epos as a multi-layered functional (traditional) narrative.

To those who are familiar with Homeric studies and orality, this work will seem like a celebration of the obvious, but sometimes we forget the obvious precisely because it is obvious. Epos is storytelling. The aoidos is a storyteller. Odysseus is a storyteller. Statements already heard may acquire a fuller and more meaningful significance if we understand the human essence of storytelling.

A few other preliminary remarks are perhaps appropriate. Storytelling is an autonomous field of research that intersects with many other disciplines. The sheer volume of the studies is enormous and essentially unmanageable:¹ storytelling is dealt with by medicine (and not

Note: I wish to express my thanks to Manuela Giordano and Andrea Doda for reading and improving this paper, for which, *ça va de soi*, I am solely responsible.

1 To give an idea of the volume of material and studies on storytelling, it may be useful to report the results obtained from searching online databases using ‘storytelling’ as the search string (15th February 2023): JSTOR = 60,171; Springer = 46,028; Scopus = 20,721; Oxford Academic = 34,902; Taylor&Francis online = 40,185; Clarivate Web of Science = 17,624. For an idea of quantity in comparative terms (I limited myself to JSTOR): typing in ‘Homer’ yields 183,755 results; typing in

only psychiatry), psychology and psycholinguistics, humanities (nearly all contemporary studies – including music, visual art, cinema, and comics – and several disciplines of antiquities, such as archaeology and classical philology), anthropology and ethnography, geography, sociology, cognitive sciences (irrespective of what is meant by this label), economics and finance. The bibliography I have consulted is of necessity partial. I do not wish to justify any omissions: I wish to warn from the outset that they will be there. In moving through the bibliographical meanders, I have privileged the experimental works (often dissertations) that present verifiable data. One study more than others has been crucial to me for its accuracy, C. Carter-Liggett, *Storytelling: The Biochemical Basis of State-Dependent Learning in Narrative Transmission* (Carter-Liggett 1996), which will be quoted extensively in what follows. Storytelling is also the subject of the journal *Storytelling, Self, Society* [henceforth SSS], whose first issue dates back to 2004, which offers contributions, studies, discussions that exceed – and by far – the aspects addressed here.²

1 Storytelling: a Cognitive Tool

Storytelling means “affabulation”, i. e. the action of telling a story.³ But storytelling is not just an action.

The historical and cross-cultural endurance of oral storytelling as a basic human function provides evidence that it could be one of evolution’s genetically encoded selective adaptations.⁴

Storytelling is a basic function of the human being (most likely the result of adaptive enhancement) and specifically a cognitive function that allows experience to be filtered and reworked according to a logic of meaning: a mental tool that serves

‘Hesiod’ yields 22,785: storytelling ‘weighs’ roughly 1/3 of Homeric studies, but three times as much as Hesiod studies.

2 The editorial of the first issue (Sobol / Gentile / Sunwolf 2004), which they subtitled *Once upon a time* with acute finesse, displays in a few pages the very broad spectrum of storytelling, openly taking R. Barthes as its starting point (Barthes 1977, 79). The authors close their paper (p. 6) with an icastic acknowledgment I like to quote: “The authors offer a deep bow of gratitude to storytellers and story listeners around the world, plus a warm wink to front porch tellers, a tip of the hat to stage performers, and a whistle to those who do it to music”.

3 The art of telling a story “includes all forms of shared oral (or signed) narrative”: Senehi 2000, 2. The definition, however, does not mention the value of storytelling as a noetic tool. Useful introduction to “oral storytelling” appears in Zeman 2023. For a general overview see Ferraro 2020.

4 Carter-Liggett 1996, 1.

to record and order events, assigning them meaning and value.⁵ Simplifying the facts as much as possible, this is the general scenario we should reconstruct: each individual, from the moment of birth onwards, is immersed in a flow of events and experiences, some of which can/should be transformed into strategic information for survival. Storytelling, i. e. the ability to organise experience into a tale, is a fundamental tool that helps to process this flow of experienced data by establishing meaningful relationships (spatial, temporal, causal, analogical etc.) between the individual elements.⁶

It is worth emphasising that storytelling is a mental process that seems to disregard language and ‘linguistic thinking’, since “storytelling taps into mental images”.⁷ A story in mental images that only later can or does turn into elaborate and culturally declined linguistic expression (see also §3 below).

Moving from the individual psychic sphere to the social sphere, i. e. considering the individual within a group of other individuals, the act of telling a story is what enables the transmission and dissemination of the cultural message,⁸ thus serving a fundamental adaptive function (see §4).

5 On the cognitive aspects of storytelling, see Herman 2007 at length (on forms of storytelling in general, see already Herman 2002) and even more so Herman 2013 (a collection of his earlier works, which offer the state-of-the-art on storytelling and the ‘sciences of mind’). The cognitive approaches discussed by Marangon 2018 (see 27–40) are functional in defining and distinguishing between the different forms or modes of storytelling (= particular characteristics of the tale/discourse are to be associated with specific cognitive approaches of the individual: cf. e.g. the synoptic table on p. 39) without addressing the cognitive function of storytelling itself. For a survey of the more properly neurological aspects, see Young / Saver 2001. A stimulating introduction to “the storytelling animal” (i. e. the human being) is Gottschell 2012, with a very effective statement in the preface: “we are, as a species, addicted to story”.

6 All in accordance with ‘event sequencing’, of fundamental importance for the creation of ‘cultural templates’: Quinn 2011. The creation of spatial sequences seems to precede the ability to establish temporal sequences (see e.g. Ingber / Eden 2011 with bibliography), but both are fundamental to the individual, and storytelling is the primary tool for defining them.

7 Carter-Liggett 1996, 6 (with reference to Vitz 1990 for ‘mental images’ and Stevens / Guille / Boersma 1992 for storytelling as “an experience which engages primary process preverbal thinking”) and 10–12, with bibliography. Moreover, all human thought, including so-called scientific and mathematical thought, is based on ‘stories’: see e.g. Howard 1991.

8 By cultural message I mean all information that is fundamental to the survival of the individual and the species that is not inscribed in the genetic code and is consequently learned and transmitted by memory and through an act of communication. The privileged communication, in the human being, is obviously linguistic communication. See *infra* §4.

2 Storytelling: an Effective Communication Tool

Here I present and briefly illustrate some specific features of storytelling that outline a sort of background scenario onto which it becomes easy to frame archaic Greek epic.

a. Storytelling is primarily an oral phenomenon, or possibly signic.⁹ Scriptural storytelling is patently secondary because it comes later both in the history of mankind (which has practically always spoken, whereas it has only been writing for more or less 6,000 years) and in the history of the individual (who learns language well before writing). Storytelling is the affabulation that crafts a fascinating tale and manages to establish a meaningful relationship with the recipient on an emotional level, generating empathy.¹⁰

b. Storytelling is a form of verbal art,¹¹ an art of speech and narration, present in all cultures of all times and places: it is a human universal.

See §1. The theory of human universals goes back to Brown 1991; the category of human universals includes “those features of culture, society, language, behaviour, and psyche for which there are no known exceptions”. The following are some universals from Brown’s list that in different ways are relevant for a better understanding of the ‘human background’ into which storytelling and verbal art can be set:

9 On sign languages see Capirci / Bonsignori 2022. The fundamentally oral nature of storytelling is consistently reaffirmed and stigmatised: e.g. Luse Smith 1998, 1, 5 (storytelling as “oral art form for preserving and transmitting ideas etc.”); Marangon 2018, 11–12 and elsewhere; similarly in virtually all the literature I consulted. Oral/aural storytelling has characteristics of peculiarity and uniqueness: Ripley 2011. For an overview of the origins and development of storytelling, see Harrell 1983.

10 On aesthetic enjoyment as “specific implementation of the epistemic goal of knowing”, and thus as an adaptive trait, see Consoli 2014. On empathy linked to oral communication, of fundamental and unavoidable importance, see Giordano 2022; a brief introduction can be found in Petrucco / De Rossi 2009; a more general sketch from a historical perspective is in Pinotti 2011. Empathy seems to generate an emotional load that is also shared in physiological terms: this is suggested by experimental data on arousal levels (Peräkylä et al. 2015). Perhaps not directly dependent on empathic bonding, but certainly linked to a form of sharing, in certain storytelling experiences (the personal one), there is the activation of a “local communicative system” that assimilates the speakers’ modes of expression and speech patterns: Dolan 1998. Bloom 2016 should be dismissed (see §4 below). For many of the issues addressed here see the contribution by Oliverio in this volume with further literature. On storytelling as emotional communication see Marangon 2018.

11 On storytelling as verbal art see §3 below. It is beyond the scope of this study to investigate the ‘persuasive’ use of words and the soft power that follows (e.g. Marangon 2018, 11 ff.).

body talk; empathy; facial communication; language; memory; mental maps; mentales; music; music, vocal, includes speech forms; myths; narrative; poetry/rhetoric; poetic line, uniform length range; poetic lines characterized by repetition and variation; proverbs, sayings; proverbs, sayings – in mutually contradictory forms; rhythm.

Barthes 1977, 79, had already unequivocally defined the fact: “Narrative is present in every age, in every place, in every society; it begins with the very history of mankind”. Turner 1996 repeatedly emphasised how substantial aspects considered ‘literary’ (i. e. proper to a certain type of communication, other than that of the common human being) are actually an integral part of the cognitive infrastructure of the human being. Turner expressly speaks of a ‘literary mind’, meaning that certain elements proper to what we call literature (namely story, projection, parable) are functions of our mind. “Story is a basic principle of mind” (*Preface*, p. I) sums up the result of his analysis very well. Along the same lines, with a focus on the universality of story as a function of our mind, see Colm Hogan 2003.

c. Storytelling is, by assumption, 1. accessible; 2. inclusive; 3. collaborative.

1. Accessible: anyone can tell a story, as no special skills are required (professional storytelling is only a matter of specialisation); anyone can listen to a story (no special cultural or cognitive prerequisites are needed).

2. Inclusive: oral narration entails the sharing of a space, a time, an emotional disposition: it presupposes and requires the physical participation of a narrator and (at least) a listener and generates variable levels of ‘narrator-listener’ and ‘listener-listener’ interaction.

3. Collaborative: the narration is the outcome of a mediation, of a ‘collaboration’, insofar as the listener influences the performer by the mere fact of being there, irrespective of his active participation (which is also a fact) with expressions of assent or dissent, approval or disapproval, corrections and clarifications, and the externalization of emotional reactions (laughing, crying, fear, anger, boredom, etc.). I find it appropriate to quote the synthesis by Carter-Liggett 1996, 25:

Implied in storytelling as a process is the presence of both teller and listener, who form a dynamic relationship wherein the story itself, like a third entity, is not only transmitted but also undergoes a transformation”; the explanation is given later on p. 27: “Teller and listener each bring psychic material which in combination births a new story.¹²

¹² The actual sharing of space and time is one of the exclusive peculiarities of oral storytelling: Ripley 2011. On the interactive narrator-listener relationship, see also Georges 1979. If we approach this from a more radical cognitive point of view, according to which “minds are spread out among participants in discourse, their speech acts, and the objects in their material environment”, and if we consider that “instead of being abstract, individualistic, and ratiocinative, thinking in its most basic form is grounded in particular situations, socially distributed” (Herman 2007, 319), the narrator-listener collaboration is a simply unavoidable fact.

d. Telling a story involves the use of voice and body. The voice is variously articulated and modulated according to the story (tone, volume, emphasis, melody, etc.). Oral storytelling, moreover, is always ‘performance’,¹³ i.e. a speech punctuated and emphasised by the body (facial expression, gestures, posture, movements). In brief: telling is performance¹⁴ and storytelling is accompanied by an implicit acting technique, which becomes explicit and conscious in the case of professional and/or traditional storytellers.

e. Precisely for this reason, storytelling is a particularly effective form of communication: because it uses multiple communicative codes and because a story that induces any form of emotional ‘shock’ settles more quickly and stably in our memory and stimulates various creative abilities to a higher degree.

A further factor enhancing the communicative impact is provided by music, in the case of sung or cantilenated storytelling. Storytelling is more effective and more durable than other forms of communication from a neurological point of view: it seems well established that any kind of brain damage reduces rational and abstract capacities, but leaves the emotional sphere unaffected (see e.g. Sacks 2016, 22), which on the other hand storytelling is able to affect. On the superior efficacy of storytelling over story-reading, i.e. oral storytelling over read fruition, see the experimental results of Khare 1992, Oaks 1995, Walker 2001, Ferris Morgan 2002; see also Carlsen / Sherrill 1988, Ok Ezechukwu 1999, August 2013. The superior effectiveness of oral storytelling compared to reading is also deduced from the physiological responses of the human body: storytelling – like other emotional experiences or certain mild stress factors – triggers a biochemical reaction that increases the immune defences, namely the production of immunoglobulin type A (IgA), as shown in experiments conducted by Carter-Liggett 1996. And even in this case, listening is found to be more effective than reading: “Findings suggest a significant positive association between story listening and immunoenhancement in the experimental group which was not present in the story reading group” (Carter-Liggett 1996, p. ii). On the impact of emotional states on the immune system see e.g. Dillon / Minchoff / Baker 1985.

The communicative effectiveness of storytelling has suggested its use in teaching at every grade (particularly in primary education),¹⁵ in finance (Borden / Hall 2020), in the de-

¹³ See Meineck in this volume, with further literature.

¹⁴ Marangon 2018, 51–52, with reference to Ong 1986, 101–103, speaks of a ‘verb-motor style’. See also Havelock 1986, 71–75: the effectiveness of oral narrative is determined by repetition, rhythm, and action; the body is called into play along with the voice. On the importance of the body in communication, see Farnell 1999 (a very useful review article; for the issue of interest here see 352–354, *Action Signs and Vocal Signs*).

¹⁵ The bibliography is extensive. In addition to the references cited above, I would like to mention other particularly interesting experimental works: Peck 1989, Luse Smith 1998, Ollerenshaw 1998, Tonemah 2002, Hansen 2004. Storytelling is also used in the teaching of the hard sciences (mathematics: e.g. Meel / Gyurko / Gaspar 2006; Mastin’s 2007 attempt to use “storygami” in mathematics teaching, i.e. combining storytelling and origami; biology: e.g. Carroll 2018). To storytelling in educational systems is dedicated the special issue of *SSS* 3, 2007 entitled

velopment of marketing and sales strategies (e.g. Landrum 2000), in corporate management training and communication,¹⁶ in the memorisation and transmission of quantitative data (numbers, percentages, lists: storytelling as mnemonics: e.g. Lund 2022), and even as a therapeutic and rehabilitative practice (e.g. Davis 1999 [drug addiction], Zed 2003 [depression]). Its study and application in the legal sphere (e.g. Reid 1998, Meyer 2000) is a return to the origins, so to speak: let us think of the birth of oratory in Greece precisely in the courtroom, with Tisias and Corax, and then the teaching of Gorgias and the *ethopoia* of Lysias: telling a credible and persuasive story is of fundamental importance in court.

f. The extraordinary ability of stories to take root and disseminate, and thus the functional efficacy of storytelling, is perfectly explained by the meme theory elaborated by Dawkins 1976. The meme is a minimal unit of memory that tends to reproduce and spread *naturaliter*; just like the gene: the meme is a cultural replicator, while the gene is a biological replicator, but both, as the outcome of a long process of adaptive selection, are structured to reproduce and spread as much as possible. Norms, myths, and stories are among the most obvious cultural replicators and are far more powerful than genes in their ability to spread, influence behaviour, generate modifications/changes in the individual's psychic conditions, and modify (adaptively) themselves. Moreover, "stories, unlike genes, are not limited in their transformative powers to transmission within one genetic line" (Carter-Liggett 1996, 8): from this point of view, the meme is more ductile, versatile, and 'adaptive' than the gene.

g. Storytelling has a considerable impact on the construction of identity and the ideological, political, religious etc. orientation of human groups (of a society as a whole or of individual segments thereof): the power of the word is capable of transmitting and conveying ideas and notions through "shared storytelling",¹⁷ i.e. through the sharing of a story, which is disseminated through its repetition.¹⁸

Storytelling and Education. On the potential of digital storytelling at school see Petrucco / De Rossi 2009, De Rossi / Petrucco 2013.

16 Consider O'Neil 2002 (experimental sector studies are conspicuous).

17 The minimum form of which, it should be remembered, is dialogue in real situations, the most common and fertile ground for disseminating information.

18 The positive potential of storytelling in the social sphere is increasingly being uncovered: by means of integrated and shared 'stories', feelings of community, integration, and respect are created/strengthened, and levels and situations of conflict are greatly reduced (see e.g. Zipes 1995, Senehi 2000, esp. 137–175; Maiangwa-Byrne 2015). That narrative can foment latent tensions and contrasts or rekindle ancient hatreds is most evident. And the supporters of modern wars and ongoing conflicts (supporters, not necessarily actors: the foreign policy of the US and the interests of arms manufacturers in general are clear-cut examples) make increasingly massive and pervasive instrumental use of storytelling (spread by media and social media) as propaganda. Storytelling is particularly functional for propaganda because stories, from a psychological point of

Storytelling contributes heavily to the formation of shared social memory (beliefs, ideologies, normative systems, etc.¹⁹ Social (i.e. collective, shared, cultural) memory is the result of a dynamic process “of information sharing and memory updating, which fundamentally depends on communication”, as argued by Coman / Momennejad / Drach / Geana 2016, 8171: by studying “laboratory-created social networks” they show how “large-scale social phenomena (i.e. collective memory) can emerge out of microlevel local dynamics (i.e. mnemonic reinforcement and suppression effects)”.

h. Given the characteristics outlined so far, storytelling, especially as a natural facilitator of memory,²⁰ is the most suitable cognitive tool and the most effective communicative act for conveying ‘cultural messages’ and is the necessary prerequisite for fully understanding traditional poems and culture books (§4 below).

3 From the Human Universal to the Cultural Specific: Storytelling, Verbal Art, and the Specialised Storyteller

While everyone knows how to tell stories, not everyone knows how to tell stories well. Knowing how to tell stories is a form of rhetorical skill that organises and structures the word into discourse, making it a *mythos* or *logos* capable of establishing an emotional contact between addressee and receiver.

Storytelling is a verbal art that is learned and perfected through listening, imitation, practice, and exercise.

The person who practices this verbal art is a specialised figure: a professional storyteller.²¹ This professional may have a recognised social and functional status (as is the case with the Homeric *aoidos* or many figures of singers/wisemen/shamans etc. in ancient and modern traditional societies) or simply a skilful story-

view, “do not engender the kind of resistance to considering new ideas that direct suggestions often can”: Lankton – Lankton 1989, 2. On all of these things, see the overview and bibliography in Seheni 2000, 9–39.

19 Assman 1992.

20 “A natural mnemonic”: Oaks 1995. This is all the truer if we take into account the meme theory mentioned above.

21 In the case of the Italian arena, several traditions of storytelling (in metrical and non-metrical form) come to mind: the so called “poeti contadini” (“rural poets” *vel sim.*) of Tuscia and Maremma, the various “cantinbanco” in central and northern Italy, the “cuntisti” in Sicily. For an overview of actual oral narrative performance in Italy, see Tomasello 2021.

teller without determination of role or status:²² The figure of the storyteller, from a social and sociological point of view, is variously characterised from culture to culture. Very often in traditional societies the storyteller is the bearer and custodian of the ‘authoritative word’, i.e. of all the foundational stories and charter myths.

The storyteller is also a professional of memory.²³ Within the storyteller, individual and collective memory merge: that of the storyteller is a ‘deep memory’.²⁴

If storytelling is a human universal, the art of storytelling is culturally determined: it manifests itself with formal and technical characteristics that differ greatly from time to time and place to place. Every human society has developed autonomous forms of storytelling, responding to specific (contingent) cultural and aesthetic codes. The storyteller’s words may be narrated, sung, chanted; they may involve spontaneous or codified gestures and/or mimicry; they may be accompanied or punctuated by musical instruments; they may be organised according to a given metric-rhythmic measure (*cola*, verse, strophe); they may involve the employment of a ‘poetic language’ more or less distant from the language of use; they may be inscribed in a rhetorical code other than that of the *langue*, etc.

The act of storytelling itself takes place in very different contexts: it may be framed and provided for in specific ritualised occasions (which may in turn involve the use of costumes, masks, scenery, etc.), or it may occur casually; it may take the form of a contest or a simple performance; it may be highly codified (by norms or tradition) or entirely spontaneous.

22 Storytellers unrelated to recognised social structures and/or functions are part of everyone’s experience: let us think of stories among groups of friends in pubs, in restaurants, at stadiums, etc. More complex and articulated storytelling phenomena have spread in the USA since the 1970s (Senehi 2000, 1–2, offers a quick list of individual or groups of storytellers; interesting is the case of “The Healing Force”, a family from North Carolina who “travels to schools throughout the state to tell stories, sing songs, and share their collection of African musical instruments”). The first National Storytelling Festival held in Jonesborough, Tennessee in 1973 kicked things off. Today, several festivals are dedicated to public storytelling; the one held annually in St. Louis is especially prestigious and is now in its 44th year [2023] (<https://www.slcl.org/events/st-louis-storytelling-festival>). Over time, a real storytelling network has emerged: the National Storytelling Network (<https://storynet.org/>). A similar diffusion of storytelling has also been recorded elsewhere (e.g. in Ireland: Ryan 1995). A detailed mapping is irrelevant for the purposes of my reasoning: I only want to point out how storytelling also exists in non-traditional societies.

23 For the role of memory in the cultural system of Archaic Greece, see Giordano 2012, 179–182 (esp. 180).

24 See the data and discussion in Ballenger 1997. On p. 793 he writes: “The merging of tribal and personal memory also means that the reach of the storyteller’s memory extends beyond their own lifetime, their own experience”.

The variability of the art of speech, of its performers, and of its contexts tends to infinity.

4 Organising and Transmitting What is Relevant: Storytelling and Tribal Encyclopaedia

Oral storytelling, due to its communicative effectiveness (*supra* §2), is the most effective tool to elaborate, organize, and transmit what is socially relevant: it is fundamental for the transmission (horizontal and vertical) of cultural messages.²⁵

Carter-Liggett 1996, 7 effectively summarises the importance of storytelling in both socio-cultural terms and as a primary adaptive response:

Stories have long been employed to convey from one generation to the next entertaining yet significant (possibly survival-related) information on maintaining cultural norms. Relevant sociocultural considerations related to the use of storytelling include (a) human responsiveness to story dissemination including evolutionary factors, cognitive-behavioral factors, and trance induction factors;²⁶ (b) developmental processes supporting stories as vehicles for cultural implants; and (c) contemporary research and psychological opinions regarding these functions.

Storytelling, in addition to being an individual cognitive process, becomes a fact of collective relevance because it serves – first and foremost – to create the group and hold it together: ‘stories’ (of whatever kind) are central to identity construction, in that they represent a shared experience, a common (real and conceptual) space, a repository (in a normative function) of knowledge, procedures, beliefs, etc. necessary for the survival of the group itself.

²⁵ On the cultural message and its transmission, see the different approaches and perspectives in Ercolani / Lulli 2022.

²⁶ This aspect of storytelling is debated, but it is extraordinarily interesting. I quote in full what Carter-Liggett 1996, 23, writes at the end of her discussion: “In summary, narratives associated with cave art, certain Native American ceremonials, medieval messengers, and fairy tales hold common elements primary to trance induction such as overloading the conscious mind, departing from reality, and using metaphors. Having entered an altered state, the listener or participator becomes increasingly receptive to new experiences, attitudes, cognitions, and emotions”. It seems an established fact that the listening experience places the listener in a different state of consciousness, similar to trance: see e.g. Sturm 2000.

In archaic and classical Greece, the ‘story’ par excellence is myth.²⁷ The Greek word *mythos* means precisely that: tale.

Myth finds expression in the most diverse forms of communication, but one would not be too much mistaken in saying that myth in Greek culture found its most stable and lasting concretion in the physical form of the epos.

The epos in Greece fulfilled all those fundamental functions mentioned above, all of which are implicit in the various definitions of epos: tribal encyclopaedia (Havelock 1963), ‘book of culture’ (Murray 1934), traditional tale (such is myth in Greece: Kirk 1970), ‘traditional poem’ (Cerri 2002).

The epic tale is all-embracing: it encompasses virtually the entire spectrum of individual and social experience. Epos may variously take the form of heroic tale, an account of journeys and adventures, ethical reflection, parenthesis, instruction and teaching, cosmogony, theogony, and so on, without ever losing sight of one of its primary purposes: *terpein*, i.e. “to delight”, precisely by telling a story.

Epos is emotional communication, a vehicle for conveying foundational content. What recent studies have highlighted about the emotional states induced by storytelling is already there, in the implicit awareness of epic poetry: to convey the cultural message by delighting, fascinating, captivating.²⁸

The epos enveloped the individual completely, guiding her or his thinking, ideology, and behaviour. And this is why practically every Greek society had one of its own, as the primary vehicle of the values and notions underlying that specific ‘social living’.²⁹

And clearly the ‘stories’ varied constantly: on a formal level – a surface level, so to speak – because each time they were performed something necessarily changed (linguistic and/or textual elements, length, narrative sequence, etc.), but also on a substantive level, the level of content. The epic text is multifaceted by nature, and its contents are subject to constant updating.³⁰

27 The special issue of *SSS* 7, 2011 is dedicated to the relationship between storytelling and myth (see the presentation offered by Gentile 2011, which is also useful for the list of possible definitions of myth he offers on pp. 86–88).

28 On *terpein*: Giordano 2022, 179–181; *loci* in Ercolani 2006, 136 f.

29 Carter-Liggett 1996, 6, since “the effects of story listening include such biophysiological impacts as immunological shifts”, appropriately warns that “personal concerns must necessarily shift from inoculating ourselves against the somatic and psychological influences of narrative influence to choosing through which narratives we will live or be lived”.

30 In oral narration, the concept of the archetype as reconstructed by classical philology does not exist: there is no unalterable original text to reconstruct. The absence of such an archetype is not just a consequence of an objective impossibility (i.e. because it is not possible to reproduce exactly the same story, with the same voice, the same words, etc.): it does not exist on a conceptual level. It does not and cannot exist: stories are born to be told, listened to and re-told, and

The Homeric epos (in particular the *Odyssey*)³¹ implicitly states the importance of storytelling for the society it reflects by presenting within the narrative the various figures of potential and possible narrators, specialised and not: 1. *aioidos*; 2. simple narrator (storyteller); 3. singer.

1. *aioidos*: *aioidoi* are Phemius at the court of Odysseus (*Od.* 1. 153-155, 325, 336 ff.; 16. 252; 17. 358 f.; 22. 330–353; 23. 133 ff.; 24. 439), Demodocus at the court of Alcinous (*Od.* 8. 43–47, 62–108, 254–369, 471–543; 13. 27f.), the anonymous singers at the court of Agamemnon (*Od.* 3. 267) and Menelaus (*Od.* 4. 17);

2. simple narrator: simple narrators (i. e. with plain speech, neither metrically organised nor performed in accordance with specific performance techniques, nor on public occasions) are Nestor in the *Iliad*³² and especially Odysseus in the *Odyssey*³³ (in addition to the *Apologoi* in *Od.* 9–12 see the ‘Cretan lies’: *Od.* 13. 256–286; 14. 191–359; 19. 165–202, 221–248, 262–307, 336–342),³⁴

3. singer: distinct from the *aioidos* because he sings and does not recount epic deeds *stricto sensu*,³⁵ Demodocus appears in this role in *Od.* 8. 258–265.

I provide here a brief bibliographical review (with a few critical notes) on storytelling in and of the Homeric poems since the 1990s: Bakker 1993; Segal 1994; Beck 1997; Mackie 1997; Scodel 1997 (on the audience of the Homeric performance); de Jong 2001 (extensive narratolog-

transformations occur at every step (see e.g. Kroeber 1992). This is true not only for ‘cultural stories’ such as the Homeric poems, for instance, but also for individual stories, those that each of us repeats about ourselves day after day (Scott 2018). Change and modification of told stories, of orally performed poems, are simply unavoidable, because there is no a priori text, but the text arises from that singular and unique form of narrator-listener (or performer-audience) collaboration mentioned above (§2 iii). On the absence of a prototype text, see Giordano 2003. On the multiformity of the epic text, see at least Finkelberg 2000 (overview in Ercolani 2006, 96–98, to be updated); on cultural updating in oral societies (always in homeostasis), Ong 1986 remains fundamental; for cultural updating in the Homeric poems, some examples appear in Ercolani 2006, 75–77. A marginal reference to the “dictated text”, repeatedly called into question among Homerists to explain the written fixation of the poems: it has been shown (Ready 2015 and 2019) that the result of dictation is a text that is in any case other than the text of the oral performance, precisely because of the interactive dynamics that are determined *in praesentia*.

³¹ See Mackie 1997.

³² Nestor is presented as a master of speech by both the inner poet/narrator (*Il.* 1. 246–249; 7. 235) and by his peers (*Il.* 4. 293–316; 10. 42–56), and he is honoured as such (e.g. *Il.* 11. 623–626).

³³ Scodel 1998: one must distinguish “song from the narrative performances of characters who are not bards” (p. 171). I was not familiar with this work when I was arguing something very similar (Ercolani 2006, p. 132): Scodel’s arguments are much more structured and incisive than mine. Linguistics and storytelling in context make it necessary to distinguish the flat word from the ‘performed’ word, so to speak. See also Mackie 1997.

³⁴ See Haft 1984.

³⁵ These are other forms of storytelling, for which see Palmisciano 2007.

ical commentary, also useful as a bibliographical handbook); Doherty 2002 (though more to do with narratology than storytelling); Biles 2003 (Odysseus at the Phaeacian court: pp. 199 ff.; some interpretations leave one in doubt: *e.g.* *Od.* 1. 352 at p. 196 f.); Camerotto 2003 (an exhaustive overview of the types and themes of epic narration, with an extensive and well-selected bibliography); Beck 2005 (*Apologoi* and Odysseus as narrator); Rinon 2006; Radke 2007 (whose undoubted – and perhaps only – merit is the bibliography); Beck 2008 (*Iliad: oratio recta in oratio recta*); Hopman 2012 (Odysseus among the Phaeacians); Russell 2013 (*Iliad*); Davies 2014 (folktale); Bertuccelli 2017 (esp. pp. 53 ff.); Zekas 2017. Although not directly relevant to storytelling, very stimulating (and very plausible) is Farenga 1998 (historical and social setting of the dark age and importance of storytelling).

Elizabeth Minchin more than anyone else has shown how specific features of the Homeric poems respond to and can be explained by taking into account the actual practices of storytelling and dialogue (the list *singulatim* of her works is compulsory because not everything is included in Minchin 2001b): Minchin 1991 (*Iliad*); 1992b (Eumaeus); 1995 (invocation to the Muses and relationship with audience); 1999 (*Odyssey* 14: reproduction of real conversational features in the dialogue between Odysseus and Eumaeus); 2001a (answers given in reverse order responding to dialogue practices in real situations given the ‘co-operative nature of conversation’ [p. 639]); 2002 (*Odyssey*); Minchin 1992a stands out as a truly seminal and pioneering work.

Doherty 1995 is at odds with several of the statements made here (despite the splendid title, the underlying assumptions are questionable to say the least).

A few scattered (non-Homeric) references, which I found instructive. First of all, Scobie 1979, for the breadth of the treatment, the comparative approach, and the wealth of bibliographical items (see esp. nos. 1–2); then, for informal storytelling (which translates, in ‘literary’ guise, into novella and/or novel), see West 2003. Interesting Maier 2015: the transition from *oratio recta* to *oratio obliqua* would be traced back to the transition from ‘orality’ to ‘literacy’ (but Homeric reasoning does not work: pp. 154–155).

Apart from questions raised by critics in relation to individual passages of the text and the role to be assigned to the various figures of performers, two facts seem to be worth emphasising, both of which are instrumental to a better understanding of the ‘performer-audience’ relationship.

The first clearly shows that the audience is not a passive element, but interacts with the performer, going so far as to ask for one song rather than another, taking the form of an extemporaneous ‘commission’ during performance: in *Od.* 8. 478 ff. Odysseus himself, after honouring and praising Demodocus, asks him to sing of the stratagem of the horse with which the Achaeans conquered Troy:

Od. 8. 492–498

ἀλλ’ ἄγε δὴ μετάβηθι καὶ ἵππου κόσμον ἄεισον
 δουρατέου, τὸν Ἐπειὸς ἐποίησεν σὺν Ἀθήνῃ,
 ὃν ποτ’ ἐς ἀκρόπολιν δόλον ἤγαγε δῖος Ὀδυσσεύς
 ἀνδρῶν ἐμπλήσας, οἳ Ἴλιον ἐξαλάπαξαν.
 αἱ κεν δὴ μοι ταῦτα κατὰ μοῖραν καταλέξῃς,

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αὐτίκα καὶ πᾶσιν μυθήσομαι ἀνθρώποισιν,
ὡς ἄρα τοι πρόφρων θεὸς ὥπασε θέσπιν ἀοιδίην.

But come now, change thy theme and sing of the building of the horse of wood, which Epeius made with Athena's help, the horse which once Odysseus led up into the citadel as a thing of guile, when he had filled it with the men who sacked Ilios. If thou dost indeed tell me this tale aright, I will declare to all mankind that the god has of a ready heart granted thee the gift of divine song. (transl. A. T. Murray)

The second fundamental fact, common to all the various forms of storytelling, is the emotional relationship established between the performer and his audience. Odysseus' weeping while listening to Demodocus, again in *Od.* 8, is emblematic and highly significant. It demonstrates the emotional reaction triggered by the storyteller, which in turn presupposes an empathic type of relationship between the teller/singer and the listener:

Od. 8. 521–531

ταῦτ' ἄρ' ἀοιδὸς αἶειδε περικλυτός· αὐτὰρ Ὀδυσσεὺς
τήκετο, δάκρυ δ' ἔδευεν ὑπὸ βλεφάροισι παρειάς,
ὡς δὲ γυνὴ κλαίῃσι φίλον πόσιν ἀμφιπεσοῦσα,
ὅς τε ἔης πρόσθεν πόλιος λαῶν τε πέσῃσι,
ἄστει καὶ τεκέεσσιν ἀμύνων νηλεὲς ἦμαρ 525
ἢ μὲν τὸν θνήσκοντα καὶ ἀσπαίροντα ἰδοῦσα
ἀμφ' αὐτῷ χυμένη λίγα κωκύει· οἱ δέ τ' ὄπισθε
κόπτοντες δούρεσσι μετάφρενον ἠδὲ καὶ ὠμοῦς
εἶπερον εἰσανάγουσι, πόνον τ' ἐχέμεν καὶ οἰζύν·
τῆς δ' ἔλεεινοτάτῳ ἄχεϊ φθινύθοῦσι παρειαί 530
ὡς Ὀδυσσεὺς ἔλεεινὸν ὑπ' ὄφρῦσι δάκρυον εἴβεν.

This song the famous minstrel sang. But the heart of Odysseus was melted and tears wet his cheeks beneath his eyelids. And as a woman wails and flings herself about her dead husband, who has fallen in front of his city and his people, seeking to ward off from his city and his children the pitiless day; and as she beholds him dying and gasping for breath, she clings to him and shrieks aloud, while the foe behind her smite her back and shoulders with their spears, and lead her away to captivity to bear toil and woe, while with most pitiful grief her cheeks are wasted: even so did Odysseus let fall pitiful tears from beneath his brows. (transl. A. T. Murray)

This emotional reaction of Odysseus is noticed by Alcinous, who brings the performance to a halt:

Od. 8. 536–543

κέκλυτε, Φαιήκων ἡγήτορες ἠδὲ μέδοντες,
Δημόδοκος δ' ἤδη σχεθέτω φόρμιγγα λίγεια·
οὐ γάρ πως πάντεσσι χαριζόμενος τάδ' αἶδει.

ἐξ οὗ δорπείομέν τε καὶ ὤρορε θεῖος αἰδός,
 ἐκ τοῦδ' οὐ πω παύσατ' οἴζυροιο γόοιο 540
 ὁ ξείνος· μάλα πού μιν ἄχος φρένας ἀμφιβέβηκεν.
 ἀλλ' ἄγ' ὁ μὲν σχεθέτω, ἴν' ὁμῶς τερπώμεθα πάντες,
 ξεινοδόκοι καὶ ξείνος, ἐπεὶ πολὺ κάλλιον οὕτω.

Hear me, leaders and counsellors of the Phaeacians, and let Demodocus now check his clear-toned lyre, for in no wise to all alike does he give pleasure with this song. Ever since we began to sup and the divine minstrel was moved to sing, from that time yon stranger has never ceased from sorrowful lamentation; surely, methinks, grief has encompassed his heart. Nay, let the minstrel cease, that we may all make merry, hosts and guest alike, since it is better thus. (transl. A. T. Murray)

On the same track are the words of Eumeus in *Od.* 17. 518–521: speaking of his encounter with Odysseus, he compares his own experience of hearing the hero's tales to that of listening to an *aidos*:

ὡς δ' ὅτ' αἰδὸν ἀνὴρ ποτιδέρκεται, ὃς τε θεῶν ἐξ
 αἰείδη δεδαῶς ἔπε' ἱμερόεντα βροτοῖσι,
 τοῦ δ' ἄμοτον μεμάασιν ἀκουέμεν, ὅππότε' αἰείδη 520
 ὡς ἐμὲ κείνος ἔθελε παρήμενος ἐν μεγάροισι.

Even as when a man gazes upon a minstrel who sings to mortals songs of longing that the gods have taught him, and their desire to hear him has no end, whensoever he sings, even so he charmed me as he sat in my hall. (transl. A. T. Murray)

Epos is not just a 'tribal encyclopaedia': epos is also 'emotional communication' that generates empathy and therefore penetrates individual memory more effectively, and as a narrative shared by all members of society ('shared storytelling') it contributes massively to shaping the so-called 'collective' or 'cultural' memory.

Some years ago, I wrote an epigraph quoting a line by the Italian folk-music band Modena City Ramblers. I would like to quote it once again here, as a fitting conclusion in celebration of storytelling, this world of words and sounds that is part of our very essence:

*sulle fisarmoniche e le batterie non finiscono la musica e le storie.*³⁶

³⁶ "On accordions and drums do not end music and stories": *Celtica patchanka* (from the album *Fuori campo*, 1999).

References

- Agosto, D. E. (2013), "If I Had Three Wishes. The Educational and Social/Emotional Benefits of Oral Storytelling", in: *SSS* 9, 53–76.
- Araújo, C. (2017), *Plato's Republic on Mimetic Poetry and Empathy*, in H. L. Reid / J.C. DeLong (eds.), *The Many Faces of Mimesis*, Fonte Aretusa, 76–85
- Assmann, J. (1992), *Das kulturelle Gedächtnis. Schrift, Erinnerung und politische Identität in frühen Hochkulturen*, Munich.
- Ballenger, B. (1997), "Methods of Memory: On Native American Storytelling", in: *College English* 59, 789–800.
- Bakker, E. J. (1993), "Discourse and Performance: Involvement, Visualization and "Presence" in Homeric Poetry", in: *Classical Antiquity* 12, 1–29.
- Barthes, R. (1977), *Image, Music, Text*, New York.
- Beck, D. (1997), *Points of Departure: Variation in Homeric Speech Frames*, diss. Harvard University.
- Beck, D. (2005), "Odysseus: Narrator, Storyteller, Poet?", in: *Classical Philology* 100, 213–227.
- Beck, D. (2008), "Character-quoted Direct Speech in the Iliad", in: *Phoenix* 62, 162–183.
- Bertuccelli, C. (2017), "Il racconto menzognero di Odisseo a Laerte: *Odissea* XXIV 303–314", in: *SCO* 63, 43–58.
- Biles, Z. (2003), "Perils of Song in Homer's *Odyssey*", in: *Phoenix* 57, 191–208.
- Bloom, P. (2016), *Against Empathy: The Case for Rational Compassion*, New York.
- Borden, K. / Hall, S. (2020), "Storytelling to Enhance Retention of Concepts in Finance", in: *Journal of Financial Education* 46, 94–114.
- Brown, D. E. (1991), *Human Universals*, New York.
- Cairney, P. (2021), "Taking Lessons from Policy Theory into Practice", in T. Mercer / R. Ayres / B. Head / J. Wanna (eds.), *Learning Policy, Doing Policy*, Canberra, 281–298.
- Camerotto, A. (2003), "Le storie e i canti degli eroi", in: *Quaderni Urbinati di Cultura Classica* 74, 9–31.
- Capirci, O. / Bonsignori, C. (2022), "Beyond Orality: The Case of Sign Languages", in: Ercolani / Lulli (2022), 69–87.
- Carisen, G. R. / Sherrill, A. (1988), *Voices of Readers: How we Come to Love Books*, Urbana, IL.
- Carroll, S. B. (2018), "The Power and Place of Stories in Biology Class", in: *The American Biology Teacher* 80, 557–559.
- Carter-Liggett, C. (1996), *Storytelling: The Biochemical Basis of State-dependent Learning in Narrative Transmission*, Diss. Pacifica (CA).
- Cerri, G. (2002), "Teoria dell'oralità e analisi stratigrafica del testo omerico: il concetto di poema tradizionale", in: *Quaderni Urbinati di Cultura Classica* 70, 7–34.
- Colm Hogan, P. (2003), *The Mind and Its Stories: Narrative Universals and Human Emotion*, New York.
- Coman, A. / Momennejad, I. / Drach, R. D. / Geana, A. (2016), "Mnemonic Convergence in Social Networks: The Emergent Properties of Cognition at a Collective Level", in: *Proceedings of the National Academy of Sciences of the USA* 113, 8171–8176.
- Consoli, G. (2014), "The Emergence of the Modern Mind: An Evolutionary Perspective on Aesthetic Experience", in: *The Journal of Aesthetics and Art Criticism* 72, 37–55.
- Davies, M. (2014), "Epeius in the Kitchen: or Ancient Greek Folk Tales Vindicated", in: *Greece & Rome* 61, 91–101.
- Davis, E. L. (1999), *Storytelling in the African American Narcotics Anonymous Community as a Praxis for Recovery*, Diss. Ohio 1999.

- Decui Ritivoi, A. (2016), “Reading Stories, Reading (Others’) Lives: Empathy, Intersubjectivity, and Narrative Understanding”, in: *Storyworlds: A Journal of Narrative Studies* 8, 51–75.
- Desideri, F. / Pieri P. F. (eds.) (2019), *Il mito dell’empatia: prospettive critiche*, Florence (nr. monografico “*atque*” n.s. 29, 2019)
- Dawkins, R. (1976), *The Selfish Gene*, New York.
- De Rossi, M. / Petrucco, C. (2013), *Le narrazioni digitali per l’educazione e la formazione*, Rome.
- Dillon, K. M. / Minchoff, B. / Baker, K. H. (1985), “Positive Emotional States and Enhancement of the Immune System”, in: *International Journal of Psychiatry and Medicine* 15, 13–17.
- Doherty, L. E. (1995), *Siren Songs: Gender, Audiences, and Narrators in the Odyssey*, Ann Arbor.
- Doherty, L. E. (2002), “The Narrative ‘Openings’ in the *Odyssey*”, in: *Arethusa* 35, 51–62.
- Dolan, D. (1998), *The Communal Function of Reciprocal Personal Experience Storytelling*, Diss. Washington 1998.
- Eisenberg, N. / Strayer J. (eds.) (1990), *Empathy and its Development*, Cambridge.
- Ercolani, A. (2006), *Omero. Introduzione allo studio dell’epica greca arcaica*, Rome.
- Ercolani, A. / Lulli, L. (eds.) (2022), *Rethinking Orality I: Codification, Transcodification and Transmission of ‘Cultural Messages’*, Berlin-Boston.
- Farenga, V. (1998), “Narrative and Community in Dark Age Greece: A Cognitive and Communicative Approach to Early Greek Citizenship”, in: *Arethusa* 31, 179–206.
- Farnell, B. (1999), “Moving Bodies, Acting Selves”, in: *Annual Review of Anthropology* 28, 341–373.
- Ferraro, G. (2020), *Teorie della narrazione. Dai racconti tradizionali all’odierno storytelling*, Rome.
- Finkelberg, M. (2000), “The *Cypria*, the *Iliad*, and the Problem of Multiformity in Oral and Written Tradition”, in: *Classical Philology* 95, 1–11.
- Gentile, J. S. (2011), “Prologue: Defining Myth: An Introduction to the Special Issue on Storytelling and Myth”, in: *SSS* 7, 85–90.
- Georges, R. A. (1979), “Feedback and Response in Storytelling”, in: *Western Folklore* 38, 104–110.
- Giordano[-Zecharya], M. (2003), “*Tabellae auris*: musica e memoria nella trasmissione della lirica monodica”, in R. Nicolai (ed.), *RHYSMOS. Studi di poesia, metrica e musica greca offerti dagli allievi a Luigi Enrico Rossi per i suoi settant’anni*, Rome, 73–92.
- Gottschall, J. (2012), *The Storytelling Animal. How Stories Make Us Human*, Boston.
- Haft, A. J. (1984), “Odysseus, Idomeneus and Meriones: The Cretan Lies of *Odyssey* 13–19”, in: *Classical Journal* 79, 289–306.
- Hanson, T. L. (2004), “An Oral Storytelling Approach to Teaching Writing in the Primary Grades”, in: *SSS* 1, 74–91.
- Harrell, J. (1983), *Origins and Early Traditions of Storytelling*, Kensington, CA.
- Havelock, E. A. (1963), *Preface to Plato*, Cambridge, Mass.
- Havelock, E. A. (1986), *The Muse Learns to Write: Reflections on Orality and Literacy from Antiquity to the Present*, New Haven.
- Herman, D. (2002), *Story Logic: Problems and Possibilities of Narrative*, Lincoln, NE.
- Herman, D. (2007), “Storytelling and the Sciences of Mind: Cognitive Narratology, Discursive Psychology, and Narratives in Face-to-Face Interaction”, in: *Narrative* 15, 306–334.
- Herman, D. (2013), *Storytelling and the Sciences of Mind*, Cambridge, Mass.
- Hopman, M. (2012), “Narrative and Rhetoric in Odysseus’ Tales to the Phaeacians”, in: *American Journal of Philology* 133, 1–30.
- Howard, G. S. (1991), “Culture Tales: A Narrative Approach to Thinking, Cross-cultural Psychology, and Psychotherapy”, in: *American Psychologist* 46, 187–197.

- Ingber, S. / Eden, S. (2011), “Enhancing Sequential Time Perception and Storytelling Ability of Deaf and Hard of Hearing Children”, in: *American Annals of the Deaf* 156, 391–401.
- de Jong, I. (2001), *A Narratological Commentary on the Odyssey*, Cambridge.
- Jung, C. G. (2014), *Opere*, vol. 6, Turin.
- Kahre, P. (1992), *Effects of Oral versus Read Stories on Children’s Creativity and Sense of Story Structure*, diss. University of Alabama.
- Kirk, G. S. (1970), *Myth: Its Meaning and Functions in Ancient and Other Cultures*, Cambridge.
- Kroeber, K. (1992), *Retelling/Rereading: The Fate of Storytelling in Modern Times*, New Brunswick, NJ.
- Landrum, N. E. (2000), *A Quantitative and Qualitative Examination of the Dynamics of Nike and Reebok Storytelling as Strategy*, diss. New Mexico State University.
- Lankton, C. H. / Lankton, S. R. (1989), *Tales of Enchantment: Goal Oriented Metaphors for Adults*, New York.
- Lund, B. D. (2022), “The Art of (Data) Storytelling: Hip Hop Innovation and Bringing a Social Justice Mindset to Data Science and Visualization”, in: *The International Journal of Information, Diversity and Inclusion* 6, 31–41.
- Luse Smith, P. (1998), *A Qualitative Investigation into the Educational Benefits of Storytelling: Teaching through Storytelling*, diss. Washington.
- Mackie, H. (1997), “Song and Storytelling: An Odyssean Perspective”, in: *Transactions of the American Philological Association* 127, 77–95.
- Maiangwa, B. / Byrne, S. (2015), “Peacebuilding and Reconciliation through Storytelling in Northern Ireland and the Border Counties of the Republic of Ireland”, in: *SSS* 11, 85–110.
- Maier, E. (2015), “Reported Speech in the Transition from Orality to Literacy”, in: *Glotta* 91, 152–170.
- Majewski, T. (2000), “‘We Are All Storytellers’: Comments on Storytelling, Science, and Historical Archaeology”, in: *Historical Archaeology* 34, 17–19.
- Marangon, D. (2018), *La comunicazione emozionale. Storytelling, approcci cognitivi e social media*, Rome.
- Marraffa, M. (2019), “Empatia, mindreading e introspezione”, in *Desideri / Pieri 2019*, 77–105.
- Martin, R. P. (1989), *The Language of Heroes: Speech and Performance in the Iliad*, Ithaca, NY.
- Massaro, T. M. (1989), “Empathy, Legal Storytelling, and the Rule of Law: New Words, Old Wounds?”, in: *Michigan Law Review* 87, 2099–2127.
- Mastin, M. (2007), “Storytelling + Origami = Storygami Mathematics”, in: *Teaching Children Mathematics* 14, 206–212.
- Meel, D. E. / Gyrko, D. / Gaspar, M. (2006), “A Little-Used Art of Teaching: The Case of Storytelling”, in: *The Mathematics Teacher* 100, 64–68.
- Meyer, P. N. (2014), “Shaping Your Legal Storytelling: Voice and Perspective Can Affect how the Law is Applied to the Facts of Your Case”, in: *ABA Journal* 100, 26–27.
- Minchin, E. (1991), “Speaker and Listener, Text and Context: Some Notes on the Encounter of Nestor and Patroklos in *Iliad* 11”, in: *Classical World* 84, 273–285.
- Minchin, E. (1992a), “Scripts and Themes: Cognitive Research and the Homeric Epic”, in: *Classical Antiquity* 11, 229–241.
- Minchin, E. (1992b), “Homer Springs a Surprise: Eumaios’ Tale at *Od.* o 403–484”, in: *Hermes* 120, 259–266.
- Minchin, E. (1995), “The Poet Appeals to His Muse: Homeric Invocations in the Context of Epic Performance”, in: *Classical Journal* 91, 25–33.

- Minchin, E. (1999), "Serial Repetition in Homer and the "Poetics of Talk": A Case Study from the *Odyssey*", in: *Oral Tradition* 14, 336–353.
- Minchin, E. (2001a), "How Homeric is Hysteron Proteron?", in: *Mnemosyne* 54, 635–645.
- Minchin, E. (2001b), *Homer and the Resources of Memory: Some Applications of Cognitive Theory to the Iliad and Odyssey*, Oxford.
- Minchin, E. (2002), "Verbal Behavior in Its Social Context: Three Question Strategies in Homer's *Odyssey*", in: *Classical Quarterly* 52, 15–32.
- Morgan, K. F. (2002), *A Study of the Responses of Fourth Grade, Public School Students to the Same Story Read Independently, Read Aloud, and Told Orally as a Shred Storytelling Experience*, diss. Denton (Texas).
- Morrell, M. F. (2010), *Empathy and Democracy: Feeling, Thinking, Deliberation*, Philadelphia.
- Murray, G. (1934⁴), *The Rise of the Greek Epic*, Oxford.
- Nussbaum, M. (2013), *Political Emotions*, Cambridge.
- Oaks, T. (1995), *Storytelling: A Natural Mnemonic. A Study of a Storytelling Teaching Method to Positively Influence Student Recall of Instructions*, diss. Knoxville (Tennessee).
- Ok Ezechuwkwu, B. (1999), *Restoring the Art of Storytelling as an Educational Tool to Empower Cooperative and Collaborative Learning among Ethnically Diverse Students/Groups*, diss. Tulsa (Oklahoma).
- Ollerenshaw, J. A. (1998), *A Study of the Impact of a Supplemental Storytelling (Oral Narrative) Strategy on Fourth Grade Students' Understanding of the Physics of Sound*, diss. Iowa.
- O'Neil, V. J. (2002), *Evaluating Storytelling as a Method for Training at Wisconsin Electric-Wisconsin Gas Company: A Case Study*, diss. Milwaukee (WI).
- Ong, W. (1986 [1982]), *Oralità e scrittura*, Milan.
- Palmisciano, R. (2007), "Recitazioni secondarie, canti lirici e canzoni nei poemi omerici. Le ragioni di un'assenza", in: *Quaderni Urbinate di Cultura Classica* 86, 23–54.
- Peck, J. (1989), "Using Storytelling to Promote Language and Literacy Development", in: *The Reading Teacher* 43, 138–141.
- Perärylä, A. / Henttonen, P. / Voutilainen, L. / Kahri, M. / Stevanovic, M. / Sams, M. / Ravaja, N. (2015), "Sharing the Emotional Load: Recipient Affiliation Calms Down the Storyteller", in: *Social Psychology Quarterly* 78, 301–323.
- Petrick, I. (2014), "The Power of Storytelling", in: *Research Technology Management* 57, 54–55.
- Petrucco, C. / De Rossi, M. (2009), *Narrare con il digital storytelling a scuola e nelle organizzazioni*, Rome.
- Pinotti, A. (2011), *Empatia. Storia di un'idea da Platone al postumano*, Rome.
- Quinn, N. (2011), "Event Sequencing as an Organizing Cultural Principle", in: *Ethos* 39, 249–278.
- Radke, G. (2007), "Die poetische Souveränität des homerischen Erzählers", in: *Rheinisches Museum* 150, 8–66.
- Ready, J. (2015), "The Textualization of Homeric Epic by Means of Dictation", in: *Transactions of the American Philological Association* 145, 1–75.
- Ready, J. (2019), *Orality, Textuality, and the Homeric Epics. An Interdisciplinary Study of Oral Texts, Dictated Texts, and Wild Texts*, Oxford.
- Reid, B. (1998), "The Trial Lawyer as Storyteller: Reviving an Ancient Art", in: *Litigation* 24, 8–13.
- Rinon, Y. (2006), "Mise en abyme and Tragic Signification in the *Odyssey*: The Three Songs of Demodocus", in: *Mnemosyne* 59, 208–225.
- Ripley, J. (2011), "Looking at Listening: Au'Oral Narrative in Theory and Practice", in: *SSS* 7, 1–14.

- Russell, C. M. (2013), *Homer's Roads not Taken. Stories and Storytelling in the Iliad and Odyssey*, diss. Los Angeles (CA).
- Ryan, P. (1995), *Storytelling in Ireland: A Re-awakening*, Londonderry.
- Sacks, O. (2016 [1985]), *L'uomo che scambiò la moglie per un cappello*, Milan.
- Salmon, C. (2008 [2007]), *Storytelling. La fabbrica delle storie*, Rome.
- Scobie, A. (1979), "Storytellers, Storytelling, and the Novel in Graeco-Roman Antiquity", in: *Rheinisches Museum* 122, 229–259.
- Scodel, R. (1997), "Pseudo-intimacy and the Prior Knowledge of the Homeric Audience", in: *Arethusa* 30, 201–219.
- Scodel, R. (1998), "Bardic Performance and Oral Tradition in Homer", in: *Transactions of the American Philological Association* 119, 171–194.
- Scott, J.-A. (2018), "Embracing the Vulnerabilities and Possibilities of Storytelling, Listening, and (Re) Creating Identity with Others", in: *SSS* 14, 254–279.
- Segal, Ch. (1994), *Singers, Heroes, and Gods in the Odyssey*, Ithaca, NY.
- Senehi, J. J. (2000), *Constructive Storytelling: Building Community, Building Peace*, diss. Syracuse University.
- Sobol, J. / Gentile, J. / Sunwolf (2004), "Storytelling, Self, Society: an Interdisciplinary Journal of Storytelling Studies: Once Upon a Time: an Introduction to the Inaugural Issue", in: *SSS* 1, 1–7.
- Stevens-Guille, M. E. / Boersma, P. J. (1992), "Fairy Tales as a Trance Experience: Possible Uses", in: *American Journal of Clinical Hypnosis* 34, 245–254.
- Sturm, B. W. (2000), "The 'Storylistening' Trance Experience", in: *The Journal of American Folklore* 113, 287–304.
- Tomasello, D. (2021), *Playtelling. Performance narrative nell'Italia contemporanea*, Venice.
- Tonemah, D. (2002), *Storytelling: Metaphor and the Education of the Kiowa Tribe*, diss. Lincoln (Nebraska).
- Turner, M. (1996), *The Literary Mind*, Oxford.
- Vendryes, J. (1923), *Le langage, introduction linguistique à l'histoire*, Paris.
- Walker, V. L. (2001), *Traditional Versus New Media Storytelling as Pedagogy for African-American Children*, diss. University of Texas at Austin.
- West, S. (2003), "Κερκίδος παραμύθια? For Whom Did Chariton Write?", in: *Zeitschrift für Papyrologie und Epigraphik* 143, 63–69.
- Wierzbicka, A. (1999), *Emotions Across Languages and Cultures: Diversity and Universals*, Cambridge.
- Young, K. / Saver, J. L. (2001), "The Neurology of Narrative", in: *SubStance* 30, 72–84.
- Zed, L. (2003), *Helpful Symbols in Fairy Tales: A Storytelling Group Employing Ancient Wisdom to Treat Depression at Midlife*, Diss. Palo Alto (CA).
- Zekas, C. (2017), "Odysseus as Storyteller", in: *Mnemosyne* 70, 721–739.
- Zeman, S. (2023), "Oral Storytelling in Ancient Greek and German Medieval Literature", in P. Hühn / J. Pier / W. Schmid (eds.), *Handbook of Diachronic Narratology*, Berlin-Boston, 684–709.
- Zipes, J. (1995), *Creative Storytelling: Building Community, Changing Lives*, New York.

Manuela Giordano

Poetic Pains and Pleasures: Theory of Mind and the Reception of Epic Performance (*Odyssey* 8 and Beyond)

Abstract: The contribution investigates aspects of literary reception in a combined aesthetic and cognitive framework. The first part is in-depth analysis of Odysseus' and Phaeacians' contrasted receptions of Demodocus' performance in *Odyssey* 8, weeping and enjoyment respectively. The investigation expands on the cognitive processes presumably at work behind these reactions, namely Theory of Mind and embodied simulation. The joint analysis shows that an 'as-if procedures' applies both to ToM and simulation theory and aesthetic principles underlying Greek poetics.

Keywords: Embodied simulation; *Odyssey*; reception; Theory of Mind.

“The Homeric poems, and especially the *Odyssey*, have much to say about singers and audiences, and it is possible to construct from them a kind of *ars poetica*”;¹ in this direction, the embedded performances of Demodocus at Scheria and Phemius at Ithaka, *Odyssey* 8 and 1 respectively, provide a privileged setting for reconstructing the conditions and premises for a successful performance and epic reception *iuxta propria principia*. In volume I of *Rethinking Orality* I focused on the embodied cognitive effects of poetic performance in the audience's reception, and identified the elicitation of silence, enchantment, and pleasure as the three interconnected goals of the performance. I have further investigated these states of mind from the cognitive point of view by means of neuroscientific findings, exploring in particular the role of silence as a trigger for attention and the function of pleasure-inducing dopamine circuits in relation to communication and acquisition of knowledge (epistemic curiosity).²

In this chapter I will focus on the two contrasted receptions of Demodocus' performance in *Odyssey* 8 by Odysseus and the Phaeacian audience respectively. The investigation expands on the cognitive processes behind the scenes, which will illuminate further aspects of literary reception in a combined aesthetic and cognitive framework.

1 Richardson 1993, 25.

2 Giordano 2022.

1 Demodocus' Performance: a Spotlight on Poetics

In his perilous journey back to Ithaka, Odysseus ends up on the isle of the Phaeacians, where queen Arete and king Alcinous welcome the hero and treat him with hospitable rituals and offerings, framed in the typical scene of *xenia*.³ The honorary banquet stars the singer Demodocus, who performs to the leisurely gathered elite community in honour of the yet nameless guest. Demodocus performs three songs: the quarrel between Achilles and Odysseus (ll. 73–82), the loves of Aphrodite and Ares (ll. 266–366),⁴ and the episode of the Wooden Horse, which is sung at Odysseus' bidding (ll. 499–520). Two of the performances are episodes from the Trojan Cycle, a common repertoire of the embedded stories of the *Odyssey*.⁵

In Book 8, however, the stories within the story acquire greater consequence: while the external audience knows that Odysseus features as the protagonist of the tales, the internal audience is unaware of his identity.⁶ The resulting *mise en abyme* is a master's touch: not only are the stories within a story recursively embedded in the narration of the last *nostos* of the protagonist of the song, but they feature Odysseus at the same time as main addressee, character, and commissioner of the song for the episode of the Wooden Horse of both diegetic levels.⁷

Epic narrative art is shown here at its finest: multiple diegetic levels open diverse perspectives – Odysseus', Alcinous', Phaeacians', as well as the external audience's – resulting in a combination of irony and suspense. Such an assemblance

3 On which see Reece 1993; for the Scheria' scene see 102–121. The scholar dwells on the peculiarity of Phaeacians' hospitality, which, despite its lavish character, is not shorn of ambivalence, in so far as it is interrupted by breach of hospitable behaviours: Alcinous' probing into Odysseus' identity before the end of the meal (*Od.* 7. 186–225), the challenge to participate in athletic contests (8. 145–157), and Euryalus' offensive behaviours (*Od.* 8. 158–233), which sit oddly with the fame of the islanders proclaimed in 8.248f. αἰεὶ δ' ἡμῖν δαίς τε φίλη κιθάρις τε χοροὶ τε/εἵματα τ' ἐξημοιβὰ λοετρά τε θερμὰ καὶ εὐναί, “and ever to us is the banquet dear, and the lyre, and the dance, and changes of raiment, and warm baths, and the couch”.

4 On which see Palmisciano 2012.

5 Cf. *Od.* 1.325–27; 3. 102–98, 247–312; 4. 76–112, 212–89, 347–586; 8. 73–82; 9. 1–12.453; 10. 14–16; 14. 462–506.

6 I prefer 'audience' to 'narratee', since the latter term takes only narration into account, whereas performance, epic or otherwise, entails more media than verbal art; see on the distinctive features of epic poetry Bakker 2009, Meineck in this volume.

7 See Létoublon 2022, 170–171; on poetological reflection, de Jong 2011, 11; see also Bierl 2022, in part. 296–301.

of viewpoints draws the external audience's attention to the discrepancy in poetic receptions, while creating a cognitive and emotional bond of shared secrecy with Odysseus as embedded character.

I will try to show that the enhanced aesthetic allure of the narration aimed at bringing more effectively to the fore the (meta)poetic bearing of the scene.

2 First Performance: the Quarrel between Achilles and Odysseus

The first performance revolves around a quarrel between Odysseus and Achilles (νεῖκος Ὀδυσσεὺς καὶ Πηλεΐδew Ἀχιλλῆος, *I.* 75), which is said to fulfil Apollo's oracle about Zeus' destructive plans:

Od. 8. 76–82

ὥς ποτε δηρίσαντο
 ἐκπάγλοις ἐπέεσσι, ἄναξ δ' ἀνδρῶν Ἀγαμέμνων
 χαῖρε νόῳ, ὃ τ' ἄριστοι Ἀχαιῶν δηρίωντο.
 ὥς γάρ οἱ χρείων μυθήσατο Φοῖβος Ἀπόλλων
 80 Πυθοῖ ἐν ἠγαθέῃ, ὅθ' ὑπέρβη λάινον οὐδὸν
 χρησόμενος: τότε γάρ ῥα κυλίνδετο πήματος ἀρχὴ
 Τρωσὶ τε καὶ Δαναοῖσι Διὸς μεγάλου διὰ βουλᾶς.

even the quarrel of Odysseus and Achilles, son of Peleus, how once they strove with furious words at a rich feast of the gods, and Agamemnon, king of men, was glad at heart that the best of the Achaeans were quarrelling; for thus Phoebus Apollo, in giving his response, had told him that it should be, [80] in sacred Pytho, when he passed over the threshold of stone to enquire of the oracle. For then the beginning of woe was rolling upon Trojans and Danaans through the will of great Zeus.⁸

Hainsworth asserts that the dispute between the two heroes is “otherwise unknown”,⁹ and deems it unnecessary to interpret the mention of Zeus' plans (82) as an allusion to *Cypria*.¹⁰ The hemistich 82 Διὸς μεγάλου διὰ βουλᾶς strikingly parallels in phrasing the proem of the *Iliad* Διὸς δ' ἔτελείετο βουλή (*Il.* 1. 5). As in the Iliadic proem, the *eris* between Agamemnon and Achilles (*Il.* 1.6–7) appears at the beginning of the epidemic that harvests lives in the Achaean camp, so in our passage the non-specified *neikos* between Achilles and Odysseus is the *arche* of a

⁸ All translations of the *Odyssey* are by A. T. Murray.

⁹ Hainsworth in Heubeck *et al. ad loc.*

¹⁰ *Idem.*

disaster falling upon Trojans and Danaans alike (74 s., κυλίνδετο πήματος ἀρχή/ Τρωσί τε καὶ Δαναοῖσι).¹¹

In my opinion we can explain the stringent narrative analogy by assuming an alternative version of the wrath of Achilles, attested in Philostratus' *Heroicus*, where it is directed at Odysseus because of Palamedes' disgraceful murder at the hands of Diomedes and Laertes' son, also attested in the *Cypria*: "he [Protesilaus] also says that the wrath of Achilles did not fall upon the Hellenes because of the daughter of Khryses, but that Achilles, too, was angry over Palamedes" (*Her.* 25. 16, transl. Maclean- Aitken).¹² Even if the reference to Palamedes' affaire remains speculative, we may at least be assured that at the time of the composition of *Odyssey* 8, the quarrel between Achilles and Odysseus circulated as one of the major episodes of the Trojan Cycle, comparable to the episode of the Wooden Horse, so much so that the poet did not consider it necessary to provide further details.¹³

Revealingly, the passage describing Odysseus' emotional reaction to the performance extends across twice the space (83–95) of the allusion to the *neikos* episode (76–82), the discrepancy resulting in a foregrounding of the impressive hero's reaction:

Od. 8.83–95

ταῦτ' ἄρ' αἰδὸς αἶδε περικλυτός· αὐτὰρ Ὀδυσσεὺς
πορφύρεον μέγα φᾶρος ἔλῶν χερσὶ στιβαρῆσι
κὰκ κεφαλῆς εἴρυσσε, κάλυψε δὲ καλὰ πρόσωπα·
αἶδετο γὰρ Φαίηκας ὑπ' ὄφρῦσι δάκρυα λείβων.
ἦ τοι ὅτε λήξειεν αἰείδων θεῖος αἰδὸς,
δάκρυ ὁμορξάμενος κεφαλῆς ἀπο φᾶρος ἔλεσκε
καὶ δέπας ἀμφικύπελλον ἔλῶν σπείσασκε θεοῖσιν·
αὐτὰρ ὄτ' ἄψ ἄρχοιτο καὶ ὀτρύνειαν αἰεῖδεν
Φαίηκων οἱ ἄριστοι, ἐπεὶ τέρποντ' ἐπέεσσιν,

11 Pace Hainsworth who considers the plural βουλὰς too vague.

12 I wish to thank Michele Lionetti, who pointed Philostratus' passage to me. Paus. 10. 31. 2, "Palamedes, as I know from reading the epic poem *Cypria*, was drowned when he put out to catch fish, and his murderers were Diomedes and Odysseus" (transl. Ormerod); in Hyg. *Fab.* 105, Palamedes is falsely accused of treason by Odysseus and stoned to death by the Greeks. See Grossardt 2006, 744f. on the connection with "Achilles' song" (Phil. *Her.* 55, 3); cf. also *Her.* 25, 11–18; 33, 36.

13 Several questions should be further clarified: what moment of the expedition is referred to by τότε of line 81? Is the disaster Zeus' plans contrive connected to the narrative of *Cypria*, since it is said to befall both Trojans and Danaans? In such a case, why are the three leaders gathered in what seems a most important occasion, θεῶν ἐν δαυτὶ θαλίῃ? If Agamemnon's enjoyment of the rivalry between two of the greatest leaders is understandable in terms of the *divide et impera* principle, the sign of the beginning of the war may be a less straightforward cause of joy.

ἄψ Ὀδυσσεὺς κατὰ κρᾶτα καλυψάμενος γοάσκει.
 ἔνθ' ἄλλους μὲν πάντας ἐλάνθανε δάκρυα λείβων,
 Ἀλκίνοος δέ μιν οἶος ἐπεφράσατ' ἠδ' ἐνόησεν
 ἦμενος ἄγχ' αὐτοῦ, βαρὺ δὲ στενάχοντος ἄκουσεν.

as often as the divine minstrel ceased his singing, Odysseus would wipe away his tears and draw the cloak from off his head, and taking the two-handed cup would pour libations to the gods, But as often as he began again, and the nobles of the Phaeacians bade him sing, because they took pleasure in his lay, Odysseus would again cover his head and moan. Now from all the rest he concealed the tears that he shed, but Alcinous alone marked him and took heed, for he sat by him, and heard him groaning heavily.

While the Phaeacians take pleasure from the story and asks for more (90–91), Odysseus is overwhelmed by grief while the performance keeps bringing out in the hero a surge of tears and moaning (92–93, 95). Moments of singing alternate with moments of respite, during which commensals offer libations while Odysseus hides his face, drawing his purple cloak on his head, because, it is explained, he feels ashamed (αἶδετο) at showing before the Phaeacians (86). The sequence libation/concealment/despondent lament is conveyed as repeatedly taking place by the use of the inchoative form of the verbs (88, σπείσασκε; 89, ἔλεσκε; 92, γοάσκει). Odysseus' enduring grief escapes the other commensals (89–90), except Alcinous, who, seated beside his guest, hears his sobs. The king immediately interrupts the performance by diverging the attention of the Phaeacians, which he invites to move outside for the next entertainment, the athletic contests (96–103).

3 Third Performance: the Guile of the Wooden Horse and Odysseus as a Widow

Before exploring Demodocus' third performance, let us take a short detour on the anthropological status of crying in Homer. The subject of tears in ancient Greece and Homer in particular was famously tackled by Monsacré's seminal study, *The Tears of Achilles*, and has continued to receive scholarly attention ever since.¹⁴ Suffice it to say that in Homer weeping is a widespread emotional and nonverbal habit among heroines and heroes alike. Tears are ostensibly shed in both public and private contexts, and it is the lack of restraint Homeric warriors display in weeping that Plato deemed so disgraceful and morally corrupting as to propose

¹⁴ See for ex. van Wees 1998; Tsagalis 2004; Fögen 2009. On tears as an unmanly expression in post-Homeric literature see Holst-Warhaft 1992, 107–108; van Wees 1998; Föllinger 2009b.

that epic should be banned from his ideal community (*Resp.* 3. 287–288).¹⁵ Since in Homer no sense of shame accompanies weeping *per se*, the reasons for Odysseus hiding his weeping as well as the alarming reaction that this elicits in Alcinous, therefore, shall be examined more precisely.

Demodocus' third performance takes place after the evening banquet and culminates the ritual delivery of hospitable presents, the bathing, and the exchange of blessings (ll. 389–445). At the closing of the meal, Odysseus addresses Demodocus, praising him as a 'master of truth',¹⁶ and challenges him to probe his valour (496–498) and develop the *oime* of the Wooden Horse:

Od. 8. 492–495

ἀλλ' ἄγε δὴ μετάβηθι καὶ ἵππου κόσμον ἄεισον
 δουρατέου, τὸν Ἐπειὸς ἐποίησεν σὺν Ἀθήνῃ,
 ὃν ποτ' ἐς ἀκρόπολιν δόλον ἤγαγε δῖος Ὀδυσσεὺς
 ἀνδρῶν ἐμπλήσας οἱ ῥ' Ἴλιον ἐξαλάπαξαν

sing of the building of the horse of wood, which Epeius made with Athena's help, the horse which once Odysseus led up into the citadel as a thing of guile, [495] when he had filled it with the men who sacked Ilios.¹⁷

The song of Demodocus as embedded narrator is artfully epitomized by the primary narrator of *Odyssey* 8 and acts as an *Iliou persis* in a nutshell (500–520). The words of the performance, however, are not directly quoted, as prescribed by the poetic rule Palmisciano has highlighted: “the singer should neither quote verbatim epic songs of other singers nor traditional lyric songs”.¹⁸

Here too, however, Demodocus' excellence proves a most unwelcome gift to Odysseus, and, as in the first performance, Odysseus experiences an emotional breakdown:

Od. 8. 521–522

ταῦτ' ἄρ' αἰδοῦς ἄειδε περικλυτός· αὐτὰρ Ὀδυσσεὺς
 τήκετο, δάκρυ δ' ἔδευεν ὑπὸ βλεφάροισι παρειάς,

This song the famous minstrel sang. But the heart of Odysseus
 was melted and tears wet his cheeks beneath his eyelids.

¹⁵ On the tears of the heroes, see Monsacré 2018, 159–167.

¹⁶ See Sbardella 2022, 153; Palmisciano in this volume.

¹⁷ See Suerbaum 1968; Doherty 1995; Palmisciano in this volume.

¹⁸ Palmisciano 2012, 177; the scholar further explains that “this law finds its *raison d'être* in the practice of oral composition, which demands that one should not repeat from memory ... but requires the singer to compose anew each time”.

A dramatic simile illustrates Odysseus' state of wretchedness:

Od. 8. 523–531

ὡς δὲ γυνὴ κλαίῃσι φίλον πόσιν ἀμφιπεσοῦσα
 ὅς τε ἔης πρόσθεν πόλιος λαῶν τε πέσῃσιν,
 ἄσται καὶ τεκέεσσιν ἀμύνων νηλεὲς ἥμαρ:
 ἢ μὲν τὸν θνήσκοντα καὶ ἀσπαίροντα ἰδοῦσα
 ἀμφ' αὐτῷ χυμένη λίγα κωκυέι: οἱ δέ τ' ὀπισθε
 κόπτοντες δούρεσσι μετάφρενον ἠδὲ καὶ ὤμους
 εἶρερον εἰσανάγουσι, πόνον τ' ἐχέμεν καὶ ὀζύν:
 τῆς δ' ἔλεεινοτάτῳ ἄχεϊ φθινύθουσι παρειαί:
 ὡς Ὀδυσσεὺς ἔλεεινὸν ὑπ' ὀφρύσι δάκρυον εἴβεν.

And as a woman wails and flings herself about her dear husband,
 who has fallen in front of his city and his people,
 seeking to ward off from his city and his children the pitiless day;
 and as she beholds him dying and gasping for breath,
 she clings to him and shrieks aloud, while the foe behind her
 smite her back and shoulders with their spears,
 and lead her away to captivity to bear toil and woe,
 while with most pitiful grief her cheeks are wasted:
 even so did Odysseus let fall pitiful tears from beneath his brows.

The son of Laertes is compared to a widow, victim of the war, by a most pathetic simile that utterly collapses gender division, and inverts roles and perspectives. Before we turn to the pragmatic context of the scene, let us dwell at the multilayered semantics of the simile.

At first glance, the simile compares the intensity of the woman's crying with that of Odysseus, as in *Il.* 2. 289–290, where the Achaeans wail in their longing to homecoming “like little children or widow women”, ὡς τε γὰρ ἢ παῖδες νεαρὸι χῆραί τε γυναῖκες. According to de Jong, “the point of comparison, as so often in Homer, is ‘advertised’ through the verbal echo of ‘most pitiable’ (*eleeinotatōi*) in ‘piteous’ (*eleinion*): the weeping of Odysseus/the woman is such as to evoke the pity of those who see them, and indeed Alcinous is moved by the stranger's tears and once again inquires after his ‘sorrow’”.¹⁹ The cause of the woman's weeping is the witnessing of her husband's violent killing and the prospect of a life as a slave, “an idea which, even when expressed without pathos, cannot help but be emotive”.²⁰

In other terms, it is the intensity of the woman's crying in the foreground, *not* the femininity of it; the point at stake in the simile, in other words, is pathos, not

¹⁹ De Jong 2018, 39.

²⁰ Griffin 1976, 173.

gender.²¹ Homer foregrounds women's subjectivity in expressing painful emotions, partly because "it is in women that the drama of the fall of the city is most fully expressed" and their weeping as victims of warfare is "a paradigm of the pathos of war";²² the encounter of Andromache and Hector (*Il.* 6.407–413) exemplifies this epic motif.²³ The context of our simile, however, expands this commonplace and makes us pause. Segal remarks that:

the simile of the weeping captive woman further suggests the possibility that this identification with the subject matter of the song applies not just to the memory of an actual participant like Odysseus, but also to vicarious participation by anyone, for the simile evokes a response of pity for the victims of any war, not just the Trojan war of which Demodocus has just sung.²⁴

As often noted, the *Odyssey*, and *nostoi* in general, looked at the Trojan war with hindsight, and trauma rather than glory emerges in the narrative; in this direction, Odysseus' reaction speaks volume about "the breaking points" connected to the experience of war.²⁵

Odysseus has just been celebrated in Demodocus' song as the agent par excellence of civic destruction, killing and wreaking havoc in the city "like Ares" (515), performing the exploit that the epithet *πολίτορθος* "sacker of the city" aptly epitomises²⁶. Interestingly, the heroic standing and civic martial virtues of the woman's husband are highlighted, a civic defender that dies at the hands of the city.²⁷ On further reflection, the juxtaposition of these subjects is altogether both poignant and puzzling: the perpetrator weeps just like one of his (potential) vic-

21 See, *contra*, Cairns 2009, 43, arguing that "the simile requires for its effect a sense that weeping is a typically feminine response", and "the implication that a veiled and weeping man is like a woman is impossible to overlook". On the pragmatic reasons for Odysseus 'veiling' see below.

22 Leandro 2022, 39.

23 In this passage Andromache fears the fate of the like of the woman in our simile, cf. *Il.* 6.464–465; for *loci similes* cf. 9.593–594; 16.833–834; 19.291–295; 22.59–71.

24 Segal 1992, 10.

25 Shay 1994, 165–181. See also pp. 188–94 on the need veterans experience for storytelling and sharing their grief. See Konstan / Meinek 2014. Hainsworth in Heubeck *et al. ad loc.* notes "heroic exploit is for Homer always an *ἄεθλος* leading to no permanent happiness".

26 Hainsworth in Heubeck *et al. ad loc.*; whereas the epithet refers also to Achilles, Ares, Enyo, and others, in the *Odyssey* the epithet only applies to Odysseus.

27 On the profile of the civic martial valour, see Scully 1990, 94–112; Giordano 2006, 291–292.

tim;²⁸ the war victim and the war hero stand side by side, his deed her tragedy, in a bitter yet mesmerizing game of mirrors.²⁹

As noted by Hainsworth, weeping can express a wide range of emotions, from fear to piety, “but none exactly fit the case of a man who weeps at the recollection of victory”.³⁰ What does Odysseus weep for exactly? Demodocus’ storytelling brings painful memories that overpower the hero’s self-control, resonant with a traumatic echo, to be sure; still, the simile’s mourning theme, and particularly the violent denial of funerary rites, is particularly relevant in this respect. Odysseus is “in a sense, mourning himself”, not only is he far from home (cf. *Il.* 2. 289 s. quoted above), but he already knows that he will die in a far-away land.³¹

Neither Odysseus nor the woman can openly and fully express their funereal weeping: the woman is impaired by external factors, i. e. her enemies, who hit her with the spears, dragging her away to a destiny of slavery, while Odysseus seems impaired by an internal factor, his own sense of shame and self-censorship. If, as I have noted, weeping is nothing eccentric for a Homeric hero, why does Odysseus desperately try to hide it from the Phaeacians? The answer, I believe, lies between epic poetics of reception and *xenia*’s ritual etiquette.

4 Concealing One’s Tears: between Poetics and *Xenia*

At the realization of his guest’s weeping, Alcinous twice commands that the song be stopped:

Od. 8. 531–542

ὦς Ὀδυσσεὺς ἐλεεινὸν ὑπ’ ὀφρύσι δάκρυον εἶβεν.
 ἔνθ’ ἄλλους μὲν πάντας ἐλάνθανε δάκρυα λείβων,
 Ἄλκίνοος δέ μιν οἶος ἐπεφράσατ’ ἠδ’ ἐνόησεν,
 ἦμενος ἄγχ’ αὐτοῦ, βαρὺ δὲ στενάχοντος ἄκουσεν.
 535αἴψα δὲ Φαιήκεσσι φιληρέτμοισι μετηύδα:
 κέκλυτε, Φαιήκων ἠγήτορες ἠδέμεδοντες,

²⁸ Pucci 1998, 5–6, see also n. 8, p. 5. See also Carastro 2006, 135–136; Brillante 2009, 30: “l’emozione dell’eroe è qui dovuta al forte coinvolgimento negli eventi oggetto del canto. Come nel caso di Penelope, la storia, [...] tocca troppo da vicino chi ascolta perché sia materia di semplice intrattenimento. Sul diletto prevalgono allora timore e angoscia”.

³⁰ Arnauld 1990, 102, “on ne saurait dire qu’elles en relèvent vraiment”.

³¹ Hainsworth in Heubeck *et al.* *ad loc.*

³¹ Minchin 2001, 208; see also de Jong 2018, 40. On the funerary connotation of weeping and veiling see Cairns 2009.

Δημόδοκος δ' ἤδη σχεθέτω φόρμιγγα λίγειαν:
 οὐ γάρ πως πάντεσσι χαριζόμενος τὰ δ' αἰίδει.
 ἔξ οὗ δορπέομέν τε καὶ ὤρορε θεῖος αἰιδός,
 540 ἐκ τοῦ δ' οὐ πω παύσατ' ὀϊζυροῖο γόοιο
 ὁ ξείνος; μάλα πού μιν ἄχος φρένας ἀμφιβέβηκεν.
 ἀλλ' ἄγ' ὁ μὲν σχεθέτω, ἴν' ὁμῶς τερπόμεθα πάντες

even so did Odysseus let fall pitiful tears from beneath his brows. Now from all the rest he concealed the tears that he shed, but Alcinous alone marked him and took heed, [535] for he sat by him and heard him groaning heavily. And straightway he spoke among the Phaeacians, lovers of the oar:

“let Demodocus now check his clear-toned lyre, for in no wise to all alike does he give pleasure with this song. Ever since we began to sup and the divine minstrel was moved to sing, from that time on stranger has never ceased from sorrowful lamentation; surely, grief has encompassed his heart. Nay, let the singer cease, that we may all make merry, hosts and guest”.

Reece views the scene as a clue to the ambiguity of Odysseus' welcome: “it is significant that the Phaeacians bungle in the entertainment of their guest: the songs of Demodocus, intended for his pleasure, instead twice bring him to tears (8. 83–95, 521–534)”.³² Alcinous, however, accounts for his order by a clear poetic argument. Giving pleasure is explicitly asserted as the goal and *sine qua non* of performance, which should be gratifying for *all* hearers (536); contrariwise, Demodocus' story has brought a continuous mourning and grief to the guest (542) and therefore should cease (544).

In response to a poetic performance, weeping immediately signals a dystonic fracture of the horizon of expectation and a transgression of the general rule of epic reception, which foresees pleasurable emotions, *terpsis*, as the benchmark of effective and captivating poetic performance.³³

At the same time, the typical scene of hospitality further illuminates Odysseus' behaviour and the reasons for concealing his weeping from the ritual point of view:

1 weeping will impolitely show that the welcoming gift of the performance is in fact unwelcome;

2 his tears will elicit suspicion and guesses about his identity, anticipating inappropriately the identification.

That the hero's reason for hiding lies mainly in the fear of being recognised sooner than the etiquette of hospitality dictates is confirmed by another scene of *xenia*. In *Odyssey* 4, Telemachus arrives with Pisistratus, son of Nestor, at Mene-

³² Reece 1993, 107.

³³ See Giordano 2022, part. 182–183.

laos' court in Sparta to seek news of his father. As is customary in the ritual of *xenia*, the Atreid king receives the young men and offers them a banquet, *before* inquiring about their identities: “a proper host requests his guest’s name and inquires into his business only after providing him a meal; the stranger is to remain anonymous throughout the meal”.³⁴ However, during the banquet, Menelaus speaks of Odysseus with heartrending affection and nostalgia, going as far as mentioning Telemachus by name:

Od. 4. 110–116

ζῶει ὃ γ' ἢ τέθνηκεν. οὐδύρονταί νύ που αὐτὸν
 Λαέρτης θ' ὁ γέρων καὶ ἐχέφρων Πηνελόπεια
 Τηλέμαχος θ', ὃν ἔλειπε νέον γεγαῶτ' ἐνὶ οἴκῳ.
 ὦς φάτο, τῷ δ' ἄρα πατρὸς ὑφ' ἕμερον ὤρσε γόοιο.
 δάκρυ δ' ἀπὸ βλεφάρων χαμάδις βάλε πατρὸς ἀκούσας,
 χλαῖναν πορφυρέην ἄντ' ὀφθαλμοῖν ἀνασχῶν
 ἀμφοτέρησιν χερσὶ.

Mourned must he be by the old man Laertes, and by steadfast Penelope, and by Telemachus, whom he left a newborn child in his house.”

So he spoke, and in Telemachus he roused the desire to weep for his father. Tears from his eyelids he let fall upon the ground, when he heard his father’s name, and with both hands held up his purple cloak before his eyes.

The similarities between the two scenes are striking: Demodocus recounts emotionally charged episodes featuring Laertes’ son, while Menelaus recalls the intense sorrow felt by himself and the Odysseus’ family over the hero’s uncertain and mournful fate; Menelaus still does not know he has in front of him Odysseus’ son, just as the Phaeacians are unaware of Odysseus’ identity. For both Odysseus and Telemachus hearing their misfortunes recounted by an unwitting narrator triggers an uncontrollable emotional reaction and they are both overcome with tears. At this point, both hide the tears that the stories have brought to their eyes, for fear that their weeping will reveal their identities before they can properly introduce themselves. In fact, untimely identification is a faux pas in Homeric typical scene of hospitality:

the revelation of a guest’s identity is perhaps the most critical element in the development of a relationship of *xenia* (...). It is understandable, then, that the manner in which a guest’s name is requested and revealed takes on an almost ritualistic formality.³⁵

³⁴ Reece 1993, 26; see also pp. 25–28. As Gainsford 2003, 44 notes, this part of the hospitality scene overlaps with the recognition scene.

³⁵ Reece 1993, 26 also remarks that “the *anagnorisis* of the visitor is slowly worked out, creating rich dramatic irony”.

Father and son perform the same gesture: they “veil” themselves, drawing their cloak before their eyes (*Od.* 8. 85, 92; *Od.* 4. 115–116).

The heroes unexpected tears lead both Alcinous and Menelaus to inquire into their guests’ identity, Menelaus’ reaction, moreover, clearly expresses the ritual embarrassment caused by Telemachus’ crying (*Od.* 4. 116–119):

νόησε δέ μιν Μενέλαος,
μερμήριξε δ’ ἔπειτα κατὰ φρένα καὶ κατὰ θυμόν,
ἦέ μιν αὐτὸν πατρός ἑάσειε μνησθῆναι
ἢ πρῶτ’ ἐξερέοιτο ἕκαστά τε πειρήσαιτο.

And Menelaus noted him, and debated in mind and heart whether he should leave him to speak of his father himself, or whether he should first question him and test him in each thing.

We can therefore conclude that in both cases crying is concealed not *per se*, but as a ‘detector’ of an identity that should not be revealed yet for ritual and pragmatic reasons; from the viewpoint of poetic reception, crying confirms *e contrario* the rule of poetic pleasure.³⁶

5 Simulation Theory, ToM, and Phaeacians’ Point of View

Segal has argued that:

through these contrasting responses, Homer reveals the paradox (...) between the pleasure that mimetic art affords its audience and the pain in its contents. For the hedonistic Phaeacians, war itself is absorbed into *oidé*, song (8. 580); for Odysseus the sufferings of war, even in song, are still sufferings and brings tears.³⁷

In my opinion, the contrast lies in the position and relative distance the audience takes vis-à-vis that content. This we may better understand by expanding our investigation on the cognitive process presumably behind Phaeacians’ and Odysseus’ represented states of mind and the differences in their unequal poetic receptions, and ultimately behind poetic reception in general.

We may surmise that the Phaeacians stand as average members of the audience at a performance, who hear the stories, imagine, and understand them

³⁶ Segal 1992, 197.

³⁷ Idem, 10.

through a process of identification involving the ability that narratology defines “mind-reading”,³⁸ that in cognitive terms we can better apprehend via two main synergic systems, namely the mentalizing system (MENT) or “Theory of Mind” (ToM) and the mirror neuron system (MNS).³⁹

Located in the “mentalizing network”, and developed around the age of four, ToM defines our ability to understand emotional and mental states of other people in a recursive representation, thanks to which “we normally understand readily four levels of embedded intentionality (you *doubt* that Brian *accepts* that Lisa *knows* what Robin *says*)”;⁴⁰ ToM applies not only when we interact with real people, but also when we imagine interactions between fictional characters. Yeshurun *et al.* have shown that “understanding interactions between characters in a story activates many brain regions, including regions implicated in thinking about the mental states of other people”.⁴¹

As it has been argued, ToM is highly relevant to ancient theatre:

watching and understanding drama is a mimetic version of Theory of Mind, where we are expected as audience members to try to understand and predict the motivation of the characters before us.⁴²

Budelmann and Easterling have argued that:

at the core of drama—and indeed of literature more broadly—lies its continual engagement with the very same mind-reading faculties that spectators and readers habitually employ in real life.⁴³

In relation to our case study, ToM not only accounts for the Phaeacians’ ability to enjoy Demodocus’ performance, but also for king Alcinous’ understanding of Odysseus’ state of mind – and, recursively, Odysseus’ mind-reading of both the Phaeacians and Alcinous. Conversely, thanks to their mentalizing system, the external audience can figure out and appreciate the discrepancy between the internal audience’s false belief about the unknown guest and his actual identity, which

³⁸ See Currie 2022, 148 “the narratee, like the characters themselves, needs to make mentalistic attributions”; see also De Jong 2018, 36. On reading minds see Easterling / Budelmann 2010.

³⁹ The connection between these two systems is as yet under investigation, see Ciaramidaro / Toppi / Vogel *et al.* 2024.

⁴⁰ Boyd 2006, 590; on Theory of Mind see Premack / Woodruff 1978; Wellman 2018; on ToM and fiction see now Curry 2025.

⁴¹ Yeshurun / Swanson / Simony 2017, 1; see also Mar 2011, with a metanalysis.

⁴² Meineck 2017, 167.

⁴³ Budelmann / Easterling 2010, 292.

is further conducive to understanding why Odysseus cannot enjoy Demodocus' performances when dealing with his own memories.

6 'Feeling with' but Keeping the Distance: Embodied Simulation and Poetic Reception

Neuroscience has mapped our connected capacity to simulate and identify with other people's feelings and emotions 'as if' we were them, in terms of "simulation theory", developed in connection with the discovery of mirror neurons by the team of Rizzolatti, Gallese *et al.*⁴⁴ These neurons form the complex mechanism of *embodied simulation*, an embodied system that allows us to 'feel with' the other person⁴⁵ and connects us to each other at a "pre-intentional and pre-linguistic level".⁴⁶ Simulation or mirror-neuron system provides the corporeal, neuro-physiological correspondence of our capacity to identify with other people's actions and emotions; poised at the core of human interactions, the system has great adaptive advantages:

however we acquired it in the course of evolution, the mirror system represents our ability to enter the minds of others by means of social emotions or empathic emotions, which allow us to grasp the intentions of individuals in society.⁴⁷

These overall cognitive competencies enable us to understand and identify other people's emotions, intentions, and states of mind by adopting their perspective, simulating them to ourselves, and accounting for our interlaced cognitive activities of mind-reading, simulation, as-if thinking under a common framework.⁴⁸

Simulative and mind-reading abilities are not only crucial for human interactions in general, but they are also conspicuously relevant for literary studies in

44 Mirror neurons are located in the premotor cortex and function as simulators of the movements that we observe in another agent, acting as a "bridge between the observer and the actor", and are at the centre of imitative behaviours, whereby we imagine and anticipate actions regardless of their actual performance. Gallese / Fadiga / Fogassi/ Rizzolatti 1996; Rizzolatti / Craighero 1996; for the theory of simulation; see now Bonini /Rotunno / Arcuri / Gallese 2022. For the relevance of mirror neurons in poetic theory, see Nicolai in this volume.

45 Gallese 2005, Gallese / Cuccio 2015.

46 Gallese / Morelli 2024, 60; see also p. 33. As the scholars clearly highlight, this means that what we term as "empathy" is not a choice, the choice being rather what we do with the recognition of our similarity to other human beings.

47 Attanasio / Oliverio (2012), 81.

48 Gallese / Goldman 1998.

general and reception studies in particular, theatre and epic performance alike. They underscore the ability of poets to understand their audience as well as the audience's capacity to enjoy all sorts of storytelling and dramatical performances, as *Odyssey* 8 masterfully reflects.⁴⁹

A recent interdisciplinary experimental study conducted by Budelmann *et al.* investigates the audience's response to a tragic story – in the experiment a sad film –, and the role of endorphins; interestingly, the study is conducive to a similar conclusion on the role of identification in the enjoyment of the story: “the causal chain is from identification to enjoyment: the more appealing, believable, and relevant we find the characters, the more we enjoy the film”.⁵⁰

As far as our passages are concerned, the embodied simulation perspective enables us to better understand why the Phaeacians as non-involved audience can share the pleasure of an epic performance: they do identify themselves with the characters of the stories, yet from a safe distance. Similarly, we can also appreciate why, unlike them, Odysseus cannot enjoy the performance, unable to distance himself from the events evoked while Demodocus' deft storytelling emotionally retrieves past memories, the trauma of the carnage, the longing for home. Admittedly he asked for it, but he did not anticipate how vividly and precisely Demodocus' storytelling skills would lead him to recall his memories. As Minchin suggests, although ‘personal relatedness’ can be a factor of interest in successful communication, there is

a level of ‘personal relatedness’ which makes the telling of a story so engaging that it is too painful to hear. This is when the story concerns ourselves or people close to us and the experience being narrated has not yet been resolved in the real world.⁵¹

In the same vein, Segal argues that

the scene articulates two very different modes of response: the aesthetic distance of Alcinoos that can treat poetry (fiction) as pure object of pleasure (*terpsis*), and the intense, painful involvement of Odysseus as he participates, through memory in the suffering of war, that are the subject matter of the song.⁵²

The interplay between memory and imagination, distance and closeness plays a crucial role: for an audience to enjoy a story, a certain distance is needed; the events can be close, but not so close as to elide the border between tale and mem-

⁴⁹ Ruffel 2008 and Palmisciano in this volume.

⁵⁰ Budelmann / Dunbar / Duncan *et al.* 2017, 241.

⁵¹ Minchin 2001, 208.

⁵² Segal 1992, 13.

ory. When this distance collapses, the audience of the performed story becomes the character *in* the story, tale turns into recalling, identification into identity, and, from the cognitive perspective, the simulative process aborts and turns instead into memory retrieval, which utterly impairs the enjoyment of the performance.

The question of distance tallies with the functioning of both the mirror neuron system and ToM. In both systems, a second parallel and interrelated competence is engrained, namely the distinct awareness that the observer and the actor are two separate persons: even though I know that the states of mind I observe or imaginatively represent are real, I am simultaneously aware that the person experiencing them is somebody else, is *not* me. Both ToM and embodied simulation therefore assume a relationship of *similarity*, not *identity*, between the two actors involved in these processes: “there is always a relationship of similarity and never identity between these two conditions of brain activation”.⁵³

As a result, I can be moved and feel extremely sad for the other person’s sorrows, I can ‘feel with’ but I still feel *as-if*, all the while knowing this is happening to another being, not myself. Both aesthetic and cognitive distance are therefore preconditions for understanding, enjoyment, and proper reception of other people’s stories. In epic poetics, if such involvement is painful and not pleasurable, aesthetic communication fails its end and must cease.

We can view under the same framework the other instance of misfired poetic communication the *Odyssey* portrays, Phemius’ performing for the Suitors gathered in the hall of Odysseus’ palace, singing the “woeful return (*nostos*) of the Achaeans” (*Od.* 1. 325–326). While the usurping princes receive the stories of the homecoming of Greek warriors with appreciative silence (325), hoping it may forebode a similarly woeful return for Odysseus,⁵⁴ the last of the Trojan veterans still engaged in his *nostos*, Penelope reacts with grief and addresses the singer in tears:

Od. 1. 336–344

δακρύσασα δ’ ἔπειτα προσηύδα θεῖον ἄοιδόν:
 Φήμιε, πολλὰ γὰρ ἄλλα βροτῶν θελκτήρια οἶδας,
 ἔργ’ ἀνδρῶν τε θεῶν τε, τὰ τε κλείουσιν ἄοιδοί:
 τῶν ἔν γέ σφιν ἄειδε παρήμενος, οἱ δὲσιωπῆ
 340οῖνον πινόντων: ταύτης δ’ ἀποπαύε’ ἄοιδῆς
 λυγρῆς, ἥ τέ μοι αἰεὶ ἐνὶ στήθεσσι φίλον κῆρ
 τεῖρει, ἐπεὶ με μάλιστα καθίκετο πένθος ἄλαστον.

53 Gallese-Morelli 2024, 37.

54 See Giordano 2022, 177–179.

τοίην γὰρ κεφαλὴν ποθέω μεμνημένη αἰεὶ,
 ἀνδρός, τοῦ κλέος εὐρὺ καθ'Ἑλλάδα καὶ μέσον Ἄργος.

“Phemius, many other things thou knowest to charm mortals, deeds of men and gods which minstrels make famous. Sing them one of these, as thou sittest here, and let them drink their wine in silence. But cease from this woeful song which ever harrows the heart in my breast, for upon me above all women has come a sorrow not to be forgotten. So dear a head do I ever remember with longing, even my husband, whose fame is wide through Hellas and mid-Argos.”⁵⁵

The scene of Phemius’ song matches the pattern of Demodocus’ performance: the content of the song retrieves Penelope’s heartrending nostalgia for her husband and fear for his fate, to which she reacts with painful tears – as Odysseus does in reaction to Demodocus’ songs; the queen requests Phemius to cease from his song, as Alcinous does Demodocus in book 8. In this case too, the storytelling fails to maintain “the distance between the subject and its audience”, and weeping signals unsuccessful poetic communication, the rupture of the implicit alliance between singer and audience, according to which the vicissitudes brought to life so vividly should be distant tales and not real-life experiences.⁵⁶

After reflecting on Odysseus’ reaction to Demodocus’ performances, Alcinous inquires about his guest’s connection with the war of Troy, the subject matter of Demodocus’ songs, and asks:

Od. 8. 580–585

ἦ τίς τοι καὶ πηὸς ἀπέφθιτο Ἰλιόθι πρὸ
 ἔσθλός ἐών, γαμβρός ἢ πενθερός, οἱ τε μάλιστα
 κήδιστοι τελέθουσι μεθ’ αἰμά τε καὶ γένος αὐτῶν;
 ἦ τίς που καὶ ἑταῖρος ἀνὴρ κεχαρισμένα εἰδώς,
 585ἔσθλός; ἐπεὶ οὐ μὲν τι κασιγνήτοιο χερείων
 γίγνεται, ὅς κεν ἑταῖρος ἐών πεπνυμένα εἰδῆ.

Did some kinsman of thine fall before Ilios, some good, true man, thy daughter’s husband or thy wife’s father, such as are nearest to one after one’s own kin and blood? Or was it haply some comrade dear to thy heart, some good, true man? For no whit worse than a brother is a comrade who has an understanding heart”.

Alcinous’ remarks imply that only a close personal affinity to the story would account for Odysseus’ miserable weeping.

55 Cf. *Od.* 1. 351–352.

56 Minchin 2001, 208.

7 My Story is Mine to Sing

Epic storytelling as represented in the poems respects therefore a basic poetic rule: the characters of the stories should not identify with a real person present in the audience nor with one strictly connected to them, *unless* the narrator and the protagonist be the same person: the last poetic rule emerging from the setting of the *Odyssey*. At the beginning of book 9, Odysseus responds to Alcinous' invitation to reveal himself and his story. In the first part of his speech, Odysseus defines the communal enjoyment of epic performance in a festive setting not only as τέλος χαριέστερον (5), the utmost accomplishment of pleasure in life, but the κάλλιστον (10), the very best of human existence tout court.⁵⁷ Having stated a principle of general validity, he adds:

Od. 9. 12–15

σοι δ' ἐμὰ κήδεα θυμὸς ἐπετρέπετο στονόεντα
εἶρεσθ', ὄφρ' ἔτι μᾶλλον ὀδυρόμενος στεναχίζω:
τί πρῶτόν τοι ἔπειτα, τί δ' ὑστάτιον καταλέξω;
15 κήδε' ἐπεὶ μοι πολλὰ δόσαν θεοὶ Οὐρανίωνες.

But thy heart is turned to ask of my grievous woes,
that I may weep and groan the more.
What, then, shall I tell thee first, what last?
for woes full many have the heavenly gods given me.

Odysseus explicitly contrasts his position as internal narrator with that of the rest of the audience and points out, as Heubeck notes, that singing of his own misfortune may bring joy to Alcinous and the rest of the audience, yet to him will “increase his sorrow still further”.⁵⁸

Nevertheless, following the poetic declaration, at line 16, Odysseus skilfully begins his own storytelling, what antiquity knew as “Ἀλκίνου ἀπόλογος” or “ἀπόλογοι” (cfr. Plat. *Resp.* 614b; Arist. *Poet.* 16.5, *Rhet.* 3.16.7). Odysseus, the protagonist of his own story, will hence take turns with Demodocus singing the tales of his adventurous voyage from Troy to Scheria, which occupy books 9 to 12. From the narratological angle, the shift in narrator – from external to internal – shows a general rule of storytelling, namely that the protagonist of a story can bear to have it narrated only if she/he themselves are the storytellers, as Odysseus does before

⁵⁷ Cf. *Od.* 9. 2–11.

⁵⁸ Heubeck in Heubeck *et al. ad loc.*, and Palmisciano in this volume.

multiple audiences and in different settings throughout the *Odyssey*.⁵⁹ At that point, switching his position from narratee to primary narrator, Odysseus becomes master of his story, distancing himself from his own emotions by narrating them.

8 Too Close to Home: ἀναμνήσαντα οἰκία κακά

How far beyond the epic does the poetic principle of reception we have examined above extend? A case taken from the history of the tragic genre and an Aristotelian passage will show its extensive validity. In 476 BCE, the playwright Phrynichus performed the tragedy *The Capture of Miletus*, which staged a recent event, the sack and burning of the Ionian Miletus in 494 BCE, during the revolt against the Persians. The Athenian reaction to the performance is famously described in Hdt. 6.21.2:

Ἀθηναῖοι μὲν γὰρ δῆλον ἐποίησαν ὑπεραχθεσθέντες τῇ Μιλήτου ἀλώσει τῇ τε ἄλλῃ πολλαχῆ, καὶ δὴ καιτουήσαντι Φρυνίχῳ δρᾶμα Μιλήτου ἄλωσιν καὶ διδάξαντι ἐς δάκρυά τε ἔπεσε τὸ θέητρον, καὶ ἐζημίωσάν μιν ὡς ἀναμνήσαντα οἰκία κακά χιλίησι δραχμηῖσι, καὶ ἐπέταξαν μηδένα χρᾶσθαι τούτῳ τῷ δράματι.

The Athenians made clear their deep grief for the taking of Miletus in many ways, but especially in this: when Phrynichus composed a play entitled “The Fall of Miletus” and produced it, the whole theatre fell to weeping; they fined Phrynichus a thousand drachmas for bringing to mind a calamity that affected them so personally, and forbade the performance of that play forever.

Herodotus says that the tragedian was fined a thousand drachmas for having staged a disaster, the conquest and annihilation of the Ionian people of Miletus, recalling the tragic fate of people too close to the Athenians, who had taken part in the revolt, sending aid to the Ionians (Hdt. 6.21). As happened to Odysseus in hearing the stories he had experienced in the first person, so the Athenians in Phrynichus’ audience were forced to retrieve a traumatic memory and were like the Homeric hero overwhelmed by grief and unbearable tears such that “the whole theatre fell to weeping”. In analogy with the widow’s simile, the Athenians did not simply grieve for the capture of Miletus, they did so exceedingly: ὑπεραχθεσθέντες. As Odysseus, the Athenians were unable to imagine the events of the play at the

⁵⁹ Cf. *Od.* 15. 400–401, where Eumaeus states that one can enjoy the telling of trials and sorrowful experiences once they are over, in an earlier version of Vergil’s *forsan et haec olim meminisse iuvabit*. On narrators, see de Jong 2004, 1–4. On the narratological perspective on emotions see Bakker / Berg / Klooster 2022a and 2022b.

right distance, which were “zoomed in” almost intrusively. In this case as well, identity replaced simulation, a cognitive process that, as we have seen, collapses the distance necessary for enjoying a story and a performance alike.⁶⁰

Sourvinou-Inwood defines the choice of a contemporary tragic subject as “transgressive” and specifies that “the characteristics of the transgressive choice are that the world of the play is basically the same as the world of the audience.”⁶¹ The scholar adds that such an experiment with the subject matter was later abandoned: “the absence of distance, or at least of sufficient distance, between the world of the play and the world of the audience was considered inappropriate.”⁶² Sourvinou-Inwood makes the distance a basic dramatic principle that creates a double perspective within the tragedy: one projects the world of tragedy into the heroic past and the other brings that world closer to that of the public through a foundation or a cultic reality that has a direct referent in the present. For this purpose, Sourvinou-Inwood argues, tragedy deploys devices for zooming-in and distancing: the first allow the reality of the drama to be made significant for the present reality of the polis, while the second enable the exploration of emotionally difficult themes that would feel threatening if shown too closely. The distancing – temporal, cultural, or geographical – thus functions vis-à-vis the boldness and danger constituted by the exploration itself.⁶³

Herodotus refers to the connection of kinship the Athenians felt to the Ionians, and their own involvement in the Ionian revolt and Persian affairs in general, by the term οἰκεῖος, “of the same household, family, or kin, related” (*LSJ*), i. e. somebody or something towards which one has a close, at-home feeling.

Indicatively, the same notion of ‘oikos-feelings’, i. e. personal relatedness to a story told, comes to the fore in a passage of Aristotle’s *Rhetoric* about the functioning of the emotion of *eleos*, the feeling of pity we experience for another (*Rhet.* 2. 8. 12):

ἐλεοῦσι δὲ τοὺς τε γνωρίμους, ἂν μὴ σφόδρα ἐγγὺς ᾧσιν οἰκειότητι. περὶ δὲ τούτους ὥσπερ περὶ αὐτοὺς μέλλοντας ἔχουσιν

The persons people pity are those whom they know, provided they are not too closely connected with them, for if they are, they feel the same as if they themselves were likely to suffer (trans. J.H. Freese, modified).

⁶⁰ Arnauld 1990, 196, 198 differentiates epic from theatre’s audiences; the case of Phrynichus proves otherwise.

⁶¹ Sourvinou-Inwood 2007, 16.

⁶² Eadem, 19.

⁶³ Eadem, 23–53 and *passim*.

Aristotle states that we feel *eleos* for people we know unless they are related to us in a relationship of *οικειότης*, that is of “intimacy”, “closeness”, “familiarity”, that is the type of personal, familiar involvement that erases the minimum distance from the other person’s fate. Aristotle brings to the fore the question of distance as crucial to the process of simulation and emotional resonance, asserting that the distance between identification and identity should not be bridged and a person’s misfortunes should not get too close to those related or displayed.

As shown in the cases of Odysseus, Penelope, the hypothetical kinsman evoked in Alcinous’ questioning, and of the Athenians with their *oikeia kakà* inappropriately evoked, when distance collapses, pity ceases and is replaced by suffering.⁶⁴

9 Conclusions: Close, but not too Close

In conclusion, simulation is a key element for unifying different maps and theories, where the as-if mechanism and the distinction between identification and identity is not only a catholic aesthetic principle with a pivotal role in epic and Greek poetics in general but extends to our neurophysiology. Simulation underlies the functioning of neural systems involved both in the mentalizing system at the basis of Theory of Mind and in the mirror neuron system, as well as, more broadly speaking, in imagination, metaphor, and last but not least, artificial intelligence.

The stories, sung or told by epic singers, poets, or storytellers provide a privileged material for new simulations that trigger simulative mechanisms in the audience, which enjoys and experiences the stories of other humans, resulting in pleasurable absorption and identification. In this direction, simulation and emotional distance involve a complex relationship between narrator, character, poet-performer, especially in epic storytelling, where, as Bakker has argued “the relation between the narrator *of* the tale and characters *in* the tale in Homer is more complicated than would seem in ordinary narratological analysis”.⁶⁵ In the embodied performance of these stories, an interdependent and interactive relationship is established between poet and audience, with varying degrees of identification and empathetic response, rendering the mirror game of distance complex

⁶⁴ The question of distance comes also to the fore in Meineck’s analysis of Greek drama and directly connected to dissociation: “Greek drama was just such a dissociative, dissonant experience that promoted cognitive absorption. Hence, in antiquity we find many references to ‘soul-moving’ or ‘spellbinding’ qualities of performance and its emotional effects”, as in Meineck 2017, 206; see also the case of Gorgia’s clever deception analysed by Nicolai in this volume.

⁶⁵ Bakker 2009, 128.

and open-ended. Still, the overall principle governing these narrations obtains as ‘neither too close nor too far’, where a clear line is drawn between identification and identity, *as if* and *is*.

Simulation and as-if processes seem to work through different media and performances; ‘getting it right’ for a storyteller as well as for a director means moving in the space of possibility and simulation, where the audience may identify with characters and the story from a safe distance, resorting to the embedded and embodied capacities of the mirror neuron system and of the mentalizing system where simulative processes and mind-reading may have free rein in the space of imagination.⁶⁶

References

- Arnould, D. (1990), *Le rire et les larmes dans la littérature grecque d’Homère à Platon*, Paris.
- Attanasio A. / Oliverio, A. (2012), “Empatia e cognizione sociale: una lettura Darwiniana del “mirror neuron system””, in: *Paradigmi. Rivista di Critica Filosofica*, 3, 93–138.
- Bakker, M. de / Berg, B. van den / Klooster, J. (eds.) (2022a), *Emotions and Narrative in Ancient Literature and Beyond: Studies in Honour of Irene De Jong*, Leiden-Boston.
- Bakker, J. B. (2009), “Homer, Odysseus, and the Narratology of Performance”, in Grethlein, J. / Rengakos, A. (eds.) (2009), *Narratology and Interpretation: The Content of Narrative Form in Ancient Literature*, Berlin-Boston, 117–136.
- Bakker, M. de / Berg, B. van den / J. Klooster (2022b), “Introduction. The Narratology of Emotions in Ancient Literature”, in: Bakker / Berg / Klooster (2022), 1–24.
- Bierl, A., (2022), “*Prometheus Bound* as ‘Epic’ Tragedy and Its Narratology of Emotion”, in: Bakker / Berg / Klooster (2022), Leiden-Boston: 287–306.
- Bonini, L. / Rotunno, C. / Arcuri, E. / Gallese, V. (2022). “Mirror Neurons 30 Years Later: Implications and Applications”, *Trends in cognitive sciences*, 26 767–781.
- Boyd, B. (2006), “Fiction and Theory of Mind”, *Philosophy and Literature* 30.2, 590–600.

66 In a famous and much discussed passage of *Poetics* 1451a-8 Aristotle declares: Φανερόν δὲ ἐκ τῶν εἰρημένων καὶ ὅτι οὐ τὸ τὰ γενόμενα λέγειν, τοῦτο ποιητοῦ ἔργον ἐστίν, ἀλλ’ οἷα ἂν γένοιτο καὶ τὰ δυνατὰ κατὰ τὸ εἰκὸς ἢ τὸ ἀναγκαῖον (..) ἀλλὰ τούτῳ διαφέρει, τῷ τὸν μὲν τὰ γενόμενα [5] λέγειν, τὸν δὲ οἷα ἂν γένοιτο. διὸ καὶ φιλοσοφώτερον καὶ σπουδαιότερον ποιήσις ἱστορίας ἐστίν: ἡ μὲν γὰρ ποιήσις μᾶλλον τὰ καθόλου, ἢ δ’ ἱστορία τὰ καθ’ ἕκαστον λέγει. “It is clear from what we said that the work of the poet is not telling what happened, but what might happen, and what is possible, according to principles of likeness and consistency (...) They differ in this: that history tells what happened, poetry tells what might happen”. The difference between possibility and reality, imagination and memory may be looked at now under the lens of the cognitive processes of identification and simulation that we have illustrated in different fields and settings. In our interpretive framework, the Aristotelian expression οἷα ἂν γένοιτο may be understood as an ‘as-if procedure’, integral to the functioning of our mind, which has been shown to explain all ways of storytelling and hence literary fictional communication, both oral and written.

- Brillante, C. (2009), *Il cantore e la musa. Poesia e modelli culturali nella Grecia arcaica*, Pisa.
- Budelmann, F. / Dunbar, R. / Duncan, S. / van Emde Boas, E. / Maguire, L. / Teasdale, B. / Thompson, J. (2017), "Cognition, Endorphins and the Literary Response to Tragedy", in: *Cambridge Quarterly* 46, 229–502.
- Budelmann, F. / Easterling, P. (2010), "Reading Minds in Greek Tragedy", in: *Greece & Rome* 57 289–303.
- Cairns, D. L. (2009), "Weeping and Veiling: Grief, Display and Concealment in Ancient Greek Culture", in: *Fögen* 2009, 37–58.
- Ciaramidaro, A. / Toppi, J. / Vogel, P. / Freitag, C. M. / Siniatchkin, M. / Astolfi, L. (2024), "Synergy of the Mirror Neuron System and the Mentalizing System in a Single Brain and Between Brains During Joint Actions", *Neuroimage*, 120783.
- Currie, B. (2022), "Emotionally Reunited: Laertes and Odysseus in *Odyssey* 24", in *Bakker / Berg / Klooster* 2022, 135–152.
- Curry, D. S. (2025), "Nonfiction Stories about Minds", in: *Topoi*, 1–12.
- Doherty, L. E. (1995), *Siren Songs: Gender, Audiences, and Narrators in The Odyssey*, Ann Arbor.
- Fögen, Th., (ed.) (2009), *Tears in the Graeco-Roman World*, Berlin-Boston.
- Föllinger, T. (2009), "Tears and Crying in Archaic Greek Poetry (especially Homer)", in: *Fögen* 2009, 17–36.
- Gainsford, P. (2003), "Formal Analysis of Recognition Scenes in the 'Odyssey'", in: *The Journal of Hellenic Studies* 123, 41–59.
- Gallese, V. (2000), "The Inner Sense of Action: Agency and Motor Representations", in: *Journal of Consciousness Studies* 7, 23–40.
- Gallese, V. (2005), "Embodied Simulation: from Neurons to Phenomenal Experience", *Phenomenology and the Cognitive Sciences* 4, 23–48.
- Gallese, V. / Fadiga, L. / Fogassi, L. / Rizzolatti, G. (1996) "Action Recognition in the Premotor Cortex", *Brain*, 119 593–609.
- Gallese, V. / Goldman, A. (1998), "Mirror Neurons and the Simulation Theory of Mind-Reading", in: *Trends in Cognitive Sciences* 2, 493–501.
- Gallese, V. / Cuccio, V. (2015), "The Paradigmatic Body: Embodied Simulation, Intersubjectivity, the Bodily Self, and Language", in: T. Metzinger / J. M. Windt (eds.), *Open Mind*, Frankfurt, 1–23.
- Gallese, V. / Morelli, U. (2024), *Cosa significa essere umani? Corpo, cervello e relazione per vivere nel presente*, Milan.
- Giordano, M. (2006), "Guerra omerica e guerra oplitica nei *Sette contro Tebe*", *Seminari romani di cultura greca* 9. 2, 271–298.
- Giordano, M. (2022), "From Oral Theory to Neuroscience: a Dialogue on Communication", in: A. Ercolani / L. Lulli (eds.), *Rethinking Orality I. Codification, Transcodification, and Transmission of Cultural Messages*, Berlin – Boston 2022, 167–198.
- Griffin, J. (1976), "Homeric Pathos and Objectivity", in: *The Classical Quarterly* 26, 161–187.
- Grossardt P. (ed., trans.) (2006), *Einführung, Übersetzung und Kommentar zum Heroikos von Flavius Philostrate*, Schweizerische Beiträge zur Altertumswissenschaft 33, Basel.
- Heubeck, A. / West / S., Hainsworth / J. B. / Hoekstra, A. (1990), *A Commentary on Homer's Odyssey: Introduction and Books I-VIII* (Vol. 1), Oxford.
- Holst-Warhaft, G. (1992), *Dangerous Voices: Women's Laments and Greek Literature*, London.
- Jong, I. J. F. de (2004), "Introduction. Narratological Theory on Narrators, Narratees, and Narratives", in: I. de Jong / R. Nünlist / A. Bowie (eds.), *Narrators, Narratees, and Narratives in Ancient Greek Literature: Studies in Ancient Greek Narrative*, Boston – Leiden.

- Jong, I. J. F. de (2011), "The Shield of Achilles: from Metalepsis to 'Mise en Abyme'", in: *Ramus* 40, 1–14.
- Jong, I. J. F. de (2018), "Homer" in: K. De Temmerman / E. van Emde Boas (eds.), *Characterization in Ancient Greek Literature: Studies in Ancient Greek Narrative*, Vol. 4, Leiden-Boston, 27–45.
- Leandro, F. (2022), "Piangere Troia. Attraverso le lacrime delle donne", in: A. Camerotto / K. Barbaresco / V. Melis, *Il grido di Andromaca. Voci di donne contro la guerra*, 39–52.
- Létoublon, F. (2022), "The Text as Labyrinth", in Bakker / Berg / Klooster 2022, 169–180.
- Maclean J. / Aitken E. (2001), *Flavius Philostratus: Heroikos. Translated with an Introduction and Notes*, Atlanta.
- Mar, R. A. (2011), "The Neural Bases of Social Cognition and Story Comprehension", in: *Annual Reviews of Psychology* 62, 103–134.
- Meineck, P. / Konstan, D. (eds.) (2014), *Combat Trauma and the Ancient Greeks*, New York.
- Meineck, P. (2017), *Theatrocracy: Greek Drama, Cognition and The Imperative for Theatre*, London.
- Minchin, E. (2001), *Homer and The Resources of Memory: Some Applications of Cognitive Theory to The Iliad and the Odyssey*, Oxford.
- Monsacré, H. (2018 [1984]), *The Tears of Achilles*, Washington, DC.
- Palmisciano, R. (2012), "Gli amori di Ares e Afrodite (*Od.* 8. 266–366): statuto del discorso e genere poetico", in: *Seminari romani di cultura greca* I, 2, 187–210.
- Premack, D. / Woodruff, G. (1978), "Does the Chimpanzee Have a Theory of Mind?" in: *Behavioural Brain Sciences* 4, 515–526.
- Pucci, P. (1998), *The Song of the Sirens. Essays on Homer*, Boston 1998.
- Reece, S. (1993), *The Stranger's Welcome: Oral Theory and the Aesthetics of the Homeric Hospitality Scene*, Ann Arbor.
- Richardson, N. (1993), *The Iliad: A Commentary*, Vol. VI, Books 21–24, Cambridge.
- Rizzolatti G. / Craighero L. (2004), "The Mirror-neuron System", in: *Annual Review of Neuroscience* 27, 169–192.
- Ruffell, I. (2008), "Audience and Emotion in the Reception of Greek Drama", in: M. Revermann / P. Wilson (eds.), *Performance, Iconography, Reception: Studies in Honour of Oliver Taplin*, Oxford, 37–58.
- Sbardella, L. (2022), "Muses and Teachers: Poets' Apprenticeship in the Greek Epic Tradition," in: A. Ercolani / L. Lulli (eds.), *Rethinking Orality I: Codification, Transcodification and Transmission of 'Cultural Messages'*, Berlin-Boston, 146–166.
- Scully, S. (1990), *Homer and the Sacred City*, Cornell.
- Segal, C. (1992), "Bard and Audience in Homer", in R. Lamberton / J. J. Keaney (eds.), *Homer's Ancient Readers: The Hermeneutics of Greek Epic's Earliest Exegetes*, Princeton, 3–29.
- Shay, J. (1994), *Achilles in Vietnam: Combat Trauma and the Undoing of Character*, New York.
- Sourvinou-Inwood, Ch. (2007), *Tragedy and Athenian Religion*, Lanham.
- Stephens G. / Silbert, L. / Hasson, U. (2010), "Speaker–listener Neural Coupling Underlies Successful Communication", in: *Proceedings of the National Academy of Sciences* 107.32, 14425–14430.
- Suerbaum, W. (1968), "Die Ich-Erzählung des Odysseus", in: *Poetica* 2, 150–177.
- Tsagalis, Ch. C. (2004), *Epic Grief: Personal Laments in Homer's Iliad*, Berlin-Boston.
- Yeshurun, Y. / Swanson, S. / Simony, E. / Chen, I. / Lazaridi C. / Honey, C. J. / Hasson, U. (2017), "Same Story, Different Story: the Neural Representation of Interpretive Frameworks", in: *Psychological Science* 28.3, 307–319.

- van Wees, H. (1998), "A Brief History of Tears. Gender Differentiation in Archaic Greece", in L. Foxhall / J. Salmon (eds.), *When Men Were Men. Masculinity, Power and Identity in Classical Antiquity*, London – New York, 10 – 53.
- Wellman, H. M. (2018), "Theory of Mind: The State of The Art", *European Journal of Developmental Psychology* 15, 728 – 755.



Part III: **Case-studies from Homer to Rome**

Riccardo Palmisciano

Demodocus, Odysseus, and the Double Standard of Authority in Speech

Abstract: *Od.* 8 and 22 provide valuable information about the profession of the bard. An analysis of the relationship between Odysseus and Demodocus and between Odysseus and Phemius shows that the bard's voice is authoritative not only because he learns the subject matter of his song from the gods, but also because his story is validated by those who were protagonists or eyewitnesses to the events narrated. Even in epic poetry, before historiography, there is a reflection on the conditions under which an oral tale can be considered reliable.

Keywords: *Odyssey*; Homeric poetry; composition in performance; poetic authority.

Book 8 of the *Odyssey* contains the most complete and detailed description of a singer in action. It is uncommon in Homeric poems, and more generally in archaic epics, to see a poet in action depicted, and for this reason the entirety of Book 8 constitutes a document of exceptional importance for those who wish to understand the mechanisms of *composition in performance*, in all the wide range of manifestations that this practice entails. In this paper we will focus mainly on the interaction between Demodocus, the resident poet at Alcinous' court, and his audience, with the mysterious guest who is the object of the Phaeacians' attentions. We shall see how the relationship established between Odysseus and Demodocus in the course of the various epic performances attended by the hero allows us to follow the lively process of the construction of an authoritative narrative. The premises established in Book 8 are also able to explain the particular form taken by the subsequent narrative of Books 9–12, the *Apologoi*, perhaps the most famous and universally known section of the entire poem.

Demodocus enters the scene almost immediately. After the banquet preparations and once a large audience has gathered in the palace of Alcinous, the herald Pontonous leads the bard into the hall.

Od. 8. 57–92

Filled were the porticoes and courts and rooms with the men that gathered, for many there were, both young and old. For them Alcinous slaughtered twelve sheep, [60] and eight white-tusked boars, and two oxen of shambling gait. These they flayed and dressed, and made ready a goodly feast. Then the herald drew near, leading the good minstrel, whom the Muse loved above all other men, and gave him both good and evil; of his sight she deprived

him, but gave him the gift of sweet song. [65] For him Pontonous, the herald, set a silver-studded chair in the midst of the banqueters, leaning it against a tall pillar; and he hung the clear-toned lyre from a peg close above his head, and showed him how to reach it with his hands. And beside him he placed a basket and a beautiful table, [70] and a cup of wine, to drink when his heart should bid him. So they put forth their hands to the good cheer lying ready before them. But when they had put from them the desire of food and drink, the Muse moved the minstrel to sing of the glorious deeds of warriors, from that lay the fame whereof had then reached broad heaven, [75] even the quarrel of Odysseus and Achilles, son of Peleus, how once they strove with furious words at a rich feast of the gods, and Agamemnon, king of men, was glad at heart that the best of the Achaeans were quarrelling; for thus Phoebus Apollo, in giving his response, had told him that it should be, [80] in sacred Pytho, when he passed over the threshold of stone to enquire of the oracle. For then the beginning of woe was rolling upon Trojans and Danaans through the will of great Zeus.

This song the famous minstrel sang; but Odysseus grasped his great purple cloak with his stout hands, [85] and drew it down over his head, and hid his comely face; for he had shame of the Phaeacians as he let fall tears from beneath his eyebrows. Yea, and as often as the divine minstrel ceased his singing, Odysseus would wipe away his tears and draw the cloak from off his head, and taking the two-handed cup would pour libations to the gods. [90] But as often as he began again, and the nobles of the Phaeacians bade him sing, because they took pleasure in his lay, Odysseus would again cover his head and moan. (transl. A. T. Murray)

The first thing said about Demodocus concerns his blindness: he had been much loved by the Muses, but the goddesses, to compensate for the gift of poetry, had taken away his sight. In accordance with a tradition widespread in various cultures, the inspired bard is blind.¹ He sees things with an ‘inner’ eye, which distin-

¹ See Scoditti 2003, 29–30: “In Kitawa, too, they think that a great poet must be blind: he closes his eyes to the outside world to open them wide to his mind. He is a man who looks inside himself, and in this inner silence he runs after images, even those of ancestors and old poets. And in the silence of the mind *he sees* the words that he gradually aligns one after the other” (my transl.). In the Japanese culture of the Heian period (8th–12th century CE), the activity of *biwa hōshi* flourished, *blind* Buddhist priests and monks who performed ancient stories of oral tradition while accompanying themselves with a string instrument called *biwa*. In Sicily, one could watch until the 1960s the performances of the “orbi”, a congregation established by the Jesuits in 1661 that aimed to disseminate poetic texts in Sicilian dialect on religious subjects to the people. In Spain, the term “ciego” was used to designate street musicians in general. In the Dalmatian area, Giulio Bajamonti recalls the custom of inviting oral poets to cheer fairs and festivals, “nel qual musico uffizio d’ordinario s’impegnavano i ciechi”, “where the blind were ordinarily engaged to play and sing” (Bajamonti 1797, 80; my transl.). On the blindness of soothsayers and prophets see Buxton 1980 and Camassa 1982. On the specific blindness of Demodocus see Marg 1971, 22–23. On the blindness of epic poets in different traditions see Bowra 1952, 420–422; Lanata 1963, 10 *ad* 64; and Ercolani (forthcoming).

guishes him from other human beings, who are bound exclusively to the perceptions of the ‘outer’ eye. Demodocus is immediately presented as a prominent figure, a man who already by the marks he wears on his body declares the special relationship he has with the divinities of poetry.²

Proportionate to the prestige Demodocus enjoys appears the consideration with which the herald Pontonous treats him. Demodocus is made to sit on an elegant seat, decorated with silver studs; beside him is placed a beautifully crafted small table on which are placed a basket with food and a cup for drinking wine “whenever he wishes”. The herald then hangs the *phorminx*, the instrument indispensable to the success of the performance, above the singer’s head and teaches him how to find it.³ In the banquet hall, Demodocus, leaning on a tall column, occupies the centre, a position that makes him equally visible to all and allows the establishment of that bond of empathy that constitutes one of the most important characteristics of oral communication.

At the end of the banquet, the bard may begin his performance. In this first performance, the choice of theme is dictated solely by reasons internal to the bard’s mind. It is the Muse, in fact, who urges Demodocus to sing of a theme whose fame then reached high heaven: v. 74 οἴμης τῆς τότ’ ἄρα κλέος οὐρανὸν εὐρὺν ἴκανε. The use of this famous formula serves not only to emphasise that the theme on which Demodocus is induced to sing was then famous, but also to insinuate the possibility that, precisely by virtue of his universal fame, the *αἰοδός* might have come to know that matter even in the remote and inaccessible world where the Phaeacians live,⁴ a detail that, as we shall see later, is of far from secondary importance.

The inspiration of the Muses has a pregnant significance. In this case it is the Muses who choose to sing an episode whose protagonist is the unknown host. Among the infinite possible topics, the choice falls on the quarrel that opposed Odysseus to Achilles, an episode unknown to the *Iliad*, unknown to the poems

2 As Grandolini 1996, 116 clearly explains, given the exceptional nature of the gift of poetry, which gives the poet access to the divine sphere through knowledge of events at which he has not been present, it is necessary for the singer to have an evil to restore the cosmic balance based on the opposition men/gods; see also Schadewaldt 1951, 70.

3 The importance of these objects in describing the activity of the singer is emphasised by Segal 1992, 24–25.

4 According to Olson 1995, 13–14, when Odysseus introduces himself to Polyphemus (*Od.* 9, 259–266, esp. 264), his words presuppose that the stories of the Trojan War have also reached the remote and inaccessible world of the Cyclopes.

of the *Cycle*, and known only through this account of the *Odyssey*,⁵ thanks to which we learn that this quarrel was mentioned in a prophecy received at Delphi by Agamemnon as a sign of the imminent conclusion of the Trojan War. If recounted in full, this episode could have taught us something interesting about the treatment of a Trojan theme outside what we know of the Epic Cycle, but unfortunately we are frustrated in our desire for details, because Demodocus' account is reported in the form of a very brief summary (only seven verses, 75–82) and in the third person. On the other hand, the summary form and third-person narration are the 'normal' way in which the words of second-degree bards recounting an epic story within an epic poem are reported.⁶

The performance of Demodocus generates a split in the audience, which reacts in two contrasting ways: on the one hand, there are the Phaeacians, who greatly appreciate the performance and urge the bard to resume his singing whenever it is interrupted;⁷ on the other hand, in absolute solitude, there is the unknown guest, who bursts into a fit of weeping upon hearing Demodocus' tale and only ceases weeping when the singer stops, to resume weeping, his head hidden in his cloak, whenever the singing resumes. If one considers that the banquet and the epic performance had been organised precisely to honour the recently arrived guest, Odysseus' weeping decrees the complete failure of Alcinous' initiative, who immediately realises that the performance does not please his guest at all and takes steps to divert the entertainment in another direction. The choice of theme could also be judged unfortunate in relation to Demodocus, were it not for the fact that it was the infallible goddesses, the Muses, who induced him to opt for this theme. And then emerges the real reason why Demodocus' choice fell on this episode: Odysseus' direct involvement in the story told is the reason for his weeping. His reaction would be abnormal for anyone except one who, hearing the tale of those distant events, was forced to retrace with his memory

5 It is difficult, not to say impossible, to specify whether the existence of an account on this theme is the result of invention or corresponds to reality. On the different positions see Grandolini 1996, 119.

6 The issue is quite wide-ranging. I have tried to give an explanation of this phenomenon in Palmisciano 2007.

7 This episode very clearly describes the fact, already highlighted by Lord 1960, 14–17, that a singer's performance is always the subject of a negotiation between the singer and his audience, which has an active role in guiding the poet's choices; see also Skafte Jensen 2009, 46–47 on this point. Moreover, the performance is not a continuum that cannot be interrupted, but involves a *stop-and-go* procedure that is useful for the singer precisely in order to verify the reactions of his audience more carefully. If he is incited to continue, as happens in the court of the Phaeacians, then the performance is fulfilling its purpose and one can continue on the same track. On the relationship between bard and audience, see the systematic study by Segal 1992.

the painful stories of which he was protagonist. This natural reaction puts Odysseus in a special light, makes him an object of special attention on the part of Alcinous, who begins to glimpse behind the appearance of the castaway asking for help and hospitality the identity of a hero. The prince of the Phaeacians immediately takes the initiative to overcome the impasse and proposes to move outside to admire a spectacle of athletic competition. Demodocus is also led by Pontonous to the competition field and once again the consideration shown to him is emphasised, demonstrating the social esteem he enjoys. The herald, in fact, led him along the same path that the other princes of the Phaeacians had taken: *Od.* 8. 107f. ἦρχε δὲ τῷ αὐτὴν ὁδὸν ἣν περ οἱ ἄλλοι / Φαιήκων οἱ ἄριστοι.

The competitions take place before the eyes of a multitude of spectators who are all enthusiastic and take great delight in the spectacle (vv. 109–132, in part, v. 131), but at this point an unexpected twist occurs: Laodamas, the son of Alcinous, turns to Odysseus to invite him to take part in the competitions, but Odysseus shrugs off the idea, recalling that his soul and body have been severely tested by the many hardships he has experienced. More than glory in the contests, he longs for a return home. This response provokes the insolence of Euryalus, who insults Odysseus by saying that he was clearly not a skilled athlete, but rather a merchant accustomed to worrying above all about the integrity of the load he was transporting by sea. To these words Odysseus responds indignantly with words appropriate to the ethos of a man of heroic status. He then grabs a discus and, after weighing it up, hurls it far beyond all the throws of his younger competitors, thanks also to the help of Athena, who manifests herself to the hero. Feeling supported by the goddess, Odysseus utters words of challenge to all the young Phaeacians, calling on them to compete with him in any athletic speciality, including running. A few fragments emerge from Odysseus' proud words that help reconstruct the hero's identity. Odysseus boasts that he is second in archery only to Philoctetes, and recalls that, with the sole exception of Philoctetes, he was able to outdo all the other Achaeans in this speciality (vv. 219–220). At this point Alcinous intervenes. He is displeased by Odysseus' resentful reaction and reminds the hero that the Phaeacians are a peaceful people, who do not excel in wrestling and boxing, but in running and seafaring. He therefore invites the best of the Phaeacian dancers to put on a dance performance under the leadership of Demodocus.

Even the sporting entertainment, therefore, did not achieve the purpose that Alcinous had intended. The host once again is displeased, even though he had at first enjoyed the spectacle offered. However, both the first performance of Demodocus and the episode of the races must be considered, rather than failures of Alcinous – evidently not enjoying one of his best days as host – as steps towards

the identification of the mysterious host, who has already revealed himself to be one of the Achaean heroes who fought beneath the walls of Troy.

At this point the performance begins. Demodocus stands in the centre of the space prepared for the performance (v. 260 χορόν) surrounded by a group of talented, young dancers who perform a dance on a mythical subject. This time there is a diaphragm between the singer and his audience that prevents the empathy typical of epic performance. Demodocus does not interact with the audience, but with the group of dancers he leads, with the sound of the phorminx and the voice of the song, in an orchestral-mimetic performance based on a mythical theme linked to hierogamy. This is not a narrative epic performance⁸ but a spectacular interlude that has a special discourse status and probably reproduces dramatic actions of a ritual character (see Palmisciano 2012). It is no coincidence that Demodocus' performance of this piece is not introduced by any formula that recalls inspiration from the Muses, nor is anything said about the chosen theme. It was evidently a traditional mythical theme, well known to both the bard and his audience, which required no other skill to be transformed into poetic discourse than that of finding an effective form of communication. At the end of this second performance, Odysseus finally feels joy, as do all the other Phaeacians (v. 368 τέρπετ' ἐνὶ φρεσὶν ἦσιν ἀκούων ἠδὲ καὶ ἄλλοι / Φαίηκες). The performance of Demodocus and the dancers recomposed the unity of the audience. This newfound harmony is followed by the delivery of the rich hospitable gifts by all thirteen princes of the Phaeacians who rule the country. Odysseus is reconciled with Euryalus, who now addresses him with appropriate words and presents him with a splendid sword. Then he is led back into the house, washed, and dressed in beautiful clothes. At last Odysseus has recovered his heroic appearance. What is still missing for his heroic identity to be fully restored is his name, his own, that of his father, and that of his homeland. Odysseus re-enters the banquet hall and sits next to Alcinous. This too is a significant difference from the first performance, when nothing is said about his position in the hall during the banquet. Evidently the intention is to emphasise that the guest is now in the position he is entitled to based not only on his status as a foreign guest, but also on the social rank that his outward appearance declares. Once the banquet is over, the scene is repeated of Demodocus' entrance into the hall. The bard is 'honoured by the people' (v. 472 λαοῖσι τετιμῆνον), an epithet that reminds us, once again, of the high esteem in which the poet is held in this ideal society. But after the bard

⁸ For this reason, when Odysseus compliments Demodocus a little later on for his skills as a singer (8. 487–491), he does not mention the *Loves of Ares and Aphrodite* at all, but refers only to the first performance.

has taken his position in the centre of the room, the initiative, this time, is taken by Odysseus. He cuts a succulent, fatty piece from the rear of a roast pig and hands it to Pontonous to offer to Demodocus. This rich portion of meat, a veritable γέρας,⁹ is the way in which he wants to show the poet the consideration he deserves, since the bards are worthy of honour (τιμή) and respect (αἰδώς) among all men, because the Muse, who greatly loved the lineage of the bards, taught them the ‘themes’ (v. 480 s. οὐνεκα ἄρα σφέας / οἶμας Μοῦσ’ ἐδίδαξε, φίλησε δὲ φῦλον αἰοιδῶν). The bard willingly accepts Odysseus’ homage. Then all the guests approach the table and, when they are full of wine and food, the first to speak is once again Odysseus, who makes an explicit request to the singer:

Od. 8. 487–498

Demodocus, verily above all mortal men do I praise thee, whether it was the Muse, the daughter of Zeus, that taught thee, or Apollo; for well and truly dost thou sing of the fate of the Achaeans, [490] all that they wrought and suffered, and all the toils they endured, as though haply thou hadst thyself been present, or hadst heard the tale from another. But come now, change thy theme, and sing of the building of the horse of wood, which Epeius made with Athena’s help, the horse which once Odysseus led up into the citadel as a thing of guile, [495] when he had filled it with the men who sacked Ilios. If thou dost indeed tell me this tale aright, I will declare to all mankind that the god has of a ready heart granted thee the gift of divine song.

(transl. A. T. Murray)

Odysseus’ elaborate speech is clearly divided into two complementary sections: the first (vv. 487–491) contains a eulogy of Demodocus’ poetic qualities, stating that he is an authentically inspired poet; in the second, a request is made to sing a new and different theme: the deception of the wooden horse that led to the destruction of Troy. This dense discourse contains some fundamental concepts. First of all, Demodocus is praised because he sang the fate of the Achaeans perfectly (v. 489 λῆν γὰρ κατὰ κόσμον). Evidently, Odysseus says, either the Muse or Apollo himself instructed the poet, because he sang those facts with the same competence that a direct witness or someone who had heard them from the voice of an eyewitness might have had (v. 491 ὡς τέ που ἦ αὐτὸς παρεὼν ἢ ἄλλου ἀκούσας).¹⁰ This last statement cannot go unnoticed, because in the course of Book 8 a

⁹ In *Il.* 7. 321 Agamemnon gives Ajax, fresh from a glorious fight with Hector, a rich piece of the back of a roasted ox. The verb used to indicate the act of bestowing this privileged portion is γεραίρω.

¹⁰ The formula seems to have a generalising character and universal validity. However, it can also be understood in a sense appropriate to the specific context of Book 8, as does Accame 1963, 281, according to whom blindness prevents Demodocus from being an eye-witness to any event

great deal has accumulated to build up the portrait of Demodocus as an authoritative poet, a voice respected and listened to by the community within which he performs his function and in which he occupies a high position. That he was a man favoured by the Muses was said from the outset, ever since it was mentioned that his blindness was a tangible sign of Demodocus' special relationship with the divinity. The praise of Odysseus would have been perfectly coherent with the way Demodocus has been described so far, if v. 491, which we have quoted above, did not intervene to complicate the picture by introducing a second criterion of speech authorisation, of a completely different nature. Demodocus' words are not *only* true because Demodocus' voice is inspired by the Muse, but they are *also* true because a protagonist of the facts, namely Odysseus, certifies their truthfulness by stating that that account corresponded to the truth of the facts as if it had been given by an eyewitness or by someone who had learned those facts from an eyewitness account.¹¹ This second level of authorisation is secular in nature, in that it is completely beyond the control of divinity and places on the same level the words one can speak about events one has witnessed or learned from other witnesses and the words spoken by the poet solely by divine inspiration. It is the human criterion that makes the traditional description of poetry as a gift from the Muses credible. It is the second level of discourse authorisation that demonstrates the divine origin of Demodocus' skill. The discourse seems to anticipate methodological reflections on the eye and ear as sources of information that will be central to Herodotus' work. These are reflections that we are used to ascribing to the historiographical sphere, whereas perhaps it is an extension of considerations on the veracity of oral discourse that this passage from the *Odyssey* allows us to move back in time.¹²

and thus the origin of his song is detached from any external contact; see also below on αὐτοδίδακτος in *Od.* 22. 347.

11 The problem of the veracity of the tale would be foreign to the Homeric poems according to Verdenius 1983, 25–26, 38 (at 25: “Homer seems to be unconscious of the fact that beautiful poetry may be untrue”). For Verdenius, every epic tale, insofar as it is inspired by the Muses, is true.

12 The ‘historical’ character of the idea of the truth of discourse that emerges in the Homeric poems is supported with good arguments by Puelma 1989, 66–73 and Olson 1995, 12–16. Both, however, tend to underestimate the importance of divinity as a source of authoritative discourse. A synthesis between the historical truth of the epic tale and divine inspiration is proposed by Setti 1958, 145 according to whom the task and merit of the poetic work lies essentially in the truth of the tale, but such merit is divine and can only come from those who know from the gods. See also Accame 1963, in part. 278–279. Conversely, Bouvier 2019, 90–91 states that Demodocus is called upon here to perform not a truthful tale, but a tale favourable to Odysseus (p. 91: “Demodocos ne doit pas être ici maître de vérité”).

This second criterion of authorisation does not remain suspended in the theoretical sphere of mere enunciation. It is immediately applied and concretely experienced afterwards. Odysseus, in fact, after praising Demodocus, explicitly asks him for a new song on a subject he has chosen: the horse's deception, the episode of the Trojan War in which Odysseus' leading role is most prominent. If Demodocus succeeds in accurately singing this episode as well (v. 496 αἶ κεν δὴ μοι ταῦτα κατὰ μοῖραν καταλέξῃς), then he will have deserved to be considered a divine singer and the host will repeat this truth to all men. The conjunction αἶ κεν with which the verse opens introduces a sentence enunciating the conditions for the validity of Demodocus' speech. Demodocus' definitive certification as a bard authentically inspired by the gods is subject to passing a very difficult test, which consists of improvising a story on a theme chosen not by the bard but by someone from the audience, which must be convincing, first and foremost, to the person who proposed the theme.¹³ If the first performance of Demodocus impressed Odysseus, however, it did not convince him completely. In his own words, only the third performance could elevate Demodocus to the rank of a truly inspired poet. The mysterious host centres the function of validator of the tale on himself. In v. 496, which is the keystone of the entire authorisation process, Odysseus elevates himself to the place of criterion, as he twice uses a second person singular marker (μοι ... καταλέξῃς) to make it clear that it is to him that Demodocus must render the tale and that he is the person to be convinced. Demodocus must sing above all for that single listener who has elevated himself to the rank of judge of the veracity of his words and who can, if convinced, spread Demodocus' fame as a genuinely inspired poet to all the men he meets. Odysseus' words might even be judged irreverent or presumptuous if the poem's ancient and modern listeners did not know from the outset that it is the protagonist of those exploits who is speaking.

The difficulty of the test Demodocus is subjected to does not lie so much in composing on a theme chosen by others, since this is a common practice in oral composition poetry,¹⁴ but in the fact that the theme proposed by Odysseus could hardly have been known to Demodocus through any other route than that of divine inspiration. It is no coincidence, I believe, that Demodocus' first performance was introduced by words stating that the subject he had chosen, the dis-

13 Already Semenzato 2017, 48 had read Odysseus' request as a test of Demodocus' abilities. According to Harrison 1971 the request contains a deliberately wrong detail, which is to function as a test: the wooden horse would have been led to the Acropolis by Odysseus, who was instead inside. And Demodocus promptly corrects the mistake in vv. 502–503. The proposal is suggestive, but perhaps excessive.

14 Calhoun 1938a, 163 "He [*scil.* Demodocus] is also expected to sing at a moment's notice any lay for which one of his hearers may ask".

pute between Achilles and Odysseus, was a theme whose fame at that time reached the vast heavens: v. 74 οἴμης τῆς τότ' ἄρα κλέος οὐρανὸν εὐρὺν ἴκανε. This formula seems to contrast with what Nausica says in Book 6, i.e. that no mortal, with the exception of Odysseus, can reach the land of the Phaeacians, since they live apart, at the edge of the world (vv. 204–205 οἰκέομεν δ' ἀπάνευθε πολυκλῦστῳ ἐνὶ πόντῳ / ἔσχατοι, οὐδέ τις ἄμι βροτῶν ἐπιμίσγεται ἄλλος). The formula employed in v. 74 could be explained by pure reasons of *composition in performance*, but it could also have a pregnant meaning. In other words, it could have been employed to leave Odysseus (and the audience) with the suspicion that the subject matter of the song of the first performance, by virtue of its great notoriety, could somehow reach the remote island of Scheria. On the other hand, nothing similar is said about the theme of the horse's deception, the subject of the third performance of Demodocus. In this way, Odysseus' request for a performance on a theme chosen by him appears all the more justified: this alone would definitively establish whether Demodocus is truly an inspired poet, since the subject of this third performance is an οἴμη that in no way could have reached Demodocus' ears through human means.¹⁵ Nor is it said of Demodocus' third performance that the Muses inspired the singer, because this time it was Odysseus and not the Muses who has dictated the theme of the performance.

The test to which Demodocus is subjected is indeed a difficult one, as is also underlined by another clue in the text. The verse introducing Demodocus' performance, contains an interesting notation: v. 499 ὡς φάθ', ὁ δ' ὀρμηθεὶς θεοῦ ἤρχετο, φαῖνε δ' ἀοιδήν. The syntactic interpretation of this verse is far from unambiguous. The one that leaves ὀρμηθεὶς alone and makes θεοῦ dependent on ἤρχετο seems more convincing.¹⁶ The translation would be: “and he, taking his cue, began with the god. He sang...” Adopting this syntactic arrangement, one could read into this verse a clear allusion to the proemial function, which would seem particularly pertinent here given the difficulty of the proof. In an attenuated form, this phrase is reminiscent of the invocation to the Muses in the *Catalogue of*

¹⁵ See Marg 1971, 12: “undeutlich bleibt, woher Demodokos diese Kenntnis vom Stoff hat”. Olson 1995, 46–47 uses *Od.* 1. 241–242 to support the idea that the Phaeacians of Scheria could not have heard the story of the Trojan Horse before.

¹⁶ Good arguments in favour of this interpretation already in Calhoun 1938b; the proemial function is recalled by Pagliaro 1961, 41–42, followed by Setti 1958, 165 n. 1 and Accame 1963, 277; Hainsworth's note in Heubeck / West / Hainsworth 1988, *ad* 499 is excellent; see also Grandolini 1996, 145 *ad* 499 for an account of the different interpretations. Those who prefer to connect ὀρμηθεὶς to θεοῦ (as genitive-ablative), leaving ἤρχετο independent, emphasise the inspiration that the god exerts on the poet, in analogy with what the Muses did in the first performance of Demodocus.

Ships, another nodal point in which the invocation emphasises the importance and difficulty of the matter being narrated. In the *Odyssey*, Demodocus also needs special support from the deity because the stakes are so high. The challenge proposed by Odysseus invests the very credibility of the poet. On the other hand, in this detailed and circumstantial portrayal of a singer in action, the reminder of the proemial function could not be absent without leaving the mosaic bereft of an important tile.

The test is brilliantly passed. We know this implicitly through the description of the unknown host's reaction. After Demodocus has recounted the *Iliou persis* (vv. 500–520), recalling Odysseus' exploits several times, from the building of the horse to the extermination caused by the Achaeans on the city's last night, the host bursts into a fit of weeping. Nothing else is said about this execution, but as in the tale of the quarrel between Achilles and Odysseus, the hero's emotional reaction can only be explained by the fact that Demodocus' words have been able to bring to life with intensity events in which he was deeply involved. Here one encounters an emotional intensity that can only be triggered by a tale that is true to the facts, and furthermore capable of arousing through that tale powerful emotions that only an inspired bard is able to provoke. And here we touch on another essential point, because if it is true that the case of Odysseus shows that a person who has been a protagonist or witness to the facts narrated can judge the truth of those facts, it is equally true that only the word crafted by a specialist who has received from the divinity the gift of the inspired tale can transform those truthful contents into a tale capable of touching the sensitive chords of the human soul, in the direction of pleasure (τέρψις),¹⁷ or in the opposite direction, if that tale brings back painful memories. Odysseus' violent reaction is the clearest proof that Demodocus' tale has fully hit the mark. There is no need to add words either from the hero or from the other guests present. Perhaps it is no coincidence that a very long and elaborate simile (vv. 523–530) is used to describe Odysseus' weeping, which is in itself a moving little tale: the hero weeps like a woman who has seen her husband die in battle and while shedding tears over her man's corpse is struck from behind with the spear-shafts by her enemies, who thus remind her of her fate as a slave. Comparing a hero of the greatest caliber with a woman grieving over the death of her husband does not seem a random choice. By expressing his grief with such an unheroic cry, Odysseus has shown everyone that he was overwhelmed by the emotions Demodocus aroused

17 The τέρψις is one of the main purposes of the epic tale (see Lanata 1963, 8–9 *ad* 45); Alcinoos himself says so of Demodocus: *Od.* 8. 44 s. τῷ γάρ ῥα θεὸς πέρι δῶκεν ἀοιδίην / τέρπειν, ὄππῃ θυμὸς ἐποτρύνῃσιν αἰεῖδειν. The τέρψις is even inscribed in the patronymic with which the bard Phemius is named, Τερπιάδης (*Od.* 22. 330).

in him. The intensity of his grief is proportionate to the effectiveness of the singer's tale. At this point, once again, Alcinous intervenes to turn the situation in the guest's favour: the execution has not been appreciated by all (v. 538 οὐ γὰρ πῶς πάντεσσι χαριζόμενος τάδ' αἶδει), the guest is shrouded in unspeakable anguish, so it is better for Demodocus to interrupt his performance. Alcinous reassures his guest by promising him the help of the magical ships of the Phaeacians to reach his homeland and then asks him to reveal his identity, to tell of his travels, and to explain why the events of the Trojan War touch him so deeply. Alcinous' questions can now be answered. There is a very serious reason why Odysseus is not only willing to tell his name and homeland but is also prepared to recount in detail and at length all his wanderings from Troy to Scheria. Odysseus has before him a genuinely inspired poet, who has passed the difficult test to which he has been subjected. The hero is given the opportunity to recount his most astonishing exploits, his νόστος, before a bard he trusts. Telling Demodocus about these things means saving those deeds from falling into oblivion, since he was the only survivor of those events. If silence were to fall upon them, all the suffering the hero went through to accomplish them would have been in vain. Odysseus cannot let such an opportunity pass him by. And he answers Alcinous' three questions: in *Od.* 9. 19 he tells his name, in v. 21 his homeland, and in v. 37 he does not limit himself to satisfying the curiosity of the prince of the Phaeacians but begins the very long account of his νόστος, which occupies the entirety of Books 9–12, the *Apologoi*, an autonomous and coherent section of the poem, in which Odysseus is the only voice to narrate the hero's exploits from the end of the Trojan War to his arrival on the island of Calypso, passing through all the incredible events that made Odysseus universally famous. Perhaps it was precisely the exceptional nature of the subject matter narrated that made it necessary to construct such an articulate and complex metanarrative. What happens in Book 8 between Demodocus and Odysseus is the premise that justifies the extraordinary length of the *Apologoi* narrative. The *Apologoi* are represented in the *Odyssey* as the first account given by the sole survivor of those events before a singer, who can repeat those events after hearing them from a witness who proves credible. Odysseus' account, in fact, is also subjected to a process of validation. First of all, as we have seen, he was tested for his physical and moral qualities during the games organised by Alcinous. At the end of that test Odysseus had been recognised as a hero and had begun the process of reintegration into his status. Before beginning his tale, Odysseus states his patronymic and accredits his heroic dignity, but the exploits he recounts in the *Apologoi* concern extraordinary adventures that take place in a world usually separated from that of normal human experience. How can one tell whether the narrator of those events is worthy of belief? In his case, the only possible criterion is an internal one. His words cannot be verified by those

who were protagonists or witnesses, because Odysseus is the only survivor, the only one who can recount those events, which had never been recounted before that mythical occasion of which the *Odyssey* speaks. But his words stand out because their truth is demonstrated by the beauty of the images they produce. His words have the same μορφή as those of the bards, that is, they have the same capacity to produce images of reality in the minds of their listeners.¹⁸ This is the characteristic of the word of the inspired bards, and Odysseus shows that he possesses the skill of a true singer in relation to the story he has experienced firsthand.¹⁹

Od. 11. 363–369

Odysseus, in no wise as we look on thee do we deem this of thee, that thou art a cheat and a dissembler, such as are many [365] whom the dark earth breeds scattered far and wide, men that fashion lies out of what no man can even see. But upon thee is grace of words, and within thee is a heart of wisdom, and thy tale thou hast told with skill, as doth a minstrel, even the grievous woes of all the Argives and of thine own self.

(transl. A. T. Murray)

These words of Alcinous seal Odysseus' account by attributing to the incredible events he has narrated the necessary authority for them to be considered worthy of repetition. Demodocus refrains from any comment, but as it has emerged in our proposed reading of Book 8, he is the true recipient of Odysseus' performance. An attentive and silent witness of that tale, Demodocus may become the initiator of the performance tradition of Odysseus' νόστος. By describing Demodocus' activity in detail, the bards of the *Odyssey* wished to construct the myth of the birth of the epic material that was theirs. The tale that Odysseus performs in the *Apologoi* before Demodocus is necessary for his story, new and exceptional, to enter the circuit of oral memory of which the singers are the repositories. After that mythical, first performance of Odysseus' adventures, every subsequent performance of Odysseus' νόστος, even after some time has passed, will draw its authority from that first performance, to which each new version will be linked not so much by the verbal plot in which it takes shape, since this is always new, but rather by its fidelity to the themes dealt with, whose truth dates back to the direct protagonist of those extraordinary adventures.

¹⁸ Thus, acutely, Puelma 1989, 68–69, 72–73; Cerri 2003, 24 and n. 24; see also Maehler 1963, 25; Verdenius 1983, 25.

¹⁹ This does not mean that Odysseus can be considered an ἄοιδός. His art of speech stops at the narration of the events in which he was a protagonist. What he lacks is the ability to compose on any theme, even those proposed by others. The difference between Odysseus and a bard is effectively explained by Mackie 1997, 87–91; Cerri 2003, 24–26; see also Semenzato 2017, 41–49.

To complete the picture we are sketching, it will be worthwhile to examine another tale from the *Odyssey* from which useful elements on the condition and function of the bard emerge. I refer to the episode in Book 22 in which the protagonist is Phemius, the resident poet at Odysseus' court. He had already appeared in Book 1 of the poem in subjection to the suitors who invaded his king's residence. The situation in which Phemius lives in the court of Ithaca, in the absence of Odysseus, is like a negative image of the perfect society of the Phaeacians where Demodocus operates. Ithaca is a disorderly community, dominated by power relations and lacking any sense of justice. In this context, even the figure of Phemius does not appear in a favourable light. The bard of Ithaca has adapted to the new situation and conditions in which he finds himself, satisfying the desires of the mighty with his stories. His behaviour is not the only one possible, for another poet, the singer to whom Agamemnon had entrusted the surveillance of his house during his absence for the Trojan War, had not accepted the changes that had taken place after the king's departure and had been banished to a desert island for his loyalty to his king.²⁰ When Phemius reappears in the poem's finale, after the hero has slaughtered the suitors and regained his home and status, there would be many reasons to punish him severely. Phemius must think the same, because when he appears in verse 330 of Book 22, he is described as thinking about the best way to save himself, whether to take refuge at the altar of Zeus or beg Odysseus to spare him. The second possibility prevails. The words that Phemius addresses to Odysseus, there in the megaron where the slaughtered bodies of the suitors lie on the ground, are relevant to our discussion.

Od. 22. 344–349

γουνουῦμαι σ', Ὀδυσσεῦ· σὺ δέ μ' αἶδεο καί μ' ἐλέησον.
 αὐτῷ τοι μετόπισθ' ἄχος ἔσσειται, εἴ κεν αἰοιδὸν 345
 πέφνης, ὃς τε θεοῖσι καὶ ἀνθρώποισιν ἀείδω.
 αὐτοδίδακτος δ' εἰμί, θεὸς δέ μοι ἐν φρεσὶν οἴμας
 παντοίας ἐνέφυσεν· ἔοικα δέ τοι παραείδειν
 ὣς τε θεῶ· τῷ μὴ με λιλαίεο δειροτομήσαι.

By thy knees I beseech thee, Odysseus, and do thou respect me and have pity; [345] on thine own self shall sorrow come hereafter, if thou slayest the minstrel, even me, who sing to gods and men. Self-taught am I, and the god has planted in my heart all manner of lays, and worthy am I to sing to thee as to a god; wherefore be not eager to cut my throat.
 (transl. A. T. Murray)

²⁰ See *Od.* 3. 267–271, where we read of Aegisthus' persecution of Agamemnon's poet whose name we do not know. The ancients made various proposals for identifying him: see Grandolini 1996, 113–114. On the social conditioning the poet suffers, and the margin of freedom available to him, see Svenbro 1984, 34–50.

The poet makes the point that if Odysseus kills him, he will feel pain and remorse in the future. The reasons for this are not explained, but one can guess. Phemius is first and foremost, like any bard, a person dear to the gods. Therefore, raising a hand against him could provoke the wrath of the gods who protect him. This argument, however, cannot be considered sufficient, because Odysseus did not hesitate to kill the haruspex Leodes (*Od.* 22. 310–329) to punish him for his unfaithfulness, without having any regard for the link that binds the haruspices' art to the gods.²¹ And in fact, Phemius adds a second argument immediately afterwards, which is perhaps precisely what convinces Odysseus to refrain from striking the bard. In v. 347f. Phemius boasts of being an *ᾠοδός* inspired by the gods, who taught him the ways of song. His words have always aroused the interest of commentators, especially in connection with the two phrases *αὐτοδίδακτος δ' εἰμί*²² and *θεὸς δέ μοι ἐν φρεσὶν οἶμας / παντοίας ἐνέφυσεν* and their mutual connection. Within the present discussion, the words of Phemius fit perfectly into the first level of discourse authority we have identified: just like Demodocus, Phemius learned the art of singing directly from the deity. That is why he can be said to be *αὐτοδίδακτος*, because he did not learn from other human beings either the technique of his art or the subjects of singing. It is the deity who has placed all kinds of thematic traces in his mind, *οἶμας παντοίας*, which the bard can transform into song.²³ It is the divinity that induces the *ᾠοδός* from time to time to

21 Consider, then, that Odysseus could have punished Phemius, even without killing him, as Aegisthus had done with Agamemnon's bard, but evidently other reasons drove him to spare Phemius in Ithaca.

22 The term *αὐτοδίδακτος* has been interpreted very differently: for an account of the various positions see Fernández-Galiano in Fernández-Galiano / Heubeck 1986, 255–256 *ad* 347–349; Grandolini 1996, 160–162; Assaël 2001, 8–14. On the linguistic level, see the analysis of Belardi 1981, 4–13, esp. p. 12: according to Belardi, what Phemius emphasises about himself, is his “spontaneous knowledge”, which immediately places him who possesses it outside the common order of mortals. Lazzeroni 1998 reinforces Belardi's interpretation with useful comparisons from Vedic poetry. I fully agree with his interpretation of the passage, p. 101: “I am *αὐτοδίδακτος* because a god has placed in my soul all sorts of plots” (my transl.). Unlike Belardi and Lazzeroni, however, I believe that Phemius' words are not isolated; rather, they seem to me to form a system with what is observed in the epic performances of Book 8 (Grandolini 1996, 161 is of the same opinion).

23 So says Odysseus, very clearly, in *Od.* 8. 480–481, when he states that the singers are worthy of honour from men *οὐνεκ' ἄρα σφέας / οἶμας Μοῦσ' ἐδίδαξε*. Notice in this passage the use of the verb *διδάσκω*, whereby the singer is not without teaching absolutely, but receives teaching only from the deity. This conception is very similar to that which emerges from the words of an *akyn* Kara-Kirghiz collected by Radloff and published in 1870, later repeated several times in studies on Greek oral epic, e.g. Bowra 1952, 41: “I can sing every song; for God had planted the gift of song in my heart. He gives me the word on my tongue without my having to seek it. I have not learned

choose one of these topics, which are learned exclusively by divine inspiration.²⁴ In reality, what have been seen by some scholars as two distinct statements (αὐτοδίδακτος δ' εἰμί... θεὸς δέ μοι ἐν φρεσὶν οἶμας...), corresponding to two different moments of poetic activity, are in fact a single statement, aimed at declaring the exceptional and divine nature of the bard's knowledge.²⁵

After displaying his credentials, Phemius promises Odysseus that he will sing for him as carefully as he would sing in honour of a god.²⁶ Although immediately afterwards Phemius adds in justification of his past behaviour that he sang for the suitors because he was forced into a state of awe, it does not seem that this last argument makes much impression on the hero's soul. Phemius, on the other hand, touched a sensitive chord in Odysseus when he promised to sing for him. And this is where the second level of authorisation of speech comes into play, even if in this case it emerges in implicit form compared to the previous case of Demodocus. Phemius was an eyewitness to Odysseus' return to the palace of Ithaca. He knows all the events that took place there before the slaughter of the suitors. And precisely because in the Homeric conception the singer does not learn the material of song from other singers but only from the divinity, every

any of my songs; everything springs up from my inner being, from myself". For the etymology and meaning of οἶμη/οἶμος, see Pagliaro 1961, 34–40.

24 One will recall the formula with which this point is described in the first performance of Demodocus: *Od.* 8. 73f. Μοῦσ' ἄρ' αἰοῖδὸν ἀνήκεν ἀειδέμεναι κλέα ἀνδρῶν, / οἶμης τῆς τότ' ἄρα κλέος οὐρανὸν εὐρὺν ἴκανε. The object of the Muse's inspiration is the specific thematic track that Demodocus is about to sing. Brillante 1992, 14 finds in Phemius' words a self-defensive strategy: if it is the Muse who induces him to sing a certain story, he is not responsible for the song he performed at the Phaeacians.

25 In favour of the complementarity of the two statements of Phemius: Ameis 1868, 58 *ad* 347: "die zu αὐτοδίδακτος gegebene Erklärung θεός κτλ enthält den Sinn, dass er bloss der göttlichen Begeisterung seinen Gesang verdanke, was die Vorzüglichkeit des Sängers bezeichnet"; according to Pagliaro 1961, 34, the notion of αὐτοδίδακτος is explained by Phemius by the fact that a god had placed οἶμας παντοίας in his mind; see also Dodds 1951, 10; Marg 1971 (1957), 9; Setti 1959, 152–153; Lesky 1961, 30–31; Accame 1963, 387–388; Murray 1981, 97, who, however, insists too much on the active role the singer plays in the creative process; Verdenius 1983, 22, 38–39; Brillante 1992, 13–16; Semenzato 2017, 49–50. Conversely, others identify in the words of Phemius the emergence of an autonomy from the Muse in the creation of song: Lanata 1963, 13–14; Maehler 1963, 22–23; Fränkel 1969, 21 n. 27; Marg 1971, 9; Fernández Galiano, in Fernández Galiano / Heubeck 1986, 255–256 *ad* 347–349; Ritook 1989, 342–343; Assaël 2001, 18–19, 21. Both Marg and Assaël separate the conception of poetry referable to Demodocus from that expressed by Phemius.

26 This seems to be the meaning of vv. 348–349, which also present some difficulties due to the particular construction of εἶκα: see Fernández-Galiano in Fernández-Galiano / Heubeck 1986, 256–257 *ad* 348–349.

tale performed by his voice is worthy of being heard and held true.²⁷ Like a truly inspired bard, Phemius can become the authoritative voice that narrates the new stories that have been created before his eyes.

By sparing Phemius, Odysseus shows that he is concerned to have someone to narrate the second part of his exploits, the heroic deeds that led him to definitively regain his social status. After having entrusted Demodocus with the matter of his νόστος, Odysseus leaves it to Phemius to narrate what he has seen happen since Odysseus set foot in Ithaca. Once again, the genesis of a new epic tale becomes itself the subject of a tale with a mythical character. And in both cases, it is always a man who ultimately determines the level of authority of the poetic discourse in relation to the truth of the facts narrated.

References

- Accame, S. (1963), “L’invocazione alla Musa e la ‘Verità’ in Omero e in Esiodo”, in: *Rivista di filologia e di istruzione classica* 91, 257–281; 385–415.
- Ameis, K. F. (1868), *Anhang zu Homers Odyssee*, 4. Heft, Leipzig.
- Ameis, K. F. / Hentze, C. (1880), *Anhang zu Homers Odyssee*, 4. Heft, Leipzig.
- Ameis, K. F. / Hentze, C. (1901), *Homers Odyssee*, 2. 2, Leipzig.
- Assaël, J. (2001), “Phemios ‘autodidaktos’”, in: *Revue de philologie* 75, 7–21.
- Bajamonti, G. (1797), “Il Morlacchismo d’Omero”, in: *Nuovo giornale enciclopedico d’Italia* X, 77–98.
- Belardi, W. (1981), “Il sapere e l’apprendere nella Grecia arcaica e nell’Iran zoroastriano”, in: *Litterature comparate: Problemi e metodo: Studi in onore di Ettore Paratore*, I, Bologna: 3–21 = “Poesia e onniscienza tecnica e insegnamento nella Grecia arcaica e nell’Iran zoroastriano”, in: W. Belardi (1990), *Linguistica generale, filologia e critica dell’espressione*, Rome, 219–236.
- Bouvier, D. (2019), “De Démodocos à ‘Homère comme poète’, réappropriation d’un chant aédique dans une épopée”, in: M.-L. Declos (ed.), *La poésie archaïque comme discours de savoir*, Paris, 73–100.
- Bowra, C. M. (1952), *Heroic Poetry*, London.
- Brillante, C. (1992), “Il cantore e la Musa nell’epica greca arcaica”, in: *Rudiae* 4, 5–37.
- Buxton, R. G. A. (1980), “Blindness and Limits: Sophokles and the Logic of Myth”, in: *Journal of Hellenic Studies* 100, 22–37.
- Calhoun, G. M. (1938a), “The Poet and the Muses in Homer”, in: *Classical Philology* 33, 157–166.

27 The specificity of the Greek epic’s conception on this point is well pointed out by Finkelberg 1990, 295–296, who distinguishes the Greek conception from that of the Serbo-Croatian epic, based on the transmission from singer to singer. According to Finkelberg, the idea that the αοιδός receives the material of the song directly from the deity allows for the inclusion in the epos of more recent history. Pizzocaro 1999 speaks of a ‘historical’ epos as a subgenre of the mythical epos. The recency of the *Odyssey*’s subject matter and the need to establish the reliability of these new tales are well explained by Mackie 1997, 78–82, 86, 89–91. Accame 1963 analyses the progressive “secularisation” and “humanisation” of poetic inspiration, from Homer to Hesiod.

- Calhoun, G. M. (1938b), “Ὀρμηθεὶς θεοῦ ἄρχετο. *Odyssey VIII. 499*”, in: *Classical Philology* 33, 205–206.
- Camassa, G. (1982), “Il simbolismo del terzo occhio e la cecità dell’indovino greco”, in: *Quaderni di storia* 16, 249–275.
- Cerri, G. (2003), “Odisseo, l’eroe che narra se stesso”, in: *AION – Annali dell’Istituto orientale di Napoli (sezione filologico-letteraria)* 25, 9–28.
- Dodds, E. (1951), *The Greeks and the Irrational*, Berkeley.
- Fernández-Galiano, M. / Heubeck, A. (1986), *Odissea*, VI (libri XXI-XXIV), Milan.
- Finkelberg, M. (1990), “A Creative Oral Poet and the Muse”, in: *American Journal of Philology* 111, 293–303.
- Fränkel, H. (1969), *Dichtung und Philosophie des frühen Griechentums*, 3. Auflage, Munich.
- Gostoli, A. (1986), “La figura dell’aedo preomerico nella filologia peripatetica ed ellenistica: Demodoco tra mito e storia”, in: G. Cerri (ed.), *Scrivere e recitare. Modelli di trasmissione del testo poetico nell’antichità e nel medioevo*, Rome, 103–126.
- Grandolini, S. (1996), *Canti e aedi nei poemi omerici. Edizione e commento*, Rome.
- Hainsworth, J. B. (1982), *Odissea*, II (libri V-VIII), transl. G. A. Privitera, Milan.
- Harrison, E. L. (1971), “Odysseus and Demodocus: Homer, *Odyssey* θ 492.f.”, in: *Hermes* 99, 378–379.
- Lanata, G. (1963), *Poetica pre-platonica. Testimonianze e frammenti*, Florence.
- Lazzeroni, R. (1998), “Autonomia del poeta e poetica indoeuropea”, in: *Studi micenei ed egeo-anatolici* 33, 1994: 69–77 = “Il poeta come mediatore fra uomini e dei. Preistoria di un epiteto greco”, in: Idem, *La cultura indoeuropea*, Rome, 96–102, 118–119.
- Lesky, A. (1961), *Göttliche und menschliche Motivation im homerischen Epos*, Heidelberg.
- Lord, A. (1960), *The Singer of Tales*, Cambridge, MA.
- Mackie, H. (1997), “Song and Storytelling: an Odyssean Perspective”, in: *Transactions of the American Philological Association* 127, 77–95.
- Maehler, H. (1963), *Die Auffassung des Dichterberufs im frühen Griechentum bis zur Zeit Pindars*, Göttingen.
- Marg, W. (1971 [1957]), *Homer über die Dichtung. Der Schild des Achilleus*, 2nd ed., Münster.
- Murray, P. (1981), “Poetic Inspiration in Early Greece”, in: *Journal of Hellenic Studies* 101, 87–100.
- Olson, S. D. (1995), *Blood and Iron: Stories and Storytelling in Homer’s Odyssey*, Leiden.
- Pagliaro, A. (1961), “Aedi e rapsodi”, in: *Saggi di critica semantica*, 2nd ed., Messina, 3–62 (= “La terminologia poetica di Omero e l’origine dell’epica”, in: *Ricerche linguistiche* 2, 1951: 1–46).
- Palmisciano, R. (2007), “Recitazioni secondarie, canti lirici e canzoni nei poemi omerici: Le ragioni di un’assenza”, in: *Quaderni urbinati di cultura classica* 86, 23–54.
- Pizzocaro, M. (1999), “Il canto nuovo di Femio: Le origini dell’epos storico”, in: *Quaderni urbinati di cultura classica* 90, 7–33.
- Puelma, M. (1989), “Der Dichter und die Wahrheit in der griechischen Poetik vom Homer bis Aristoteles”, in: *Museum Helveticum* 46, 65–100.
- Ritoók, Zs. (1989), “The Views of Early Greek Epic on Poetry and Art”, in: *Mnemosyne* 42, 331–348.
- Palmisciano, R. (2012), “Gli amori di Ares e Afrodite (*Od.* 8. 266–366). Statuto del discorso e genere poetico”, in: *Seminari romani di cultura greca* n.s. I 2, 187–210.
- Schadewaldt, W. (1951), “Die Gestalt des homerischen Sängers”, in: *Von Homers Welt und Werk*, 2. Auflage, Stuttgart, 54–86.
- Scoditti, G. M. G. (2003), *Kitawa: Il suono e il colore della memoria*, Turin.

- Segal, Ch. (1992), "Bard and Audience in Homer", in: R. Lamberton / J. J. Keaney (eds.), *Homer's Ancient Readers*, Princeton, 3–29.
- Semenzato, C. (2017), *À l'écoute des Muses en Grèce archaïque: La question de l'inspiration dans la poésie grecque à l'aube de notre civilisation*, Berlin.
- Setti, A. (1958), "La memoria e il canto: Saggio di poetica arcaica greca", in: *Studi italiani di filologia classica* 30, 129–171.
- Skaftø Jensen, M. (2009), "Performance", in: J. M. Foley (ed.), *A Companion to Ancient Epic*, Malden, MA, 45–54.
- Svenbro, J. (1984), *La parola e il marmo: Alle origini della poetica greca*, Turin.
- Verdenius, W. J. (1983), "The Principles of Greek Literary Criticism", in: *Mnemosyne* 36, 14–59.

Margalit Finkelberg

Was Classical Athens an Oral Society?

Abstract Two arguments support the widespread assumption that the society of classical Athens was an oral society. According to the first, Athens cannot be considered a literate society because writing did not penetrate all spheres of social life and not everyone was affected by it. According to the second, Athens should be regarded as an oral society because oral communication still prevailed in many spheres of its life. Yet, it seems that we should also pose the question whether writing can be seen as a systemic feature of the Athenian society, that is, as an integral part of its infrastructure.

Keywords: Literacy; orality; Eric Havelock; Panathenaic Regulation; Lycurgus the Athenian.

Alphabetic writing was introduced in Greece somewhere at the beginning of the first millennium BCE, and in any case not later than the eighth century. The wide variety of materials employed, the richness of the epigraphic contexts, as well as the fact that the use of alphabetic writing for administrative and public purposes came only at a later stage point out that from the very beginning Greek alphabetic writing functioned as a mass medium accessible to large sectors of society. Once introduced, the alphabet became an asset of the society at large, and it was going to root deeper and deeper into its fabric.¹ Towards the fifth century BCE it was already an integral part of the social life of Greek city-states, particularly of Athens.²

¹ See, e.g., Detienne 2010 [1988], par. 13: “Depuis un siècle, au moins, l’écriture alphabétique est en circulation: les marchands, les poètes, les artisans, les particuliers, chacun en use, à son gré et comme il l’entend. Simple, lisible, elle n’est, elle ne sera jamais réservée à des professionnels”; Jeffery 1990, 63: “[alphabetic] writing was never regarded as an esoteric craft in early Greece”; Pébarthe 2006, 18: “Le concept de *restricted literacy* appliqué à la Grèce ancienne ne paraît donc guère opératoire”; Powell 2011, 410: “[t]he Greek alphabet was never the possession of a scribal caste, as in the East including the Levant”; see also Powell 2002, 24–25. The corpus of early inscriptions recently discovered in Methone, Pieria (the late 8th – early 7th century BCE) corroborates this conclusion. The 25 vessels bearing alphabetic inscriptions and symbols show a remarkable diversity in the way of writing and a strong association with the sympotic context. See further Bessios / Tzifopoulos / Kotsonas 2012; Clay / Malkin / Tzifopuloos 2017.

² The epigraphical evidence strongly suggests that already in the archaic period writing was much more widespread in Attica than in other parts of Greece, see Stoddart and Whitley 1988; Pébarthe 2006, 53–56.

All this is a matter of common knowledge and not in dispute. Nevertheless, it is generally assumed today that for all practical purposes the society of classical Athens was an oral society. Two interconnected arguments support this thesis. According to the first, best represented by William Harris' staunch criticism of the older scholars' tendency to idealize the role of literacy in the ancient world, Athens cannot be considered a literate society because writing did not penetrate all the spheres of social life and not all sectors of the society were equally affected by it. The second line of argument, closely associated with Eric Havelock's thesis of a quintessential orality of classical Greece, is that since oral communication still prevailed in many spheres of the city's life, Athens should be regarded as an oral society. It seems, however, that, side-by-side with asking how literate each individual Athenian actually was, it is no less important to pose the question as to whether writing can be seen as a systemic feature of the Athenian society, that is, as an integral part of the infrastructure which shaped the community's social interactions. It is the question that I am going to address in this paper. My argument falls into two parts: in the first, I will discuss the ways in which literacy manifested itself in fifth- and fourth-century Athens; in the second, I will try to assess its position in the Athenian society.

1

Let me start with quoting a recent assessment of the ongoing discussion regarding the extent of literacy in classical Athens:

Those who believe that the city of Athens had achieved widespread literacy at least by the end of the fifth century BCE, have abundant evidence to support their view in Athenian drama, both in tragedy and in comedy. Skeptics, on the other hand, have been able to qualify each instance of apparent reading or writing in drama so as to explain the evidence away.³

Although addressing the evidence supplied by Athenian drama, these words are equally applicable to the Athenian society at large, for the evidence it supplies presents a complex and sometimes perplexing picture.

On the one hand, there is plenty of evidence pointing to high levels of literacy in certain circles of the Athenian society. Here are some examples.⁴ Plato's Socrates mentions more than once his having read Anaxagoras' book(s) (*biblia*, *biblion*,

³ Anderson / Dix 2014, 77.

⁴ For a more detailed account see Davison 1962; Burns 1981; Detienne 1988; Harris 1989, 65–115.

bibloi), which apparently were broadly circulating in fifth-century Athens;⁵ one of Aristophanes' characters (actually, the god Dionysus) recalls his reading Euripides' *Andromeda* on a sea journey (*Frogs* 52–53); the avid book collector Euthydemus is portrayed in Xenophon's *Memorabilia* (4.2.1–20); Aristotle admits that reading a tragic play is no less effective than attending a live performance (*Poet.* 6, 1450b17–20), and so on. We should also not forget the writers themselves, all those poets, historians, scientists, philosophers and orators, all of them residents of Athens, who left to posterity the compositions they authored (more below).

Alongside the intellectual elite, there were also trained professionals, such as state functionaries in charge of decrees and regulations written on papyrus scrolls (*biblia*) as paraded, for example, in Aristophanes' *Birds* (958–991, 1021–1057); clerks (*grammateis*) whose task was to read out the official documents and other pieces of written evidence presented before courts and assemblies and who, as a result, are frequently referred to in Attic orators; schoolteachers (*grammatodidaskaloi*), who were expected to have at their disposal a text of Homer and who could even be competent enough to engage in editing it (Plut. *Alc.* 7.1.); the rhapsodes, who were also expected to possess a copy of the Homeric poems (Xen. *Mem.* 4.2.10); doctors, engineers and other specialists, who often had at their disposal handbooks for their craft (*ibid.*); and, last but not least, specially trained slaves who, as in the prologue of Plato's *Theaetetus*, read out written texts to their masters.

On the other hand, there is no denying that for the ordinary citizens of the fifth-century Athens writing was far from being the preferred means of communication nor the one through which the main body of information was transmitted. As a matter of fact, the Athenians were in no hurry to abandon the traditional media for the sake of written communication. Everywhere one went – the assembly, the court, a council meeting, a festival – the spoken word prevailed. Nor did the transmission of information about the communal past depend on written sources: 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

5 Pl. *Ap.* 26d6–10; Socrates also points out, probably ironically, that the members of the jury are not so 'ignorant of letters' (ἀπείρους γραμμάτων) as not to be acquainted with Anaxagoras' doctrines. On Socrates as a reader of Anaxagoras see also *Phd.* 97b9–c1, 98b4–5; on his habit of reading with his friends "the treasures that the wise men of old have written in their books (*biblia*)" see Xen. *Mem.* 1.6.14.

the members of the community.⁶ All in all, writing as such hardly played a substantial role in daily routines of the Athenian citizens, so much so that even the constantly growing corpus of literary compositions were as a rule delivered orally (see further below, Section 2). Moreover, as several studies have shown, in democratic Athens one's proficiency in reading *scriptio continua* used for writing on papyrus scrolls (*biblia*), being a mark of higher learning, might well be looked upon with suspicion, so that orators, for example, had to conceal their learning lest it arouse antagonism in the audience.⁷

In view of this ostensibly discordant evidence, it seems that the most efficient way to circumscribe the diapason of literacy in the general population would be to let the Athenians speak for themselves. Let me, then, adduce two passages neither of which, it seems, has drawn the attention it deserves. The first one is from Plato's *Phaedrus* (spoken by Socrates):

Plat. *Phdr.* 242c 3–5

In effect, you see, I am a seer, and though I am not particularly good (σπουδαῖος) at it, still, like people who are not proficient in reading and writing (οἱ τὰ γράμματα φαῦλοι), I am good enough for my own needs (ὅσον μὲν ἑμαυτῷ μόνον ἱκανός).⁸

The phrase “to be good enough for one's own needs”, emerging in a text written as late as the middle of the fourth century BCE, unequivocally supports the thesis of limited Athenian literacy upheld by such scholars as William Harris, Rosalind Thomas, and others.⁹ But how limited was it? Did indeed the fifth-century practice of ostracism, presupposing as it does that every Athenian citizen was capable of inscribing a proper name on an ostrakon, present the ‘democratic minimum’ required in classical Athens? Or, as the anecdote of Aristides and an illiterate Athenian who, having not recognized the statesman, asked him to inscribe his own name suggests, the actual extent of literacy was even narrower than that?¹⁰

⁶ Finkelberg 2014; see Thomas 1992, 88–93. See also Scolion / Scolion 1995, 28, on ‘multisensory and multimodal’ orality.

⁷ On the widespread suspicion towards *biblia* see Anderson / Dix 2014; on orators see Perlman 1964. On the reading habits see Johnson 2000.

⁸ My translation and emphasis. Cf. *Laws* 810b1–4: “They [boys of 10–13 years old] ought to be occupied with their letters until they are able to read and write; but the acquisition of perfect beauty or quickness in writing, if nature has not stimulated them to acquire these accomplishments in the given number of years, they should let alone”. Tr. B. Jowett. Cf. also *Prt.* 325e. ⁹ Harris 1989; Thomas 2009.

¹⁰ Plut. *Arist.* 7 τῖνα τῶν ἀγραμμάτων καὶ παντελῶς ἀγροικῶν. On the ‘democratic minimum’ see Thomas 2009, 18: “Was there a democratic minimum in the mid-fifth century (ostracism?) and

At least a partial answer to this question can be found in Aristophanes' *Birds* (414 BCE). Having negotiated a truce between birds and men, Peisetairos commands his 'hoplites':

Ar. Av. 448–450

The hoplites are now to pick up their arms and go off home but *check whatever notices we put on the boards* (σκοπεῖν δ' ὅ τι ἂν προγράψωμεν ἐν τοῖς πινακίους).¹¹

As Nan Dunbar points out in her commentary, in this passage Aristophanes "is closely echoing the demobilization formulae familiar to his audience".¹² It follows, then, that at least for the members of the middle class, the 'hoplites' of Aristophanes' passage, reading official announcements, including those concerning emergencies such as mobilization, was a matter of routine. This certainly implies a higher level of general literacy than just the capability to inscribe a proper name on an ostrakon.¹³

There is plenty of evidence that in Greece of the fifth century BCE the capability to write was generally taken for granted. For example, in Euripides' *Hippolytus* (428 BCE) Phaedra falsely accuses Hippolytus of rape by means of a message inscribed on a wax tablet (*deltos*) (856–859, 877, 1057–1058), surely a feature borrowed from contemporary experience rather than passed down from the preliterate myth on which the tragedy's plot was based; Aristophanes' *Wasps* 97–99 (422 BCE) mentions love confessions written on doors, and texts to the same effect also emerge in graffiti (the so-called *kalos* graffiti), and so on. Alongside these, there were also inscribed tombstones and inscriptions put on vases for the purpose of clarifying their subjects or indicating the artist's name, all of them obviously meant to be read. To quote Stoddart and Whitley,

In the case of tombstones, their public position, their formula, the way that some of them appear to address a casual passer-by, do appear to assume (and thus indicate to us) that some other person could read, rather than simply appreciate the fact that the monument had been written upon.¹⁴

perhaps a different minimum in the restored democracy of the fourth century?" On literacy and ostracism see also Harris 1989, 53–55; Pébarthe 2006, 63–66, 310–311; Missiou 2011.

11 Trans. N. Dunbar, slightly adapted. My emphasis.

12 Dunbar 1998, 215. For additional examples and parallels, see Dunbar 1998, 215–216; see also Harris 1989, 76. The 'arms' here are of course the utensils used in the comic battle.

13 See Pébarthe 2006, 52: "Même dans les demeures rurales, les Athéniens étaient confrontés à l'écrit; leur nom était inscrit dans un registre, il était affiché sur les listes de mobilisation et certaines décisions de la collectivité étaient gravées sur pierre".

14 Stoddart / Whitley 1988, 765.

No less significantly, writing seems to have penetrated the consciousness so deeply that, judging by its recurrent emergence in tragedy, the expression “to write on the tablets of the mind” acquired the status of an idiom.¹⁵ Note that the kind of writing implied in these examples addresses neither the inscriptions on stone executed by professionals nor the scrolls (*biblia*) of the literati but, rather, a much more mundane but apparently more widespread practice of writing on wax tablets (*deltoi*) which, as the visual sources testify, were also used in schools.¹⁶

We can conclude, therefore, that although in fifth- and fourth-century Athens oral communication was all-pervasive and although levels of literacy could vary from individual to individual, on the whole writing was considered trivial enough to be regarded as part of the citizens’ daily routine. This allows us to speak of a “literate state of mind” (below, with n. 30) that characterized the Athenian society as a whole – the more so as, as we shall see immediately, some of the central phenomena of Athens’ social life could not come into existence without close interaction between orality and literacy.

2

In the decades following the publication of Havelock’s *Preface to Plato* (1963), we have become accustomed to seeing the culture of classical Greece as quintessentially oral. Thus, according to a recent assessment by Steve Reece, “[a] chapter on the orality of ancient Greek literature should properly entail a survey of almost all of ancient Greek literature”. And, after referring to the oral aspects of archaic poetry, both epic and lyric, he proceeds:

Greek drama, too, was fundamentally oral: both tragedies and comedies were composed to be performed orally... Greek oratory entailed speech before a live audience that was timed by a water clock; Greek philosophy was often presented in the form of an oral dialogue; even the quintessential literary genre of Greek history was designed to be read aloud to an audience of listeners – Herodotus is said to have made a fortune by offering public readings of his work in Athens.¹⁷

15 Aesch. *Ch.* 450 ἐν φρεσίν γράφου; *Eum.* 275 δελτογράφω ... φρενί; *PV.* 789 ἐγγράφου σὺ μνήμοισιν δέλτοις φρενῶν; *Soph. Ph.* 1325 γράφου φρενῶν ἔσω; fr. 597 θῆς ἐν φρενὸς δέλτοισι τοὺς ἐμοὺς λόγους. Cf. *Pi. O.* 10 (11) 3 πόθι φρενὸς γέγραπται. The metaphor has been taken further in Plato’s *Theaetetus*, see *Tht.* 191c8-d10.

16 As shown, for example, on the famous School Cup by Douris (ca. 490 BCE; Altes Museum, Berlin).

17 Reece 2015, 43–44; see Thomas 1992, 123–127.

All this is factually correct. The problem, however, is that this is only one side of the coin. To claim that the literary culture of classical Greece was fundamentally oral is to disregard the fact that none of the orally delivered compositions appearing on Reece's list would have come into existence without being supported by written texts. Accordingly, there is no way they can be approached as genuine representatives of oral culture. In view of this, it is especially illuminating to take a closer look at the performance history of the Homeric poems, the only orally delivered text of classical Athens whose predecessors circulated in oral form also in the preliterate period.

Since the Persian conquest of Asia Minor in the middle of the sixth century BCE, Athens was rapidly turning into the religious, political and cultural centre of the Ionian lands. This is the historical background against which the tradition of Athenian standardization of the text of Homer should be approached.¹⁸ According to the tradition in question, the Athenian ruler Hipparchus son of Pisistratus initiated a regulated performance of the standardized text of the *Iliad* and the *Odyssey* at the recently established Panathenaic festival (the so-called Panathenaic Rule, or Panathenaic Regulation).¹⁹ The Panathenaic performance of Homer, apparently introduced in 522 BCE, was based either on a preexisting text (or texts) supplied by Ionian sources or, alternately, on a new transcript of the poems orally performed in Athens by one or more Ionian bards. However that may be, the standardization of the *Iliad* and the *Odyssey* granted the Athenian state the ownership of what was quickly recognized by all as the canonical text of Homer and substantially contributed to Athens' cultural hegemony. In the classical period, the Panathenaic text of Homer was being routinely performed by the rhapsodes, highly trained professionals who specialized in memorizing the *Iliad* and the *Odyssey* and reciting them before large audiences not only at the Panathenaia but also at other festivals all over Greece.²⁰

It is not difficult to discern that, although superficially similar to the performance of orally composed poems, the rhapsodic performance of Homer does not pass the test of orality. As a result of the Panathenaic Regulation, the once oral character of the Homeric poems had been radically transformed. The rhapsodes' performance followed strict rules which controlled the correspondence be-

¹⁸ See Nagy 2009, I§50, on 'the new Panionianism of the Peisistratidai of Athens' as triggered by the Persian occupation of old Ionian centres.

¹⁹ On the Panathenaic Regulation see Nagy 2011; on the tradition of the Athenian standardization of Homer see Andersen 2011 (with bibliography).

²⁰ On memorization see Xen. *Symp.* 3.6; on the written text of Homer at the rhapsodes' disposal see Xen. *Mem.* 4.2.10; on their specialization in performing the *Iliad* and the *Odyssey* see Pl. *Ion passim*; Lycurg. *Leoc.* 102. See further Pelliccia 2003; West 2011; Ready and Tsagalis 2018, 2–8.

tween the performance units ('songs') and the standardized text. That is to say, orally delivered though they were, the rhapsodic performances of Homer were controlled by a written text: they were conditioned, again, on the pre-existence of writing.

That the Athenians' appropriation of the Homeric epics took the form of replacement of the traditional practice of composition-in-performance by recitation of a fixed text highlights the deep cultural change effected by the penetration of writing into the inner fabric of ancient Greek civilization. Everything points in the direction that this change was initiated in Ionia, where the first written books appeared and where traditional epics were apparently fixed in writing for the first time. In fifth-century Athens, it was already taken for granted. And, although the reliability of oral tradition had already been challenged by Ionian prose writers,²¹ it should come as no surprise that the definitive diagnosis of the cultural transformation that Greece had undergone belonged to a fifth-century Athenian.

"It is", Thucydides wrote about his *History of the Peloponnesian War*, "a possession for eternity rather than a competition piece to listen to for the moment".²² For centuries, it had been taken for granted that oral performance, "a competition piece to listen to for the moment", was the only adequate means for preservation of the fame, literally, 'rumour' (*kleos*), of events of the past. Now, the incorporeal 'immortal fame' preserved in oral tradition, which belonged to all and to no one in particular, has given place to the 'possession for eternity' (*ktēma eis aei*), a formulation that epitomizes the two most essential characteristics of the products of writing, namely, their materiality as a guarantee of preservation and their status as objects of ownership.²³ By the time of Diodorus Siculus (1st century BCE), this transformation was a *fait accompli*. "Who, indeed", he asks in the *Historical Library*, "could compose a worthy laudation of the knowledge of letters? For it is by such knowledge alone that the dead are carried in the memory of the living ..."²⁴

It is against this background that Plato's famous invective against writing (*Phaedrus* 274b 6–278b 6) should be approached. Contrary to Havelock's influen-

21 See, e.g., Hecataeus of Miletus (ca. 550 – ca. 476 BC E) Fr. 1 Jacoby "I write what seems to me to be true, for the stories (*logoi*) of the Greeks are numerous and, as it appears to me, absurd".

22 Thuc. 1.22.4 κτήμα τε ἐς αἰεὶ μᾶλλον ἢ ἀγώνισμα ἐς τὸ παραχρήμα ἀκούειν ζύγκεται. My translation.

23 See Gribble 1998, 46: "Thucydides' status as a (presumably, primarily) non-oral narrator, as writer rather than entertainer, helps to explain his striving after an accurate and lasting object (like an inscription)". See also Gentili and Cerri 1988, 11–13.

24 Diod. Sic. 12.13.2 τίς γὰρ ἂν ἄξιον ἐγκώμιον διάθοιτο τῆς τῶν γραμμάτων μαθήσεως; διὰ γὰρ τούτων μόνων οἱ μὲν τετελευτηκότες τοῖς ζῶσι διαμνημονεύονται κτλ. Tr. C. H. Oldfather.

tial theory, Plato was not a transitional figure placed between the oral stage that preceded him and the post-Platonic stage of the domination of literacy. After centuries of the increasingly intensive use of writing, the fourth-century Athenian society to which Plato belonged could hardly be characterized as transitional.²⁵ Rather, as in many other cases, Plato's was a dissenting opinion, and in voicing it he pursued his own agenda. Plato attacked writing because he saw in it an attribute of mass culture, something that would make one's word indiscriminately accessible to all:

Plat. *Phdr.* 275d 9-e2

And when once it is written, every composition (*logos*) is trundled about everywhere in the same way, in the presence both of those who understand what it is about and those who have nothing at all to do with it, and it does not know how to address those it should address and not those it should not.

This distinctly elitist stance is paralleled in esoteric traditions all over the ancient world, thus undermining the approach, known as technological determinism, that orality and literacy should be arranged in a hierarchical order, where orality would be associated with backwardness and social disadvantage and literacy with cultural elitism.²⁶

Small wonder, therefore, that Plato's position on writing did not gain recognition beyond the circle of his followers. The Athenian democracy kept to its old ways, so much so that on the eve of the Macedonian conquest the orator and statesman Lycurgus, once a student of Plato,²⁷ symbolically re-enacted the Panathenaic Regulation by initiating the state production of an authorized text of the corpus of classical Attic tragedy:

[Plut.] *Vit. Dec. or.* 841

[Lycurgus also introduced] the law that bronze statues of the poets Aeschylus, Sophocles, and Euripides be erected, that their tragedies be written out and preserved in a public depository (*ἐν κοινῷ*), and that the clerk of the state read them to the actors who were to perform their plays for comparison of the texts (*καὶ τὸν τῆς πόλεως γραμματέα παραναγι-*

²⁵ See Nails 1995, 158–178. On the range of literature available to Plato see also Kutash 2007.

²⁶ See further Finkelberg 2007. See also Scolion / Scolion 1995, 22: “The belief in progress transforms all of our language of the primary, of the traditional into a subtle implication of backwardness. A worldview of progress cannot see its own antecedents as anything but an awkward groping toward the present to be gotten over and forgotten as quickly as possible”.

²⁷ [Plut.] *Vit. Dec. or.* 841: “He received his first instruction in philosophy from Plato the philosopher”.

γνώσκειν τοῖς ὑποκρινομένοις) and that it be unlawful to depart from the authorized text in acting (οὐκ ἐξεῖναι γὰρ <παρ'> αὐτοὺς ὑποκρίνεσθαι).²⁸

“The enactment of Lycurgus”, Ruth Scodel wrote in this connection, “was a Panathenaic rule for the three tragedians”.²⁹ Just as their forefathers two hundred years before, the fourth-century Athenians signalled their ownership of a cultural asset of Panhellenic significance by the act of production and conservation of a canonical text, yet another *ktēma eis aei* meant to supersede the fluidity inherent in oral performance. Needless to say, this is hardly the way in which a genuine oral society would behave.

3 Conclusions

To adequately assess the role of literacy in a given society, an exclusive focus on statistical data is not enough. As Nicholas Horsfall put it in his “Statistics or States of Mind?”, writing is a state of mind and therefore cannot be accounted for by statistics alone. According to William A. Johnson:

The moment seems right, therefore, to try to formulate more interesting, productive ways of talking about the conception and construction of ‘literacies’ in the ancient world – literacy not in the sense of whether 10 percent or 30 percent of people in the ancient world could read or write, but in the sense of text-oriented events embedded in particular sociocultural contexts.³⁰

Consider, for example, the following. As a 2005 UNESCO report testifies, pockets of illiteracy or low literacy have been registered even in highly literate contemporary societies:³¹ nevertheless, no one would claim on these grounds that these societies should be classified as nonliterate. On the other hand, although high degrees of literacy were achieved in some ancient Near Eastern societies, writing functioned in these societies as no more than a strictly professional skill confined to the scribes’ use alone (the so-called scribal literacy), and the same seems to be

²⁸ Trans. H. N. Fowler; slightly adapted. See further Scodel 2007; Hanink 2014, 60–74.

²⁹ Scodel 2007, 150. For Lycurgus’ explicit reference to the Panathenaic Regulation, which he summarily ascribes to ‘the forefathers’, see *Against Leocrates* 102.

³⁰ Horsfall 1991; Johnson 2009, 3.

³¹ Global Education Monitoring Report Team 2005. See Burns 1981, 384: “The U.S. Navy, for example, routinely rejects about thirty percent of its would-be recruits because of “functional illiteracy”, i. e., the inability to function effectively in a given literate society”.

true of the Mycenaean Linear B script.³² What matters is apparently not so much who read what and how proficiently but, rather, to what degree writing penetrated the infrastructure of the society and how significant was the place it occupied in people's minds.

As I hope to have shown, it would be misleading to claim that "writing as such is not thought an important defining characteristic of the Greeks or the Greek *polis*".³³ A more nuanced approach is needed. Orality and literacy existed side by side, and the social framework of classical Athens encompassed both. Although in the face-to-face community of the polis oral communication was indeed all-pervading, Athens of the fifth and fourth centuries BCE can hardly be qualified as an oral society. Literacy penetrated all spheres of social and cultural life and was an inseparable part of the Athenians' way of thinking. Above all, it provided the society of classical Athens with a latent but robust infrastructure which was equally shared by its both literate and non-literate or semi-literate members.³⁴ Take literacy away, and Athens as we know it will cease to exist.

It goes without saying that classical Athens and the Greco-Roman world in general fall short of the contemporary standards of literacy – such as, for example, those set by Harris, whose point of reference is the situation "prevailing in the most educated countries of the last 200 years".³⁵ The same, however, would also be true for any other pre-modern or early modern society. This is why I find it much more profitable to approach the position of literacy in a given society along the lines of Brian Stock's distinction between the so-called 'strong' thesis, which accounts for historical situations where "changes in mentality may be the result of bringing reading and writing to a society for the first time", and the 'weak' thesis, which "attempts to account for the interaction of the oral and the written after the initial step is taken". "Therefore", he concludes:

32 On 'scribal literacy' see Harris 1989, 7–8 and n. 1 above; on Linear B see Hooker 1979, 72; Sherratt 2003, 228.

33 Thomas 1992, 130; cf. Harris 1989, 12, but see Pébarthe 2006, 347: "Peut-on alors véritablement qualifier la société athénienne de société orale et traquer d'une mentalité lettrée (*document minded*) au cours du IV^e siècle?"

34 See Burns 1981, 377: "No matter who prepares the document, a society in which written documents regulate social, legal, and commercial relationships must be called a literate society". See also Pébarthe 2006, 18: "Une réflexion sur la place de l'écriture dans la culture grecque requiert donc une approche plus ambitieuse, qui, en outre, intègre l'importance accordée à l'écriture même par les non alphabétisés".

35 Harris 1989, 331. See also Harris 1989, 327, on the Greco-Roman world as a whole: "an intermediate condition, neither primitive nor modern".

cognitive change cannot be based on a straightforward transition from nonliteracy to literacy. This is not even the central issue. The focus of interest lies in the way in which speech and writing answer to different social priorities.³⁶

Just as medieval Europe, the focus of Stock's discussion, Athens of the fifth and fourth centuries BCE firmly belonged to the latter category.³⁷

References

- Andersen, Ø. (2011), "Pisistratean Recension", in: Finkelberg 2011, 668–670.
- Anderson, C. A. / Dix, T. (2014), "Λαβὲ τὸ βιβλίον: Orality and Literacy in Aristophanes", in: Scodel 2014, 77–86.
- Bessios, M. / Tzifopoulos, Y. / Kotsonas, A. (eds.) (2012), *Methone I: Inscriptions, Graffiti and Trademarks on Geometric and Archaic Pottery from the 'Ypogeio'*, Thessaloniki.
- Burns, A. (1981), "Athenian Literacy in the Fifth Century B. C.", in: *Journal of the History of Ideas* 42, 371–387.
- Clay, J. S. / Malkin, I. / Tzifopuloos, Y. Z. (eds.) (2017), *Panhellenes at Methone. Graphê in Late Geometric and Protoarchaic Methone, Macedonia (ca. 700 BCE)*, Berlin – New York.
- Cooper, C. (ed.) (2007), *The Politics of Orality*. Leiden – Boston.
- Davison, J. A. (1962), "Literature and Literacy in Ancient Greece", in: *Phoenix* 16: 141–156, 219–233.
- Detienne, M. (2010 [1988]), "L'écriture et ses nouveaux objets intellectuels en Grèce", in: Detienne 2010, 7–26.
- Detienne, M. (ed.) (2010 [1988]), *Les savoirs de l'écriture en Grèce ancienne*, Villeneuve-d'Ascq.
- Dunbar, N. (1998), *Aristophanes' Birds. Edited with Introduction and Commentary*, Oxford.
- Finkelberg, M. (2007), "Elitist Orality and the Triviality of Writing", in: Cooper 2007, 293–305.
- Finkelberg, M. (2014), "Boreas and Oreithyia: A Case-Study in Multichannel Transmission of Myth", in: Scodel 2014, 87–100.
- Finkelberg, M. (ed.) (2011), *The Homer Encyclopedia*, Malden, Mass. – Oxford.
- Gentili, B. / Cerri, G. (1988), *History and Biography in Ancient Thought*, Amsterdam.
- Global Education Monitoring Report Team (corporate author) (2005), *Education for All: Literacy for Life. EFA Global Monitoring Report*, <https://unesdoc.unesco.org/ark:/48223/pf0000144270>
- Gribble, D. (1998), "Narrator Interventions in Thucydides", in: *Journal of Hellenic Studies* 118: 41–67.
- Hanink, J. (2014), *Lycurgan Athens and the Making of Classical Tragedy*, Cambridge.
- Harris, W. V. (1989), *Ancient Literacy*. Cambridge, Mass. – London.
- Havelock, E. A. (1963), *Preface to Plato*, Cambridge, Mass. – London.
- Hooker, J. T. (1979), *The Origin of the Linear B Script*, Salamanca.
- Horsfall, N. (1991), "Statistics or States of Mind?", in M. Beard / A. K. Bowman / M. Corbier (eds.), *Literacy in the Roman World, Journal of Roman Archaeology*, Supplementary series 3, Ann Arbor, 59–76.

³⁶ Stock 1990, 5–6. Walter Ong's concept of 'secondary', or 'literary', orality as distinct from the 'primary' orality of preliterate man would also be appropriate here, see Ong 1971, 285; 1982, 157. See also Scolion / Scolion 1995, 19; Pébarthe 2006, 16–17.

³⁷ I would like to thank the anonymous referees of this paper for their helpful comments.

- Jeffery, L. H. (1990), *The Local Scripts of Archaic Greece*, Revised edition, Oxford.
- Johnson, W. A. (2000), "Toward a Sociology of Reading in Classical Antiquity", in: *American Journal of Philology* 121, 593–627.
- Johnson, W. A. (2009), "Introduction", in: Johnson / Parker 2009, 3–10.
- Johnson, W. A. / Parker, H. N. (eds.) (2009), *Ancient Literacies. The Culture of Reading in Greece and Rome*, Oxford.
- Kutash, E. F. (2007), "What Did Plato Read?", in: *Plato Journal* 7, 1–20.
- Missiou, A. (2011), *Literacy and Democracy in Fifth-Century Athens*, Cambridge.
- Nagy, G. (2009), *Homer the Preclassic*, Online edition 2009, <http://chs.harvard.edu/CHS/article/display/4377> (= G. Nagy (2012), *Homer the Preclassic*, Berkeley – Los Angeles).
- Nagy, G. (2011), "Athens and Homer", in: Finkelberg (2011), 112–116.
- Nails, D. (1995), *Agora, Academy, and the Conduct of Philosophy*, Dordrecht.
- Ong, W. J. (1971), *Rhetoric, Romance, and Technology. Studies in the Interaction of Expression and Culture*, Ithaca – London.
- Ong, W. J. (1982), *Orality and Literacy: The Technologizing of the Word*, London.
- Pébarthe, Chr. (2006), *Cité, démocratie et écriture: Histoire de l'alphabétisation d'Athènes à l'époque classique*, Paris.
- Pelliccia, H. (2003), "Two Points About Rhapsodes", in: M. Finkelberg / G. G. Stroumsa (eds.), *Homer, the Bible, and Beyond. Literary and Religious Canons in the Ancient World*, Leiden – Boston, 97–116.
- Perlman, S. (1964), "Quotations from Poetry in Attic Orators of the Fourth Century B.C." in: *American Journal of Philology* 85, 155–172.
- Powell, B. B. (2002), *Writing and the Origins of Greek Literature*, Cambridge.
- Powell, B. B. (2011), "Inscriptions", in: Finkelberg 2011, 409–411.
- Ready, J. L. / Tsagalis, Chr. C. (2018), "Introduction", in: J. L. Ready. / C. C. Tsagalis (eds.), *Homer in Performance: Rhapsodes, Narrators, and Characters*, Austin, 1–26.
- Reece, S. (2015), "Orality and Literacy: Ancient Greek Literature as Oral Literature", in: M. Hose / D. Schenker (eds.), *A Companion to Greek Literature*, Malden, Mass. – Oxford, 43–57.
- Scodel, R. (2007), "Lycurgus and the State Text of Tragedy", in: Cooper 2007, 129–154.
- Scodel, R. (ed.) (2014), *Between Orality and Literacy: Communication and Adaptation in Antiquity*. Leiden – Boston.
- Scolion, R. / Scolion, S. (1995), "Somatic Communication: How Useful is 'Orality' for the Characterization of Speech Events and Cultures?", in: U. M. Quasthoff (ed.), *Aspects of Oral Communication*, Berlin – New York, 19–29.
- Sherratt, S. (2003), "Visible Writing: Questions of Script and Identity in Early Iron Age Greece and Cyprus", in: *Oxford Journal of Archaeology* 22, 225–242.
- Stock, B. (1990), *Listening for the Text. On the Uses of the Past*, Baltimore.
- Stoddard, S. / Whitley, J. (1988), "The Social Context of Literacy in Archaic Greece and Etruria", in: *Antiquity* 62, 761–772.
- Thomas, R. (1992), *Literacy and Orality in Ancient Greece*, Cambridge.
- Thomas, R. (2009), "Writing, Reading, Public and Private 'Literacies': Functional Literacy and Democratic Literacy in Greece", in Johnson / Parker 2009, 13–45.
- Turner, E. G. (1952), *Athenian Books in the Fifth and the Fourth Centuries B.C.*, London.
- West, M. L. (2011), "Rhapsodes", in: Finkelberg 2011, 745–746.

Alessandro Vatri

The Need for Voice in Classical Greek: Reading, Complexity, and Prose Rhythm

Abstract: This chapter examines how the oral character of certain Classical Greek texts may be revealed by features that betray the ability for speakers to use non-verbal signs that could not be fully encoded in writing, making it necessary for a text to be vocalized in order to achieve its intended effects. Such a necessity for competent delivery emerges, for instance, from the analysis of complex sentences whose syntax would be ambiguous in the absence of auditory clues, as well as from early descriptions of rhythmic phenomena in prose, as examples from Aristotle's *Rhetoric* illustrate.

Keywords: Ambiguity; rhythm; reading; Aristotle; comprehension.

1 Introduction

Assessing the orality of an ancient literary text is no straightforward task. If anything, the very notion of orality is an elusive one and may refer to rather distinct phenomena. Taken literally, the adjective 'oral' simply denotes the property of taking place in the spoken medium.¹ However, this term came to acquire a "cultural value" — in Bakker's words² — indicating mental habits and modes of expression that stand in opposition to what we perceive as characterizing (our own) 'written' culture. 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. The idea of an oral conception may be further elaborated on by drawing a distinction between an oral 'mentality' characterizing entire cultures (and shaping the minds of their members)³ and a linguistic/pragmatic understanding of orality, according to which a (written or spoken) text

¹ See Lord 1995, 188–189, Bakker 1997, 7.

² Bakker 1997, 7.

³ So e.g. Bakker 1997, 8. Lord (1995, 187–188) ascribes this perspective to what he terms the "philosophical school" in oralist criticism.

may be conceptionally oral if it displays communicative strategies that are most commonly associated with speaking in a given culture.⁴

The notion of orality may also be connected with a third, purely formal dimension — one that reflects the use of a well-defined ‘oral style’ conceived as the product of specific techniques of literary production and dissemination in traditional oral poetry — which Lord calls “philological” orality.⁵

The ‘philological’ and the ‘cultural/conceptual’ perspectives come with their own diagnostics for the orality of a text in their respective understandings. A text would be ‘philologically’ oral if it displays features such as formulaic language or ring-composition, to name a couple, whereas ‘cultural/conceptual’ orality would transpire from the (re)presentation of thought processes and sociological dynamics we ascribe to preliterate or aliterate cultures — for example, the preference for oral testimonies and oaths over written documents.⁶

When it comes to operationalizing orality from a ‘literal’ or a ‘pragmatic/conceptual’ standpoint, in turn, we first need to identify sets of “telltale features”⁷ that distinguish texts conceived for oral reception from those that were intended for other modes of communication. Ideally, the identification of such features should be based on the empirical observation of variation across sets of texts representing the spoken and written mode — a test corpus — not including the texts whose orality we need to assess. However, this task may face serious challenges. For one thing, cross-linguistic research has shown that it is very difficult to observe clear-cut linguistic correlates to variation in medium alone, with all other variables being controlled for.⁸ For another, all of the available record is written, which implies that variation may not be observed directly. As a result, the identification of ‘telltale features’ of ‘literal’ or ‘pragmatic/conceptual’ orality is fundamentally assumed rather than empirical.⁹

The keynote of all of these approaches to orality — and a common basis for assumptions about what makes a text ‘oral’ — seems to be an often implicit negative outlook on the notion of orality itself. As members of societies where the

4 See Oesterreicher 1997, 192–195.

5 Lord 1995, 189; cf. Bakker 1997, 8–9.

6 See Thomas 1992, 10.

7 As Foley (1999, 21) calls them.

8 See Vatri 2017, 9–13.

9 Assumptions may be made at multiple levels. For example, if one were to select specific literary texts or genres (e.g. drama or oratory) as representative of the oral mode, one would need to decide *a priori* in what ways the extant texts are related to oral performance (see Vatri 2017, 37–46 on these problems) and if whether/how to filter out the effect of other communicative or generic concerns and stylization on the form of the texts — a problem that all research on oral language has had to deal with.

technology of writing is pervasive,¹⁰ we tend to think about orality in terms of the constraints that the unavailability of writing imposes both on the cognitive resources of speakers and hearers and on the very ways in which texts are received in a given socio-cultural context.

Early formulations of the oral theory sought to explain the features of ‘philological’ orality precisely in these terms. As Foley put it, “the pressure of composition in performance, it was argued, must account for the poet’s deployment of ready-made verses and typical scenes.”¹¹ The same applies to the ‘telltale features’ of ‘literal’ and ‘pragmatic/conceptual’ orality, whose selection is more often than not based on the tacit equation of orality with the slippery notion of spoken language¹² and on the idea that, once again, the on-line production and comprehension of language are “determined by cognitive constraints” that exceed those that condition reading and writing.¹³

Constraints, however, do not tell the whole story. Much as the cognitive advantages of the typical devices of ‘philological orality’ are undeniable,¹⁴ they may be invoked as an explanation not so much for every instance of such devices as for their origin. As anthropological fieldwork has shown, the aliterate production and performance of traditional oral poetry need not be as constrained for skilled practitioners as we might assume it to be,¹⁵ and the formal elements that characterize it may constitute an expressive and literary repertoire that may be referenced for its own sake and cultural value.¹⁶

Analogously, constraints that may be associated with the spoken channel from a ‘literal’ or ‘pragmatic’ perspective are by and large not determined by the physical channel itself but reflect other components of the socio-cultural situations in which language is used. For example, while it is true that samples of language characterized by a high degree of fragmentation or emotional involvement tend to be spoken, it is not the case that all instances of spoken language show these tendencies — certain oral genres are very ‘formal’, so to speak. Conversely,

¹⁰ See Bakker 1997, 7–8 on the “inbuilt biases of our own writing culture”.

¹¹ Foley 1999, 5.

¹² See Vatri 2017, 9–13 for a review.

¹³ Bakker 1990, 4.

¹⁴ See Rubin 1995 for a systematic study of oral/traditional literature from the point of view of cognitive psychology.

¹⁵ See e.g. Finnegan 1979, 73–86 and Finnegan 1988, 95–98, 101–109.

¹⁶ A point effectively summarized by Foley (1999, 13) as “the crucial term in the phrase ‘oral tradition’ is the latter one”.

these ‘oral’ tendencies may well be displayed by written language produced for real-time interaction.¹⁷

Now, we may well be able to identify situational components that characterize specific types of oral interactions in a given society and pinpoint the constraints on production and reception that they may determine in order to come up with sets of formal features to look for in texts that we can reasonably assume were originally composed for reception in precisely those situations. This is the approach taken, for instance, by Gagarin in his study of the orality of Attic prose,¹⁸ which describes the distribution of textual features he connects to ‘literal’ and ‘conceptional’ orality across oratorical texts meant for either oral delivery or written circulation. In a study of this kind, two crucial variables — the situational features of the contexts of oral delivery for the studied genre and the connection of each text with oral delivery — are (tacitly) controlled for or at least specified by the initial assumptions. However, when it comes to texts whose connection with oral performance is unclear and difficult to make informed assumptions about, the identification of formal features that allegedly reveal orality may yield conflicting results.

The Aristotelian studies offer a case in point. Lengen, for example, interprets the highly structured presentation of arguments in the *Rhetoric* — typically starting with a definition, with virtually no discussion of other opinions, and with a penchant for catalogues and enumerations — as instrumental to written consultation and detrimental to listening, in contrast with the representation of dialectic processes in the *Nicomachean Ethics*, which would betray the text as a “Vorlesungsmanuskript”.¹⁹ According to Lengen, the text of the *Nicomachean Ethics* builds up the conclusion before the receivers instead of presenting them a finished, systematic product. Such a way of proceeding, which mimics oral discussions,²⁰ would get the listeners directly involved into the train of thought and would make the text difficult to consult²¹ but better suited to oral reception than a ‘handbook’ like the *Rhetoric*.

These very features, however, have been interpreted in the opposite direction by Lang, who regards the unpacking of an initial definition into individual points as a way to provide mnemonic markers to listeners, whereas “the postponement of the main conclusion” would be “impossible within the framework (both rhetor-

17 See Vatri 2017, 12

18 Gagarin 1999.

19 Lengen 2002, 168, 223–229

20 On Aristotle’s ‘oral’ methods see also Föllinger 1993, Melia 2004, Taub 2015, and Quarantotto 2017.

21 Lengen 2002, 106.

ical and logical) of an oral tradition.”²² The elements of ‘imagined orality’²³ Lengen recognizes in the *Nicomachean Ethics* would thus not necessarily make the text optimal for oral reception, whose constraints would be handled more effectively by the rigorous structures of a text like *Rhetoric*. The fact that we cannot say much on the intended mode of reception for these treatises does not, of course, help us decide who to agree with. Our belief fundamentally depends on whose assumptions we find more convincing regarding strategies for optimizing texts for (the constraints of) oral performance.

Possibly, a way around impasses of this kind is to take a positive outlook over orality as a feature of communicative situations — namely, to think about the oral medium as an enabling factor rather than a source of constraints. Oral communication is intrinsically multimodal,²⁴ and this aspect of its nature affords speakers to convey bits of information that writers may have a hard time encoding graphically.²⁵ Texts conceived for oral communication are not necessarily cognitively ‘simpler’, ‘stripped-down’ versions of what conceptionally written versions may have looked like. In fact, texts intended for oral performance can afford rerouting (from the perspective of a writer) information to other channels than the graphic one, which may result in increasing the complexity or even the ambiguity of the written text as such. In this connection, the advantages of the oral channel were already recognised by early Greek theoreticians. Texts composed for oral delivery may afford embellishments that the written page is not able to convey nor script to the full — such as rhythm, according to Isocrates (5.26–27), or a convincing rendering of asyndetic sequences, according to Aristotle (*Rh.* 3.12, 1413b17–31) — and may contain syntactic ambiguities that are automatically removed by correct prosodic phrasing (see for instance Arist. *SE* 20 177b1–9). On top of this, oral performance is not necessarily fully dictated by a written script; as Alcidas recognized in the early fourth century, speakers may improvise and adapt the text to the circumstances in real time (*Soph.* 21–25).

The oral character of certain texts, in principle, may thus be revealed by their *need for voice*. While this may be obvious for performing genres (such as drama or oratory), this can lead to surprising shifts of perspective when it comes to texts whose original communicative status is less transparent.

²² Lang 1998, 22–23.

²³ As Föllinger (1993, 280) efficaciously calls it.

²⁴ See e.g. Giordano 2022, 174.

²⁵ Vatri 2017, 20 with further references.

2 Silent Reading — a False Start

As a side note, it is worth reminding that ironically, one of the aspects of the Greek writing culture for which the need for voice has been most prominently advocated is the technology of writing itself. In particular, the medievalist Paul Saenger suggested that it was physiologically impossible for ancient Greeks and Romans to read silently in the absence of spaces between words, as words could not be identified based on the visual input alone but needed to be ‘heard’ (either vocally or mentally) by the reader in order to be recognized and processed.²⁶ This idea was disproved independently by Battezzato and myself²⁷ based on the fact that proficient readers of an unspaced alphabetic script such as the Thai abugida are able to read silently and do not display any difference in eye-movement patterns from proficient readers of spaced Western alphabets. While Western-script readers identify words based on the position of spaces and experience sizeable disruptions in their reading performance when these are removed, Thai readers are guided by the frequency of graphemes (and their combinations) at word boundaries. A statistical study of the frequency of graphemes in a 278,098-word sample of Classical Attic has shown that about 60% of the 420 phonetically possible combinations occur either more than 70% or less than 30% of the time at word boundaries and they may well have provided visual cues for or against segmentation respectively.²⁸

There was no physiological need for early Greek readers to vocalize their *scriptio continua* texts in order to be able to process the visual input. It is in other domains that the competent vocalization of a written text could have a major impact both on language comprehension and on the aesthetic experience of its recipients.

3 ‘Difficult’ Sentences

The ability for paralinguistic (in particular, prosodic) information to support the real-time parsing of syntax and to clarify semantic and information-structural properties of utterances is well established in modern psycholinguistics²⁹ and,

²⁶ Saenger 1997, 1–17.

²⁷ Battezzato 2009, Vatri 2012.

²⁸ Vatri 2012.

²⁹ See Carlson 2009, Wagner / Watson 2010, and Pratt 2018 for useful reviews. See also Vatri 2017, 175–187 for an overview.

as mentioned above, did not escape the ancient Greek theoreticians either. In the *Rhetoric* (3.5 1407b14–18), for example, Aristotle presents the beginning of Heraclitus' book (22 B1 D.-K.) as an example of a sentence containing a word whose syntactic attachment is ambiguous:

τοῦ λόγου τοῦδ' ἐόντος αἰεὶ ἀξύνετοι ἄνθρωποι γίνονται.

Of this reason that exists always ignorant men are.

Aristotle comments that Heraclitus' prose is hard to punctuate because it is unclear whether certain words belong with what precedes or what follows them (τὰ γὰρ Ἡρακλείτου διαστίξαι ἔργον διὰ τὸ ἀδηλον εἶναι ποτέρῳ πρόσκειται, τῷ ὕστερον ἢ τῷ πρότερον). The offending word in the example is αἰεὶ, which is positioned between the participle ἐόντος and the verb phrase ἀξύνετοι ἄνθρωποι γίνονται and may in principle modify any of the two. Punctuation on either side of αἰεὶ would provide a graphic cue to a prosodic boundary for both silent and oral readers and would remove the ambiguity from this sentence.³⁰ Analogously, in the *Sophistical Refutations* (20 177b1–17) Aristotle presents fallacies based on 'division and combination' (διαίρεσις/σύνθεσις) as a purely graphic matter; if words are separated or combined properly when the sentence is vocalized, there is no ambiguity (οὐ γὰρ ἔστι διττόν). Therefore, a sentence like ἰδεῖν τοῖς ὀφθαλμοῖς τυπτόμενον (20 177b10–12) may only be interpreted as meaning either 'to see with one's eyes someone being beaten' or 'to see someone beaten by means of one's eyes' when a prosodic boundary separates τοῖς ὀφθαλμοῖς from τυπτόμενον or from to ἰδεῖν respectively.³¹

The disambiguating power of prosody, however, is not limited to such rare cases of ambiguity in the linear order of the constituents of a sentence. Take, for example, this relatively complex sentence from Aristotle's *Rhetoric* (1.1 1355a4–10):

ἐπεὶ δὲ φανερόν ἐστιν ὅτι ἡ μὲν ἐντεχνος μέθοδος περὶ τὰς πίστεις ἐστίν, ἡ δὲ πίστις ἀπόδειξις τις (τότε γὰρ πιστεύομεν μάλιστα ὅταν ἀποδείχθαι ὑπολάβωμεν), ἔστι δ' ἀπόδειξις ῥητορικὴ ἐνθύμημα, καὶ ἔστι τοῦτο ὡς εἰπεῖν ἀπλῶς κυριώτατον τῶν πίστεων, τὸ δ' ἐνθύμημα συλλογισμὸς τις, περὶ δὲ συλλογισμοῦ ὁμοίως ἅπαντος τῆς διαλεκτικῆς ἐστὶν ἰδεῖν, ἢ αὐτῆς ὅλης ἢ μέρους τινός, δῆλον δ' ὅτι, κτλ.

Since it is obvious that a system arranged according to the rules of art is only concerned with proofs; that proof is a sort of demonstration (for we are most strongly convinced when we

³⁰ See Steinhauer 2003, Hirotsu / Lyn / Rayner 2006 on the effect of punctuation in reading comprehension.

³¹ See Vatri 2017, 112–114.

suppose anything to have been demonstrated); that rhetorical demonstration is an enthymeme, and this, generally speaking, is the strongest of rhetorical proofs; that the enthymeme is a kind of syllogism, and that it is the function of dialectic as a whole, or of one of its parts, to consider every kind of syllogism in a similar manner, it is clear that, etc. (transl. Freese 1926, adapted)

This sentence opens with an initial subordinate ἐπεὶ clause connected to the preceding section by text-structuring δέ. The clause hosts in turn a number of ὅτι clauses linked by an extended contrastive μέν... δέ... chain (ἢ μέν... ἢ δέ... ἔστι δ(έ)... τὸ δ(έ)... περὶ δέ...), which is eventually wrapped up by the main clause (δῆλον):

- ἐπεὶ δὲ φανερόν ἐστιν ὅτι
 - ἢ μὲν ἔντεχνος μέθοδος περὶ τὰς πίστεις ἐστίν,
 - ἢ δὲ πίστις ἀπόδειξις τις
 - (τότε γὰρ πιστεύομεν μάλιστα ὅταν ἀποδεδείχθαι ὑπολάβωμεν),
 - ἔστι δ' ἀπόδειξις ῥητορικὴ ἐνθύμημα,
 - καὶ ἔστι τοῦτο ὡς εἰπεῖν ἀπλῶς κυριώτατον τῶν πίστεων,
 - τὸ δ' ἐνθύμημα συλλογισμὸς τις,
 - περὶ δὲ συλλογισμοῦ ὁμοίως ἅπαντος τῆς διαλεκτικῆς ἐστὶν ἰδεῖν, ἢ αὐτῆς ὅλης ἢ μέρους τινός,
- δῆλον δ' ὅτι, κτλ.

The main clause is itself connected to what precedes it by the particle δέ. Given that sentence comprehension is an incremental process, and that both readers and listeners start forming a mental representation of the structure and meaning of a sentence as soon as they encounter each new word either visually or acoustically,³² we may surmise that a structure like that of this sentence might cause some hiccups for first-time readers (especially in the absence of fully-fledged punctuation). Possible misinterpretations on first-pass reading might be due to either early or late closure, so to speak, of the subordinate structure. If the real main clause is linked to the preceding context by δέ, in principle any of the coordinate ὅτι clauses following the initial pair (introduced by μέν and δέ) could be initially read as the main clause (early closure). Similarly, but perhaps less plausibly from a semantic point of view, the sequence δῆλον δ(έ) could be initially interpreted as the beginning of another coordinate ὅτι clause instead of the main clause (late closure).

Such first-sight reading problems would probably be avoided if the sentence were delivered orally in a competent manner. In particular, intonation could pre-

32 See Vatri 2017, 141 with further references.

vent early closure by signalling to listeners that a clause in the μέν... δέ... chain must be added to the sequence of ὅτι clauses (an effect that in English, for instance, is produced by rising intonation), while the main clause could be marked off prosodically as such (e.g. through falling intonation). Regardless of the exact phonetics of such intonation patterns, we have some (admittedly late) evidence for this type of distinctions in Classical Greek. A prosodic difference between pauses separating contrastive μέν... δέ... clauses and those separating clauses linked by text-structuring δέ was captured by the second-century AD grammarian Nicanor, who proposed that clauses connected by particles such as δέ, γάρ, ἀλλά, and αὐτάρ should be marked off by a ὑποτελεία στιγμή measuring three χρόνοι, while contrastive or disjunctive clauses (μέν... δέ..., οὐ... ἀλλά..., ἤ... ἢ...) were to be marked off by a πρώτη ἄνω στιγμή measuring only two χρόνοι.³³ Further indirect evidence for the ‘recitability’ of structures like that of the Aristotelian example may be drawn from the fact they may be found in a performing genre such as oratory, as the following sentence of Demosthenes (20.80) illustrates:

ἐπειδὴ δὲ τούναντίον ἑπτακαίδεκα μὲν πόλεις εἴλεν, ἑβδομήκοντα δὲ ναῦς ἔλαβεν, τρισχίλιους δ' αἰχμαλώτους, δέκα δὲ καὶ ἑκατὸν τάλαντ' ἀπέφηνεν, τοσαῦτα δ' ἔστησε τρόπαια, τηνικαῦτα δ' οὐκ ἔσται κύρι' αὐτῶ τὰ δοθέντ' ἐπὶ τούτοις;

But since, on the contrary, he took seventeen cities, and captured seventy ships and three thousand prisoners, and paid into the treasury a hundred and ten talents, and set up so many trophies, in that case shall not his rewards for these services stand good?

The initial *colon* ἐπειδὴ δὲ τούναντίον (containing text-structuring δέ) introduces a series of coordinate clauses connected to each other by contrastive μέν... δέ... and building up to the main clauses, which is itself linked to the subordinate structure by text-structuring δέ:

- ἐπειδὴ δὲ τούναντίον
 - ἑπτακαίδεκα μὲν πόλεις εἴλεν,
 - ἑβδομήκοντα δὲ ναῦς ἔλαβεν,
 - τρισχίλιους δ' αἰχμαλώτους,
 - δέκα δὲ καὶ ἑκατὸν τάλαντ' ἀπέφηνεν,
 - τοσαῦτα δ' ἔστησε τρόπαια,
- τηνικαῦτα δ' οὐκ ἔσται κύρι' αὐτῶ τὰ δοθέντ' ἐπὶ τούτοις;

A difference between this oratorical sentence and the example from Aristotle's *Rhetoric* lies in the complexity of the subordinate structure. In the sentence of Aristotle, one of the δέ clauses hosts a γάρ parenthetical, while another is extend-

33 See Blank 1983, cf. Devine and Stephens 1994, 421–422.

ed by a καί coordinate clause which in turn includes parenthetical ὡς εἰπεῖν. Much as complexities of this kind do increase the cognitive load placed on the working memory of readers and listeners — longer and more numerous utterances are harder to process and recall than shorter and fewer ones — such a negative effect may in fact be mitigated by prosody. Experimental data on the recall of auditory data shows that participants perform much worse in the absence of correct prosodic information when the input is larger than three intonational phrases.³⁴ Paradoxically, a sentence like that of Aristotle would benefit much more from being received orally than that of Demosthenes, not to mention the fact that, as Alcidas would have it, its complexity could have been reduced in oral delivery if, for example, the text of the *Rhetoric* was to be used as a blueprint for lectures as envisaged by Lang. That is to say, if the text was to serve as a classroom *aide-mémoire*, parentheses and remarks could have been omitted or postponed. From the point of view of language production, the example from Aristotle's *Rhetoric* reads very 'written' in that it displays features that convey communicative characteristics that we may often associate with prototypically written genres — the sentence is carefully planned and structured, it has high informational density, and it is emotionally detached.³⁵ From the point of view of comprehension, however, the sentence 'needs' voice; even though its linguistic form may not be as optimal as it gets for oral reception, listeners of a competent delivery would most probably have an edge over readers of a barely punctuated text.

4 The Key to Rhythm

Prose rhythm is another linguistic/stylistic phenomenon whose understanding is greatly affected by the tension between the written text and its oral/acoustic dimension. The first step modern critics take for the identification and assessment of the rhythmic features of stretches of Greek prose is to scan the text — a procedure that mechanically extracts the phonological weight of each syllable from the sequence of graphemes the written text consists of, following the segmentation of the text into prosodic units based on the editorial punctuation, the position of clitics (Wackernagel's law),³⁶ or other criteria for the colization of Greek based on assumptions regarding the syntax/prosody interface.³⁷ This procedure does not

³⁴ Rosner / Grabe / Nicholson *et al.* 2003. See Vatri 2017, 163–166 on the processing of parentheses.

³⁵ See Vatri 2017, 9–12

³⁶ See Dik 1995, 36–37 for an accessible summary

³⁷ See e.g. Scheppers 2011 for a complex exercise in this direction.

fundamentally differ from the metrical scansion of verse, except for the fact that the prose equivalent of the metrical units of poetry need to be somehow inferred and that no patterns of repetition or resposion may be posited *a priori*.

Such a metrical, purely phonological approach to prose rhythm has not been overwhelmingly successful — if anything, it has not resulted in a universally accepted methodology that is able to yield repeatable results in a comparable way to the study of metre in poetry. Moreover, it is also at odds with a number of ancient testimonies.

To begin with, Isocrates (5.26–27) mentions that rhythmic effects had better not be entrusted to the written page if the author has no control over their rendering. Rhythm, as it were, is not produced automatically by simply vocalizing the phonological material as is encoded in the written text. Aristotle (*Rh.* 3.1 1403b26–31), in turn, includes rhythm among the features that are brought about by the voice of the performer in oral delivery and does not confine it to the realm of composition — a fact that seems to point in the same direction.

Other clues to the elusiveness of prose rhythm in the absence of voice may be drawn from ancient criticism itself. For one thing, it is surprising that Aristotle makes no mention of the wealth of hexametric sequences identifiable in the text of Heraclitus when he is interested both in rhythm as such — including hexametric rhythm — and in the style of Heraclitus himself.³⁸ For another, the metrical analyses of snippets of Classical Greek prose presented by Dionysius of Halicarnassus in his treatise *On Literary Composition* (chapters 17 and 25) are fine-grained but notoriously inconsistent.³⁹ A possible common denominator for Aristotle's omissions and Dionysius' erraticism may lie in a 'bookish' fruition of the texts they worked on. It might be the case that Heraclitus' metrical sequences were not registered by Aristotle because he did not hear the text of Heraclitus being recited but used a written copy without assuming that it would contain rhythmic sequences to look for. Conversely, Dionysius would assume that rhythmic sequences were there to be found in the classical prose texts he examined, but he would also need to make do with written copies that were not able to capture this phenomenon to the full and had to work within the limitations of his own post-classical, metrical approach.

Now, if we look at the earliest formulations of ideas on the rhythm of Greek prose, we can see how the definition of rhythmical units is not a metrical one — it is not based on the meticulous description of patterns of heavy and light syllables — but matches the understanding of rhythm as a psychoacoustic phenomenon as

³⁸ See Vatri 2019 for a full discussion.

³⁹ See Vatri 2020b.

discussed by the early Greek musicologists. In particular, Aristotle's criterion for the identification of feet (*Rh.* 3.8 1408b21–09a21) is that of the alternation between an up- and a down-beat standing in exact durational ratios to one another — a theory that goes at least as far back as Damon.⁴⁰ Such rhythmical positions may be prototypically filled by one/two light syllables and one heavy syllable respectively, as the patterns of Greek recitative metre indicate, but the phonological sequence of syllable weights itself amounts to no more than a sequence of notes in a score without bars. Certain patterns of alternation of phonological durations may lend themselves naturally to producing the perception of an alternating rhythm, but such a perception, especially when it comes to the location and strength of boundaries between rhythmic units (feet), is susceptible to being altered in oral performance. In other words, the 'bars' may emerge naturally but are ultimately the performer's job to bring about; in Aristoxenus' words (*Rhythm.* 2.3–9), the phonological weights of syllables may be interpreted as *rhythmizomena* — 'rhythmizable matter' — and produce *rhythmoi* only once turned into acoustic stimuli.⁴¹

Perhaps it is not a coincidence that post-classical prose rhythm developed into a more conspicuous and more regular 'metrical' phenomenon in correspondence with an increasing reliance on writing as a medium for dissemination and a growing disconnection between prose writing and *hypokrisis*. Rhythm was tamed into the Hellenistic system of clausulae presumably as a by-product of the Gorgianic taste for isocolon and parallelism that characterized 'Asiatic' rhetoric (as Cicero would suggest, *Orat.* 175–177). The 'metricalization' of rhythmic cadences entailed the possibility of identifying and abstracting them from the written page alone, without any need for vocalization.⁴² When applied to classical prose, however, such a metrical approach to rhythm was bound to be inadequate, as Dionysius' efforts show. With pre-Hellenistic materials, what we can do is identify the *rhythmizomena* and reconstruct their possible rhythmizations into *rhythmoi*, which may very well remain elusive.

Admittedly, this exercise is especially tantalizing when one encounters fully-fledged metrical sequences. Iambic or trochaic expressions are not too difficult to come across in classical oratory, for example,⁴³ but even Aristotle may occasionally be caught (seemingly) playing with effects of this sort. In the *Rhetoric* (2.2 1378b31–35), for example, he wraps up two quotations from the *Iliad* (1.356 and 9.648) with the expression *ὡς διὰ ταῦτα ὀργιζόμενος*, which scans as the beginning

⁴⁰ Cf. e.g. Pl. *Resp.* 400a–c; see Vatri 2020a, 469 with further references.

⁴¹ See Vatri 2020a for a full discussion.

⁴² On 'Asiatic' prose rhythm see most recently Kim 2022.

⁴³ Sandys 1872, 149.

of a hexameter up to the hephthemimeral caesura (—υυ—υυυε, with the elision of the final vowel of ταῦτα). It is difficult to decide if this is deliberate. As mentioned above, Aristotle apparently did not detect sequences of this kind in Ionic prose; at the same time his remarks on hexametric rhythm in the *Rhetoric* and the *Poetics* seem to hint to the fact that, when one heard such sequences in speech, they were normally recited with special intonation.⁴⁴ This would imply that they were too rare not to be deliberate (and marked off from normal speech in oral delivery), but if accidental ones were to occur, they might well escape notice on the written page. This is precisely what the third-century AD rhetorician Cassius Longinus (fr. 42.3 Patillon-Brisson) suggests as he unearths a full hexameter from the text of Demosthenes' *On the Crown* (τὸν γὰρ ἐν Ἀμφίση πόλεμον, δι' ὃν εἰς Ἐλάτειαν, D. 18.143). Could the absence of voice hide rhythm in plain sight?

5 Concluding Remarks

In its literal sense, 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 — with or without the constraints of on-line composition — comes with a number of benefits and licences that break the expressive constraints that the technology of writing entails.

This brief review study sought to illustrate how the oral dimension of texts may be sought precisely where the limits of written communication seem to be pushed — whether linguistic structures may be difficult to process from a merely visual input or the aesthetic effects of language may simply not be fully encoded graphically and require vocalization in order to be produced and perceived.

Much as this approach may seem obvious when it comes to the study of performing genres, it may cast some light on the modes of communication other text types could have been intended for. As the examples from Aristotle's *Rhetoric* aim to show, it might be profitable to think about the 'added value' of oral delivery for texts whose communicative nature and original destination remain somewhat debated, if not obscure, as is the case with the Aristotelian *pragmateiai*. In some cases, such 'added value' may be identified as a clear improvement in the on-line processability⁴⁵ of the syntax of complex sentences — an idea that somehow subverts our expectations as to the optimization of language for written or oral communication. This is not to say that all complex language is a sign of the oral conception

⁴⁴ See Vatri 2016, 389–392.

⁴⁵ See Vatri 2017, 130 on this concept.

of a text. Complex structures may still strain the cognitive abilities of listeners in on-line comprehension, and off-line modes of access to texts that writing affords may still be required for the processing of difficult passages. What this contribution aims to suggest, instead, is that certain linguistic phenomena call for vocalization and, in text types or literary genres for which vocalization is indeed contemplated, they may be interpreted as a clue to the suitability, if not the design, of a text for oral delivery in a way that may defy our expectations.

References

- Bakker, E. J. (1990), "Homeric Discourse and Enjambement: A Cognitive Approach", in: *Transactions and Proceedings of the American Philological Association* 120, 1–21.
- Bakker, E. J. (1997), *Poetry in Speech: Orality and Homeric Discourse*, Ithaca.
- Battezzato, L. (2009), "Techniques of Reading and Textual Layout in Ancient Greek Texts", in: *The Cambridge Classical Journal* 55, 1–23.
- Blank, D. L. (1983), "Remarks on Nicanor, the Stoics and the Ancient Theory of Punctuation", in: *Glotta* 61, 48–67.
- Carlson, K., (2009), "How Prosody Influences Sentence Comprehension", in: *Language and Linguistics Compass* 3, 1188–1200.
- Devine, A. M. / Stephens L. D. (1994), *The Prosody of Greek Speech*, New York – Oxford.
- Dik, H. (1995), *Word Order in Ancient Greek: A Pragmatic Account of Word Order Variation in Herodotus*, Amsterdam.
- Finnegan, R. H. (1979), *Oral Poetry: Its Nature, Significance and Social Context*, Cambridge.
- Finnegan, R. H. (1988), *Literacy and Orality: Studies in the Technology of Communication*, Oxford – New York.
- Foley, J. M. (1999), "Introduction: What's in a Sign?", in: E. A. Mackay (ed.), *Signs of Orality: The Oral Tradition and Its Influence in the Greek and Roman World*, Leiden – Boston, 1–27.
- Föllinger, S. (1993), "Mündlichkeit in der Schriftlichkeit als Ausdruck wissenschaftlicher Methode bei Aristoteles", in: W. Kullmann / J. Althoff (eds.), *Vermittlung und Tradierung von Wissen in der griechischen Kultur*, Tübingen, 263–280.
- Freese, J. H. (1926), *Aristotle: "Art" of Rhetoric*, Cambridge, Mass.
- Gagarin, M. (1999), "The Orality of Greek Oratory", in: E. A. Mackay (ed.), *Signs of Orality: The Oral Tradition and Its Influence in the Greek and Roman World*, Leiden – Boston, 163–180.
- Giordano, M. (2022), "From Oral Theory to Neuroscience: a Dialogue on Communication", in: A. Ercolani / L. Lulli (eds.), *Rethinking Orality I*, Berlin – Boston, 167–198.
- Hirovani, M. / Lyn F. / Rayner K. (2006), "Punctuation and Intonation Effects on Clause and Sentence Wrap-up: Evidence from Eye Movements", in: *Journal of Memory and Language* 54, 425–443.
- Kim, L. (2022), "'Asianist' Style in Hellenistic Oratory and Philostratus' *Lives of the Sophists*", in: J. König / N. Wiater (eds.), *Late Hellenistic Greek Literature in Dialogue*, Cambridge, 272–318.
- Lang, H. S. (1998), *The Order of Nature in Aristotle's Physics: Place and the Elements*, Cambridge – New York.
- Lengen, R. (2002), *Form und Funktion der aristotelischen Pragmatie: die Kommunikation mit dem Rezipienten*, Stuttgart.

- Lord, A. B. (1995), *The Singer Resumes the Tale*, Ithaca.
- Melia, D. F. (2004), “Orality and Aristotle’s Aesthetics and Methods; Take #2”, in: Ch. J. Mackie (ed.), *Oral Performance and its Context*, Leiden – Boston: 117–128.
- Oesterreicher, W. (1997), “Types of Orality in Text”, in: E. J. Bakker / A. Kahane (eds.), *Written Voices, Spoken Signs: Tradition, Performance, and the Epic Text*, Cambridge, Mass., 190–214.
- Pratt, E. (2018), “Prosody in Sentence Processing”, in: E. M. Fernández / H. Smith Cairns (eds.), *The Handbook of Psycholinguistics*, Hoboken, NJ – Oxford, 365–391.
- Quarantotto, D. (2017), “Aristotle’s *Problemata*-Style and Aural Textuality”, in: W. R. Wians / R. M. Polansky (eds.), *Reading Aristotle: Argument and Exposition*, Leiden – Boston, 97–126.
- Rosner, B. S. / Grabe, E. / Nicholson, H. B. / Owen, K. / Keane, E. L. (2003), “Prosody, Memory Load, and Memory for Speech”, in: E. Grabe / D. G. S. Wright (eds.), *Oxford University Working Papers in Linguistics, Philology & Phonetics*, vol. 8, Oxford, 85–102.
- Rubin, D. C. (1995), *Memory in Oral Traditions. The Cognitive Psychology of Epic, Ballads and Counting-out Rhymes*, New York – Oxford.
- Saenger, P. (1997), *Space Between Words: The Origin of Silent Reading*, Stanford – Cambridge.
- Sandys, J. E. (1872), *Isocrates: Ad Demonicum et Panegyricus*, London – Oxford – Cambridge.
- Scheppers, F. (2011), *The Colon Hypothesis: Word Order, Discourse Segmentation and Discourse Coherence in Ancient Greek*, Bruxelles.
- Steinhauer, K. (2003), “Electrophysiological Correlates of Prosody and Punctuation”, in: *Brain and Language* 86, 142–164.
- Taub, L. (2015), “‘Problematising’ the *Problemata*: The *Problemata* in Relation to Other Question-and-Answer Texts”, in: R. Mayhew (ed.), *The Aristotelian Problemata Physica: Philosophical and Scientific Investigations*, Leiden – Boston, 413–436.
- Thomas, R. (1992), *Literacy and Orality in Ancient Greece*, Cambridge – New York.
- Vatri, A. (2012), “The Physiology of Ancient Greek Reading”, in: *Classical Quarterly* n. s. 62, 633–647.
- Vatri, A. (2016), “Between Song and Prose: The Meaning(s) of *Harmonia* in Aristotle’s *Rhetoric* and *Poetics*”, in: *Rhetorica* 34, 372–392.
- Vatri, A. (2017), *Orality and Performance in Classical Attic Prose. A Linguistic Approach*, Oxford.
- Vatri, A. (2019), “Early Dactylic Prose in the History of Greek Prose Rhythm”, in: O. Tribulato / E. Passa (eds.), *The Paths of Greek: At the Crossroads Between Literature, Linguistics and Epigraphy*, Berlin – Boston, 175–195.
- Vatri, A. (2020), “The Nature and Perception of Attic Prose Rhythm”, in: *Classical Philology* 115, 467–485.
- Vatri, A. (2020b), “Empirismo e percezione nelle analisi ritmiche della prosa di Dionigi di Alicarnasso”, in: M. Bianconi / M. Capano (eds.), *In amicitia tua memores et grati. Contributi in memoria di Daniele Mastai*, Pisa, 151–168.
- Wagner, M. / Duane G. W. (2010), “Experimental and Theoretical Advances in Prosody: A Review”, in: *Language and Cognitive Processes* 25, 905–945.

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Solemn Words: Ritual Performance in Ancient Roman Courts

Abstract: In the most ancient phases of Roman legal practice, the only way to take an action before the magistrate was to resort to some fixed oral statements called *legis actiones*. They were characterized by an extremely ritualised rigidity, and their efficacy was out of question. Which was the source of such a ‘binding’ power? In this essay old “etic” explanation formulas such as “magical religious power of the word” will be discarded. Our attention will rather take an “emic” approach, focusing on fixed wording, ritual repetition and contextual stability as fundamental factors in creating the power of *legis actiones*.

Keywords: Rome; *Legis actiones*; legal formulas; Twelve Tables; ritual; context.

In this chapter I address some peculiar aspects of Roman civil procedure, still capable of stimulating not only our wonder, but also our reflection: the civil procedure activated through the *legis actiones*, literally “actions of law”. When Romans *recited* these set forms of words – in front of the magistrate and according to a rigid ceremonial protocol – the “spoken word” displayed all the power of its ritual efficacy.

In the most ancient phases of Roman legal practice, the only way to take an action before the magistrate was to resort to some fixed statements derived from the laws of the Twelve Tables, called *legis actiones*.¹ The entire matter of a contention was to be ‘compressed’ within them. In particular, this legal action consisted in the *recitation* of certain set words; the act of writing played no role. *Orality* governed the whole development of the action. The procedure carried out through the *legis actiones* was extremely rigid, which made it very difficult for parties to bring the real *complexity* of individual cases before the magistrate. The rigidity of this procedure could even result in injustice. As we know from Gaius – the famous jurist of the second century CE who authored the *Institutiones* – the *legis actiones* were “immutable” (*immutabiles*), i. e. rigid and fixed, to such an extent that a ci-

¹ Gaius, *Institutiones* 4.11. The actions of the practice of older times were called *legis actiones*, either because they were the creation of statutes (of course, in those days, the praetorian edicts, whereby a large number of actions came to be introduced, were not yet in use), or because they were framed in the very words of statutes and were consequently treated as no less immutable than statutes.

tizen had lost a case because he had placed one wrong word. As Gaius puts it (4.11): “a man who had sued another for cutting his vines and in his *actio* called them “vines” *vites*, irreparably lost his right because he ought to have called them “trees” *arbores*, as the enactment of the Twelve Tables, which confers the action concerning the cutting of vines, speaks generally of trees and not particularly of vines”. The intrusion of an external and contextual element – that is, unrelated to the standardized statement to be used – had the power to undermine the efficacy of the *actio*. As Gaius says, this was the result of the “pedantic subtlety” with which the “ancients” used the *legis actiones* they had created; even a minor error could forfeit a dispute. For this reason, continues Gaius, the *legis actiones* “gradually came to hatred” and two successive laws established that legal action would take place in different, more open and flexible forms. But let us examine the way in which Sextus Pomponius, a jurist of the second century CE, describes the *legis actiones* in his *Enchiridion*, a ‘handbook’ on the history of Roman law handed down through Justinian’s *Digesta*²:

The *legis actiones* was given a fixed form conforming to the ritual (*certas sollemnesque*), to prevent the people from using it at their own will.

The *legis actiones* therefore consisted of non-modifiable expressions (*certas*), whose enunciation had a ritualized character (*sollemnes*): in order to sue someone (initiate a legal procedure) it was necessary to use the same words in the same order, according to a prescribed scheme.

In other words, the *legis actiones* consisted of *certa verba*. Before proceeding in our analysis, please consider that *verbum* – normally translated simply as “word” – can mean a single word, an entire sentence, multiple sentences combined in a complex speech, or even an exchange of utterances between two speakers. More specifically, *verbum* generally designates a “speech flow”, which as such can have variable length, from a simple “word” to a more complex enunciative segment³. Consequently, the expression *certa verba* does not mean “certain or fixed words” but “certain or fixed utterances”, that is, those fixed expressions – necessarily repeated in the same form from one time to another – which in Rome recurred not only in the *legis actiones* but also in the statements of the praetor; in the ritual words recited by the general on the occasion of the *devotio*, when he consecrated his life to the underworld gods in exchange for the victory over the enemy; in the ritual words that the *augur* uttered in delimiting a ritual space

² Pomponius, *Encheiridion*, *Digesta* 1.2.2.6.

³ Bettini 2022, 15–16

(*templum*) by the power of his speech; and so on. They were all ritualized utterances, pronounced by a figure endowed with *authority*.

In addition to preventing the arbitrary manipulation of the utterances forming the *legis actiones*, as stated by Pomponius, their formal closure certainly had a second motivation, which can be easily inferred from the rest of the story:

However – continues Pomponius – both the interpretative science of *legis actiones* and the *legis actiones* themselves were assigned to the college of *pontifices* (“pontiffs”), establishing who should take care of private actions each year.

In other words, the *legis actiones* were not made public. As Cicero tells us concerning the *pontifices*⁴,

those ancients who dedicated themselves to this discipline [of law], to preserve and nourish their power did not want their science to be divulged.

Indeed, it is possible to assume that the *legis actiones* had not been expressly recorded in writing, given the following (again from Pomponius):

later, having Appius Claudius drawn up an exposition of these actions in a definite form, his scribe Gnaeus Flavius, son of a freedman, after having stolen the book, handed it over to the people.

The fact that Appius Claudius is recorded as drafting a “book” (in which the actions were presented in an orderly manner) suggests that up to that moment writing had not yet organically intervened in the conservation, transmission, and management of the *legis actiones*. In other words, we must imagine that this patrimony of juridical statements was not only unknown to the public, as it was jealously guarded by the college, but was also administered in oral or semi-oral form by the priests. In the absence of a written text to which to refer, it was indispensable that the sentences of the *legis actiones*, which were concretely used to take legal action, should be fixed and defined in all respects. Only their nature as non-modifiable and ritualized statements could preserve them from the wear and tear produced by use and time. Their *standardized* shape provided the *legis actiones* with the character of *permanence* that in other historical and cultural environments is guaranteed by writing.

In practice, however, how was it ensured that the *legis actiones* retained their *certus*, *sollemnis*, and *immutabilis* character? In the first place, by prescribing that the same words should be repeated each time in the same order, and concurrently

⁴ Cicero, *De oratore* 1.184

by preventing those utterances from being modified by the intrusion of *extraneous/contextual* elements. When we observe the texts of *legis actiones* handed down to us by Gaius (*legis actio sacramento, per iudicis arbitrive postulationem, per pignoris capionem, per manus iniunctionem, per conductionem*) we are struck by the absolute absence of any contextual reference external to the pronounced sentence (personal names, places, circumstances, etc.)⁵. Why do they exclude any contextual reference? Because they would thereby inevitably change the *certus, sollemnis, and immutabilis* character of the wording, making it each time different.

Let us give some examples. When claiming possession of someone, the person's name is not mentioned, but is only evoked as *hunc hominem*, that is, identifying him/her only through the 'empty' instrument of the deictic (HUNC EGO HOMINEM / EX IURE QUIRITIUM / MEUM ESSE AIO "I declare that this person belongs to me under the law of the Quirites")⁶. It is only the *concrete* standing on the trial scene of the unnamed person that makes the sentence understandable, filling' the deictic *hunc* with referential meaning. Similarly, the other part is evoked through a generic personal pronoun, *tu* / you, without any personal appellation (QUANDO TU INIURIA VINDICASTI ... "Since you reclaimed unjustly ...")⁷; if it is a question of claiming a given sum *ex stipulatione*, the temporal or local circumstances in which the case would have occurred are not stated, but only its existence is mentioned. No contextual intrusion must disturb the *certus, sollemnis, and immutabilis* character of the sentences, which must be repeated in the same form on every occasion. As Marie Therese Fögen has brilliantly written, "the stereotypical diction of the utterances limits the entry of life into law", but at the same time it forces all life to enter into law⁸.

We know that in general the recitation of standardized utterances, to be repeated in a consistent way from one time to another, makes use of certain "recall structures", as Jack Goody called them, i. e. nuclei of memory capable of resurrecting the set words to mind⁹. In the case of *legis actiones*, compositional forms inspired by the rhythmic principle of similarity could act as "recall structures": for example, the 'three-block' composition, each of which in turn is characterized by a tripartite articulation, recurring in *HUNC EGO HOMINEM / EX IURE QUIRITIUM / MEUM ESSE AIO* "I declare that this person / under the law of the Quirites / belongs to me". This sentence is then followed by a sequence marked by the initial

5 Gaius, *Institutiones* 4.16 ff.

6 Gaius, *Institutiones* 4.16 ff.

7 Gaius, *Institutiones* 4.16–17a

8 Fögen 2002, 140

9 Goody 1987, pp. 171, 186

alliteration in -S-, SECUNDUM SUAM CAUSAM SICUT DIXI “According to its cause as I said”. ‘Pre-modeled’ rhythmic configurations such as the following could also act as “recall structures”: ... AIO DARE OPORTERE. ID POSTULO AIAS AN NEGAS. QUANDO TU NEGAS... “I say that he / she ought to be given. This I ask, if you assent or deny. Since you deny ...” The responsive nature of this linguistic configuration (AIAS AN NEGAS ... QUANDO TU NEGAS) “if you assent or deny. Since you deny ...”, on the part of the actor, ensured correct resumption in the acting after interruption by an opponent. At the same time, ritualized gestures of performative value, external but simultaneous to the recitation of set words, could concur as “recall structures” to guarantee the correct formulation of the utterance, such as: the act of “grasping” (*adprehendere*) the thing or person whose possession is reclaimed; the recitation of the set words and the imposition of the “stalk” *festuca* (a small rod) on the person or thing to be claimed *simultaneously* (*simul*) with the pronouncing of the words of the *legis actio sacramenti*, that is HUNC EGO HOMINEM ... ECCE TIBI VINDICTAM IMPOSUI “on this person ... behold, I impose the stalk, i.e. I reclaim ownership”; and even more the ‘mirror’ repetition, by one’s opponent, of the same verbal enunciations and of the same and simultaneous gestures (“grasping” the thing or man whose possession is claimed, imposing the “stalk” on the person or thing to be claimed). The same can be said for the equally ritualized gesture with which in the *legis actio per manus iniunctionem* the actor “took a part of the opponent’s body” *simultaneously* (*simul*) with pronouncing the sentence MANUM INICIO “I lay my hands on him, her, it”. Ritualizing each gesture and pronouncing *simultaneously* the prescribed words certainly contributed to making each sentence more memorable.

If there is something striking in the use of the *legis actiones* by the Romans, it is not only their fixity or their “limiting the entry of life into law”, as it has been put: it is above all the *efficacy* attributed to them. These standardized “words”, so essential and dry, in fact had the power to produce significant effects on the economic or social conditions of individuals. Where does the source of this “force” ultimately reside (to use Louis Gernet’s term)? Does it come from this special way of speaking? Does this apply to all the legal Roman procedures consisting of verbal acts?

According to an interpretation still accepted by historians and scholars of Roman law, the efficacy of these forms of set words would originate from some intrinsic virtue of the “word” itself, whether of a magical, religious, or “magical-religious” nature¹⁰. Better to say that the efficacy exercised by these linguistic

10 Since Huvelin 1905–1906. See Bernardi 1988, 422f; Magdelain 1990, 34–48; Schiavone 2005, 53, 55, 58, 66, 68; etc.

acts would be based on the permanence (even in later times) of some “primitive”, if not “mystical” traits, which in Rome would have characterized the origins of legal thought. Before continuing in our analysis, let us stop to remark that today general notions such as the “magic power of the word” should be reviewed and abandoned in the light of the most recent anthropological studies, showing how fragile and generic this formulation is. In any ritual process it is not so much the mystical efficacy of the *word* in itself that produces a certain effect as its belonging to a particular type of language (from time to time sacred, archaic, incomprehensible: just think of the obscure words used in the *Carmina Saliaria*), as well as the contextual relationship of single utterances with narrating specific myths; the performance of codified gestures or prescribed actions; interaction with specific objects necessary for action; and so on. All such elements take part in the process, and only as a *whole* do they produce the ritual efficacy. As Stanley J. Tambiah writes, “words become effective only if spoken within a very special context of other actions”¹¹. Naturally, the fact that law and religion have been strongly linked in Roman experience, maybe more visible in the early archaic period, remains out of the question – even if nothing authorizes us to place both in a “primitive” dimension not only indebted to obsolete anthropologies but substantially foreign to Roman culture itself (as we know it). Regardless, however, invoking a generic “magical-religious” force to explain verbal efficacy in the field of law in our opinion runs into two difficult obstacles.

First, such hypotheses do not take into account the *local, internal*, Roman perception of “verbal efficacy”. On the contrary, it seems to us that “emic” observation (i. e. adopting the point of view of the culture studied) is always essential for building a correct interpretation of the facts to be analyzed. Now, in some famous paragraphs of his *Natural History* Pliny the older asks himself the fascinating and crucial question of “whether words, utterances (*verba*), charms and incantations (*incantamenta carminum*), are of any efficacy or not”. Pliny continues¹²

this power should be accepted by men without question: but the most cultivated people, individually, reject this belief, while life (*vita*) taken as a whole believes in it every moment, and does not realize it.

Pliny appears to be an acute observer of the culture that surrounds him, clearly distinguishing between the opinions of “intellectuals” and those that circulate in widespread culture. But what is even more interesting, he grasps the unconscious nature of certain beliefs, consequently uniting “intellectuals” and ordinary

11 Tambiah 1985, 18

12 Pliny the Elder, *Naturalis Historia*, 28.10 ff.

people in a single group, as both share similar opinions. What we intend to highlight, however, is the nature of the *examples* that the author brings to support his thesis, that is the widespread persuasion (even of an unconscious nature) according to which “words (*verba*), charms and incantations (*incantamenta carminum*)” would be endowed of efficacy. The list is quite rich.

There are prayers or invocations pronounced by priests or Vestals; by generals who consecrate themselves to the gods through the *devotio*; by generals who practice the *evocatio*, i. e. reciting prayers to ‘summon away’ the divinity protecting the opposing city; divinatory responses; real magic “spells” (the two mentioned in the Twelve Tables, both the one used to “steal” crops from a neighbor’s fields and the “malevolent chant” *malum carmen* hurled at someone); amatory “spells”; formulas used in curses (*defixiones*); “spells” against fires written on the walls of the houses; “incomprehensible words” used in chants; and so on. In other words, the “statements” about whose efficacy Pliny wonders all have a *religious* or *magical* character. No juridical statement or utterance is ever considered: not the *legis actiones*, not the “three words” (*tria verba*) that the magistrate solemnly pronounces, and so on. In spite of the “power” unquestionably possessed by *verba* and legal formulations – since they can change a person’s status, determine the belonging of a good, even cause the punishment or death of an individual (the debtor who becomes slave to the creditor), and so on – and the large sharing of such legal formulations in Roman life, Pliny does not think of putting them in the same category as the “prayers and invocations” used in religious practice, much less in that of spells or magic words. Therefore, if we respect the internal Roman perception of the “power” possessed by *verba*, we can only conclude that the words of the law were not considered “effective” as they participated in the religious or “magical-religious” power frequently attributed to them by moderns. If we wanted to clarify the Plinian text by resorting to the words of Marcel Mauss – who denied any magical character to legal obligations – we could say that they do not appear in this list as “they limit themselves to establishing *contractual* relations between human beings”¹³.

The “magical-religious” interpretations of legal formulae run up against a second obstacle: the recourse to *legis actiones*, as well as to other juridical procedures based on set words, is active even in phases of Roman culture far from any primitiveness. To surpass this problem, nineteenth-century anthropologists, like modern historians, based their supposed magical-religious force on an old anthropological notion: the idea of “survival” explicitly theorized by Edward B. Tylor or defended by J. F. McLennan. This interpretative category took for granted that

13 Mauss 1965, 13

(in the words of Alberto Mario Cirese) “remains of previous cultural stages ... persist, more or less active, even in subsequent cultural stages, similarly to what happens in the biological evolution of the species in which organs or parts of the body that have lost their previous function (famous, among other things, the wisdom tooth or the trace of ‘tail’ represented by the coccyx)”¹⁴. Their “survival” therefore constitutes a notion that made sense within an episteme of a markedly positivist, scientist, evolutionist character, but which clashes with the paradigms shared by more modern anthropology. However, at stake here is not only a question of methodological aging. The fact is that the idea of “survival” seems in itself misleading.

When you come across a cultural phenomenon that does not seem to ‘square’ with the rest of the context, dismissing it as an (inert) “survival” of the past simply prevents you from addressing the issue. What if it were just a deception of perspective? The temporal distance, and above all the superimposition of our cultural categories, onto the original cultural context can play tricks on us. If a certain culture acts according to principles that for us are not in harmony with the rest, this does not mean that traces of its presumed primitive past “survive” in it: this culture may simply have given itself a different organization from what we expect, and which at first glance we fail to understand. In other words, faced with difficulties of this type, it is time to *undertake* the analysis, trying to identify what are the functional traits that can explain the presence of the ‘anomalous’ element within the cultural system – not to *block* it by simply postulating the existence of some “survival” of a remote past. We therefore believe that even in the case of *legis actiones*, as well as in that of legal standardized statements in general, resorting to the survival of ancient “magical-religious” forms to explain their efficacy is (as we said) misleading: concentrating on the alleged “magical” virtue that they would carry with them from a distant (and equally presumed) past prevents us from seeing the presence of a series of functional traits – absolutely verifiable, coeval, synchronic with respect to the application of the statements themselves. These traits are able to justify the efficacy attributed in Rome to the spoken word in the legal field, starting with the form that these utterances take in their recitation, and ending with the context in which they are pronounced.

Let us briefly review the distinctive features of the *legis actiones* we have outlined so far, that is, the *certus*, *sollemnis*, and *immutabilis* character of the utterances; the absence of external intrusions; the peculiarities of the syntactic forms used; parallelisms and phonic echoes; the simultaneity between pronunciation and ritualized gestures. These formal features surrounding the single utter-

14 Cirese 1973, 43 f

ances immediately reveal as exceptional the discourse articulated between the parties and the magistrate. And this because a linguistic interaction, let's say an *ordinary* interaction, would never take place according to such assumptions – in everyday life, no one would speak in this way. The same also applies to the pre-defined simultaneity between certain phrases and certain gestures, according to a behaviour that is not part of usual social interaction. As such, the characters of the performance further increase the binding nature of the words and actions required to successfully complete the legal action. Such exceptional linguistic and gestural procedures also presupposed an equally special temporal context, as they could only take place on certain particular days, defined as *fasti* “lawful” by the calendar, as opposed to others (called *nefasti*) that would not have been recognized as valid for starting litigation. Above all, however, we must keep in mind that a lawsuit could be started only in the presence of a specific figure, a magistrate provided with *imperium* “coercive power”, whose *auctoritas* “authority” was made explicit through the possession of particular *insignia*: a specific type of toga (*praetexta* “a toga with a purple border”), the *fasces* (“bundles of rods”), and the *sella curulis* (“curule chair”). The display of these attributes was so important in determining the legal efficacy of the procedure that the law excluded the blind man from the possibility of forwarding a request to the magistrate in place of another (*postulare pro aliis*) as “without sight in both eyes ... he cannot see and reverence the *insignia* of the magistrate”¹⁵. Perhaps the most interesting aspect, however, of the Roman legal performance is its spatial context. We know that the area *par excellence* dedicated to legal action corresponded to the *forum*; in Rome, justice was administered “in the open” (*sub divo*). Even more interestingly, the person of the *praetor* had the power to establish a legal space though his sheer presence. As stated in the *Digesta* (3.1.1.5.):

Wherever the praetor has decided to “exercise his jurisdiction” (*ius dicere*), without prejudice to the majesty of his own *imperium* and the customs of the ancestors, this place is correctly called *ius*.

In the Roman juridical tradition, the same term, *ius*, designated both the “right” and the “place” in which justice was given. As stated in the *Digesta* (1.1.1.11):

The term *ius* is used in many senses ... With another meaning, *ius* is defined as the place where it is administered, deriving its name from what happens there.

Building the *ius* as the “juridical place” presupposed the erection of a wooden “tribune” (*tribunal*), whose location could vary, provided that it supported the *sella curulis* (owned by the *praetor*) on which he sat exhibiting his own *insignia*. The

¹⁵ *Digesta* 3.1.1.5.

“sitting” position of the magistrate guaranteed his person a special dignity, while the placement of the “curule chair” in an elevated position still allowed him to dominate those around him. This ‘vertical’ privilege attributed to the *praetor* made the *maiestas* (“majesty”) of his *imperium* further visible¹⁶. Ultimately, how can we not be fascinated by the meticulous solemnity, the exhibited refinement, of such a social performance, certainly deserving the definition of “ritual”? This complex architecture of words, gestures, people, *insignia*, times, places – which was repeated each time in the same way – produces a fundamental effect: we could define it as an expansion of the “horizons of speech”.

With this expression we define the active reference to elements that are in themselves extraneous to a given context (constituted by the specific place/time of the utterance and the particular persons of the speakers) but which somehow become part of it as they are rooted in wider contexts, present to the awareness of the actors at the moment of the single utterances¹⁷. In the case of *legis actiones* the horizons of speech we are referring to correspond to the shared memory of the fact that, in the past of the City, the same verbal procedure has already been performed countless other times, in identical form and in similar contexts; and has been registered by the cultural tradition under the label “this is how it is done” or “this is how it works”. In conclusion, it is precisely the fixity of the set of words, the exceptionality of their linguistic and gestural closure, as well as the repetitiveness of the contexts within which they are pronounced from time to time, which grounded their efficacy. Repeating every single action according to the same linguistic, gestural, and contextual script produces the awareness that it is a *timeless* act. Hence its *force*, to use Louis Gernet’s term.

Now we understand better, perhaps, why the Romans wanted to “limit the entry of life” into the juridical formulations: because in doing so the fragments of life initially selected by the custom could be repeated identically from one time to another, thus building the bases of the authority and efficacy of a set form of legal words.

¹⁶ Here I am following the lead of De Angelis 2010, 1–25. The papers collected in this volume offer an extraordinarily rich set of new perspectives on “the spaces of justice” in ancient Rome

¹⁷ I take my inspiration here from the idea of an “embedded context” articulated in Hanks 2006, 115–128 (“Embedding designates the relation between contextual aspects that pertain to the framing of discourse, its centring or groundedness in broader frameworks”). See also Severi 2018, 135 ff.

References

- Bernardi A. (1988) *Le XII tavole: i contenuti legislativi*, in: A. Momigliano, A. Schiavone (eds.), *Storia di Roma*, I, Turin 1988, 413–426.
- Bettini M. (2022), *Roma. Città della Parola*, Turin (= *City of the Spoken Word. Orality and the Foundations of Roman Culture*, Berkeley, UC Press, forthcoming).
- De Angelis F. (2010), *Ius and Space: An Introduction*, in: Id. (ed.) *Spaces of Justice in the Roman World*, Leiden – Boston, 1–25.
- Fögen M. Th. (2002), *Römische Rechtsgeschichten. Über Ursprung und Evolution eines sozialen Systems*, Göttingen.
- Goody J. (1987), *The Interface Between the Written and the Oral*, Cambridge.
- Hanks W. F. (2006), *Context Communicative*, in: K. Brown (ed.), *Encyclopaedia of Language and Linguistics*, Amsterdam, 115–128.
- Huvelin P. (1905–1906), “Magie et droit individuel”, *L'Année sociologique* 10, 1–47.
- Magdelain A. (1990), *Le ius archaïque*, in Id., *Jus, imperium, auctoritas: études de droit romain*, École Française de Rome, Rome, 3–93.
- Mauss M. (1965), *Sociologie et anthropologie*, Paris.
- Schiavone A. (2005), *Ius. L'invenzione del diritto in occidente*, Turin.
- Severi C. (2018), *L'oggetto persona*, Turin.
- Tambiah S. J (1985), *Culture, Thought, and Social Action: An Anthropological Perspective*, Cambridge, Mass.

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