

Between Mimesis and *Technē*: Cinematic Image as a Site for Critical Thinking

Abstract

This paper recovers a crucial insight from Aristotle for how to study artworks and then applies that insight to contemporary film theory. In his *Poetics*, Aristotle introduces the discipline of the critical study of art as the foundation of liberal education. He did so in opposition to Plato, who thought that the mimetic arts could not be taught – only *technē* could. Aristotle’s crucial claim is that the artwork is born out of the creative antagonism between the mimetic and technical learning, which only critical thinking is able to reflect on. Cognitivist film scholars (opposing the typical humanities approach that reduces film to its mimetic aspect) argue for a more scientific approach to film, which, however, would reduce film drama entirely to its technical aspect. I argue that the study of cinema is part of liberal education: it yields both algorithmic analytical learning taught formally and heuristic mimetic learning that cannot be formally taught. The artistic image is a site of learning potentially leading even its uneducated (or illiterate) student from mimetic pleasure to dramatic recognition. The cultivation of critical cinematic thinking enables the learner to resist the attempt of control by marketing or propaganda.

Introduction

There are an increasing number of voices – both in the relatively new academic field of film scholarship and outside of it – claiming that film could be or even should be studied

within science as opposed to the humanities. Among them one finds some of the most distinguished film scholars teaching in film, literature, art history, or visual arts departments; their core argument is that their specific field needs to become more scientific. A craving for disciplinary rigor in the humanities is as old as Plato's attack on rhetoric and poetics. In the era of constant academic assessment exercises, however this craving for measurable results seems like a simple survival instinct. Still, what Plato has not dreamt of (and certainly would have disapproved of) is a craving for economic relevance, which has by now become customary in technical and scientific education and research, but is new in the liberal arts. Some film scholars claim that a scientific and technical approach is peculiarly suited to film studies, since film production is much more dependent on technology and industry than, for instance, literature. The growing appreciation of positivistic methods in cinema studies is probably stoked, among other things, by the recent availability of machines that can measure some aspects of the brain during the activity of enjoying a film. Those who believe that observing the brain will predict with scientific certainty how the mind works while watching films can reasonably suggest that film should no longer be studied in the humanities but in neuroscience. Of course, if film studies becomes a subfield of neuroscience, it will not only be able to demonstrate its scientific status based on positivistic rigor but also its economic importance based upon its ability to predict financial profit, or journalistically speaking, the Oscar winners¹. It is time to examine whether these claims have any merit or are just

¹ www.fastcompany.com/1731055/rise-neurocinema-how-hollywood-studios-harness-your-brainwaves-win-oscars (last accessed 22/06/15).

part of a general trend of academic influence-mongering which use the current popular fascination with neuroscience and ‘neuromarketing’.

This article argues that film studies should stay within liberal arts education, because the art of film is born out of the creative tension between mimesis and *technē* and therefore requires what I call critical – and not, by contrast, technical, scientific, or purely analytical – thinking. To make this claim, I shall proceed as follows. First, I discuss the recent instructive story of how a group of neuroscientists attempted to colonize film studies with the new discipline of neurocinematics only to meet with the warm welcome by leading film scholars, who are all but ready to leave the sinking ship of liberal education. To clarify what prompted the odd welcome of the scientific colonization of film studies, I briefly discuss the longstanding quarrel between so-called Grand Theory (which approaches film from its mimetic aspect) and the cognitivists (who favor the technical aspect) in the light of the ancient disciplinary war between philosophy (as represented in Plato’s positivism) and rhetoric as well as poetics. Finally I suggest a solution for bridging the gap between Grand Theory and cognitivism by analyzing the iconic modernist image from the prologue of Fellini’s *La dolce vita* (1960). Because Fellini’s ironic image of Christ’s Second Coming is enfolding not by presenting, but by negation (like an *elenchus*, in fact), positivistic approaches are entirely inadequate for its contemplation or scholarly examination. I conclude that the cinematic image is a potential site for critical thinking. It takes liberal education to recognize such a potential and be able to take up the challenge creative films present.

Film Studies as a Colony of the Empire of Science

In 2008 the editors of *Projections: The Journal of Movies and Mind* invited a group of neuroscientists to publish ‘an integrative article’² about their research. The lead author of the article, Uri Hasson, and his fellow scientists announced that they could measure the effect of film on our minds and would be able to interpret their measurement in such a way as to predict scientifically the impact of specific film styles on their audiences: ‘We propose that ISC [inter-subject correlation] may be useful to film studies by providing a quantitative neuro-scientific assessment of the impact of different styles of filmmaking on viewers’ brains, and a valuable method for the film industry to better assess its products.’³ Upon close inspection, however, the method of inter-subject correlation (ISC) analysis, which the authors herald as path-breaking, turns out to be a simple show-and-tell that displays the convergence or divergence (correlation) of the fMRI records of a pool of data providers’ brain activities and eye movements while watching excerpts of different films (in deafening machine noise generated by MRI technology)⁴. While this method indeed offers positive measurement of some not always very clearly defined aspects of brain activity under not always very clearly defined stimulation, it offers no

² Uri Hasson, Ohad Landesman, Barbara Knappmeyer, Ignacio Vallines, Nava Rubin, and David J. Heeger, ‘Neurocinematics: The Neuroscience of Film’ in *Projections: The Journal of Movies and Mind*, Volume 2, Issue 1, Summer 2008, p. 20.

³ Ibid. p. 1.

⁴ The authors use their statistical measurement of film effect in order to provide a baseline of average reaction to a certain type of film so that variations could be measured (in future experiments) to this baseline both in terms of films style and audience type such as gender or ethnic belonging. This research plan seems to follow the standard strategy of neuromarketing concerning consumer typology. I offer a more detailed critique of Hasson’s project in a paper not yet published.

scientific – only statistical – interpretation of the measured data. A scientific explanation would produce a scientific theory. Here however we only have a hypothesis that brain images will be similar in the activity of viewing the same film as a result of the intentional control of the filmmaker. What is ‘proven’ statistically is the part of the hypothesis that the measurement of various brains’ activity converge to a certain extent, but the causal relationship between the filmmaker’s choices of devices and their effect on the brain remain purely hypothetical. The experiment is not controlled enough to determine clearly what prompts the measured engagement in the brain. They do not mention whether the participants knew beforehand their most effective sample from Hitchcock’s *Bang! You Are Dead* (1961), an obviously relevant question. Neither did they entertained the possibility that an audience can feel terror even with their eyes shut – think of the most famous Hitchcock quotation: ‘The terror is not in the bang, only in the anticipation of it.’ Their contrast sample of unedited (whatever that means is also theoretically contentious) film shot (framed) in New York City should have formed a minimal pair with the Hitchcock film in which a child is waving a loaded gun assuming wrongly that it is just a toy. If so, imagine the engagement of the participants’ brains with the “unedited” New York film when a child appeared with a gun ...

Hasson and his colleagues announced in *Projections* the advent of a new discipline, which they named neurocinematics, probably inspired by the name of the already well-established discipline of neuroeconomics. In fact, one might be forgiven for thinking that neurocinematics is simply a subfield of neuroeconomics or even neuromarketing, especially in the light of the scientists’ own statement about how the purpose of the new discipline is to provide useful neuro-scientific assessment of the

products of the film industry. Cleverly pitching their ideas to both academia and the film and advertising industry, the pioneers of neurocinematics claim as their predecessors a group of leading film scholars (who, in the 1980s, put up the banner of ‘cognitivism’ to signal their secession from the long-standing humanities approach to cinema).

We should also note that a cognitivist approach to film is by no means a new theoretical path for film studies. In fact, it has been quite a dominant method of exploration since the 1980s. Film scholars, including Gregory Currie, Torben Grodal, Trevor Ponech, David Bordwell, Noël Carroll, and Murray Smith have written extensively on film perception, recognition, interpretation, and comprehension through the prism of understanding human mental processes.⁵

Thus the scientists seem to have validated the cognitivist film scholars’ argument for a more scientific approach to film. The lead-author, Uri Hasson, who quickly grabbed the attention of the media and (according to the media) also the advertising industry, might have done a great service to the cognitivist war efforts against Grand Theory. But then again, perhaps things are exactly the other way around. It is, in fact, the leading authorities in contemporary film scholarship, who have given credibility to the new science of neurocinematics, thus providing an excuse for the neurocinematics researchers’ relaxed scientific standards since they are dealing with art, a traditional subject of the humanities. The film scholars, however, might have been too quick to oblige in validating

⁵ Hasson, 2008, p. 21.

neurocinematics, just because it promises a way to fulfill their aspiration for scientific rigor and even added something they did not even dream about: economic relevance in an age when the humanities are under pressure everywhere to prove their usefulness for society at large.

Perhaps the most prominent proponent of cognitivism, and one of the editors of *Projections*, is David Bordwell. Bordwell advocates a rigorous and technical approach to film and is highly invested in an intellectual war against the kind of charismatic – therefore, apparently, undisciplined – theorizing of cinema that is favored by humanities departments. As Bordwell put it, ‘some will say I’m actually aiming at “science”. I’d say, rather, that I am trying to join the tradition of rational and empirical enquiry, a broader tradition than what we actually consider to be science.’⁶ Thus Bordwell’s clamor for disciplinary rigor and his studied modesty in engaging manageable middle-level (as he calls them) problems emerged as a reaction against what he called (or, rather, condemned as) ‘Grand Theory’ favored by humanities departments -- including film studies: ‘It seems to me that no single megatheory can comprehend the diversity of the cinematic phenomena; that the most useful research usually tackles middle-range problems, beginning with neither a theory of the human subject nor isolated facts.’⁷ Grand Theory, indeed, seem to conceive of the cinematic artwork as a mimetic reenactment of myths that dramatize the universal human condition. The psychoanalytical versions of Grand Theory, for example, could easily be understood as extrapolations of archetypes such as Oedipus or Narcissus. In short, Bordwell finds that such mega-theories with their

⁶ David Bordwell, *Poetics of Cinema*, Routledge, 2007, p. 3.

⁷ David Bordwell, ‘A Case for Cognitivism’ in *IRIS* 9, Spring, 1989, p. 12.

universalizing myths are too general to have real traction in understanding particular films.

With unavoidable generalization one can say, then, that Grand Theory conceives of the cinematic artwork as mimesis, while Bordwell and the middle-range critics see it as *technē*. The former camp holds that film is a mimetic dramatization of the human condition, while the latter tends to think that it is the product of the filmmaker's craft. Believing that cinematic techniques are responsible for the production of the cinematic artwork leads naturally to the thought that a technical and even scientific approach can be most appropriate for studying film. The intellectual position of the middle-range school of film studies goes back to Plato's positivism. Plato insisted on teaching only what can be grasped positively by *technē*. He, therefore, expelled the poets from the ideal state on the grounds that their art was pure mimesis, deceptive and un-teachable. The main charge of the middle-range school leveled against Grand Theorists could be translated into Plato's terms as follows: Grand Theories attempt to teach what is un-teachable about film as opposed to the school of middle-range criticism including most importantly cognitivism, which identifies the teachable problems of film and which thereby claims to be able to teach film instead of mystifying it. Bordwell's pushing film studies from the humanities to science is like Plato's expulsion of the poets from the ideal republic.

Bordwell is so embittered by what he sees as the capture of film studies by Grand Theory in the humanities departments that he would rather uproot film from the liberal arts before it even properly took hold there: 'In subscribing to the antiscientific stance of Theory, film studies risks remaining provincial', or so he says.⁸ One might wonder

⁸ Bordwell 2007, p. 5.

whether Bordwell's choice of the word 'provincial' is a sign of the Zeitgeist – our times are ones in which bashing liberal education is popular; while technical education seems valued above all else. In any case, Bordwell, seems to be urging film scholars to leave the sinking ship. Subscribing to a scientific stance on film scholarship at the moment, however, could only mean the kind of show-and-tell science that might be the necessary baby steps for neuroscience but certainly a step back from the sophistication of film studies – as exemplified not at least by Bordwell and the cognitivists.

It is difficult to believe, for example, that Bordwell would agree with the supposition, which Uri Hasson and his coauthors put forth in lieu of a scientific theory, namely that film equals the measurable effects caused by the various cinematic techniques of the filmmakers:

Throughout the years filmmakers have developed an arsenal of cinematic devices (e.g., montage, continuity editing, close-up) to direct viewers' minds during movie watching. These techniques, which constitute the formal structure and aesthetics of any given cinematic text, determine how viewers respond to the film.⁹

This statement about cinematic devices being able to constitute cinematic aesthetics (whatever that might mean here) and determine the mental response of audiences has no rigor or any explanatory power either in the context of science or in the humanities. It simply says that cinematic aesthetics is some kind of mind control mechanism that can be

⁹ Hasson 2008, p. 1.

measured. 'We can't replace the film-maker, but we can measure the impact of what he did,' Hasson's says modestly.¹⁰ Bordwell's theoretically sophisticated work on film style¹¹, however, makes us understand that the cinematic devices mentioned by Hasson and his coauthors are historically variable in their meaning and effect. (The very first movie audience famously reacted to the cinematic image of an approaching train by escaping the theater.) The audience's response to so-called continuity editing, for instance, is changing and so is the technique of continuity editing itself, as it is always adjusting to the ever more sophisticated expectations of the audience. Continuity editing (or any style of editing, for that matter) therefore is not a simple device but an interface, the medium, yet also the 'message' of film. Breaking with temporal and spatial continuity in Alain Resnais's *Last Year in Marienbad* (1961), for example, is not simply a formal feature, but rather the presentation of the dramatic plot with recognitions, reversals, and misrecognitions. The sense of radical discontinuity in Resnais' film, as well as the sense of continuity in a film by Hitchcock (whose cutting according to Hasson exerts the most control over an audience's brain), could not be achieved only through editing, but rather through various other dramatic devices of storytelling. When Hasson and his co-authors say that they offer a 'quantitative neuro-scientific assessment of the impact of different styles of filmmaking on viewers' brains', they are no less mystifying than the film scholars of Grand Theory. Thus Bordwell – in synch with the Zeitgeist – mistakes positivism for rigor. The appropriate rigor in the study of an artwork as an artwork,

¹⁰ <http://www.fastcompany.com/1731055/rise-neurocinema-how-hollywood-studios-harness-your-brainwave> (last accessed 25/6/15)

¹¹ David Bordwell, *On the History of Film Style*, Harvard University Press, 1997.

however, lies in the negative capability of not resolving ambiguities by simplifications and not reaching for conclusions for the sake of positive results.

Towards an Aristotelian Poetics of Film

Bordwell's own critical work is indeed most inspiring and rigorous when engaged with well-defined middle-range problems, just as he recommends in his theoretical statements. Still, on occasion, he seems to be tripped up by his own brand of meta-theorizing -- always, one might note, while in the heat of the battle against mega-theorizing. For example, he has been seeking to attach film studies to the Aristotelian tradition of poetics -- which is a move also recommended by this article.¹² Bordwell, however, recommends such a move in the hope of achieving semi-scientific status for film studies: 'It's probably best to say that poetics joins the overarching tradition of rational and empirical inquiry to which science and kindred disciplines belong.'¹³ Bordwell's advocacy of making film studies a semi-scientific discipline is one thing, but justifying this through Aristotle's *Poetics* is a fundamental misunderstanding. Aristotle explicitly dissociates his *Poetics* as well as his *Rhetoric* from any scientific method on the basis that their subjects are not definite; moreover, they admit opposite ends, and they come to being by virtue of language only. Aristotle argues that problems of indefinite nature (those pertaining to human affairs) cannot be treated scientifically without distorting their nature:

¹² The ambition of this article is not to offer a scholarly exegesis of the Aristotelian oeuvre. My original theory (connecting artistic design and critical thinking), however, is very much inspired by my scholarly reading of Aristotle.

¹³ Bordwell 2007, p. 13.

But the more we try to make either dialectic or rhetoric not, what they really are, practical faculties, but sciences, the more we shall inadvertently be destroying their true nature: for we shall be re-fashioning them and shall be passing into the region of sciences dealing with definite subjects rather than simply with speeches.¹⁴

Instead, Aristotle in his *Poetics* – just like the Grand Theorists – is in the business of teaching the un-teachable, which is criticized –rightly or not - by Noël Carroll, Bordwell’s fellow cognitivist, as mystification¹⁵. Aristotle follows the Socratic argument (worked out in the *Protagoras*) that what is invaluable and therefore un-teachable is exactly what is most worthy of teaching. It is the serious artwork that gives occasion to such a coincidence of the antithetical modes of learning because art itself is co-produced by mimetic and technical learning.

Plato’s objection to the arts, on the other hand, is that they are purely mimetic and as such incapable of giving rules to the emotions; therefore they cannot educate the soul. Aristotle has no problem acknowledging that mimetic learning, which he introduces as the origin of all arts, and, moreover, of all education, is not a process under the ruling guidance of teaching, but springs from an autonomous instinct that is inborn in all human beings; Imitation is natural for man since childhood, one of his advantages over the lower animals being this, that he is the most imitative creature in the world, and learn at first by

¹⁴ Aristotle, *The Complete Works of Aristotle*, Princeton University Press, ed. Jonathan Barnes, 1984, Arist. Rhet. 1359b11-16.

¹⁵ Noël Carroll, *Fads and Fallacies in Contemporary Film Theory*, Columbia University Press, 1991.

imitation.¹⁶ Aristotle also does not contest Plato's assessment that mimesis is based upon a sensual appeal stoking the emotions noting that 'it is also natural for all to delight in works of imitation'¹⁷. What Plato describes as emotions warping the rule of judgment, however, Aristotle sees as emotions grounding and completing judgment, which would count as equally manipulative for Plato. Aristotle, however, does suggest that something can happen to our emotions when stoked by the mimetic aspect of the poetic work. The poetic design is an interface of the technical and the mimetic modes.¹⁸ On this interface the emotional appeal of the mimetic mode is brought into interaction with the analytical mode of *technē* that can lead to a catharsis of emotions. Catharsis is a moral pleasure that is both sensual and intellectual, therefore, mimesis can lead to a pedagogical or educative effect after all.

Aristotle thus chimes in with the Platonic assessment that mimesis causes pleasure and thereby seduces the uncultivated, vulgar audience. Yet Aristotle seems not to be alarmed by this. To illustrate the point with an example from recent cinema history: Aristotle would probably have smiled understandingly at the shocking popularity of European masters such as Fellini, who delighted 1960s US audiences with a lot of naked flesh and seductive mime, which were declared obscene by the Hays Office¹⁹ with its puritanical rules of censorship that, for instance, did not allow screen couples (even husbands and wives) filmed in the same bed, extend their kiss beyond three seconds, or

¹⁶ Arist. Poet. 1448b8-9.

¹⁷ Arist. Poet. 1448b8-9.

¹⁸ My understanding of catharsis is explained in my article 'Fear as a Civic Emotion: The Cathartic Reversal of Pity and Fear in Bence Fliegauf's *Just the Wind* (2012)', not yet published.

¹⁹ Until 1968 a moral code regulated film production in the United States, informally called Hays Office.

be of different races. As opposed to Plato, Aristotle would have seen the sex appeal of Anita Ekberg as an opportunity to draw the audience in and then turn sex appeal into a moral appeal through the catharsis of the film drama about lost faith in *La Dolce Vita*.

Mimetic pleasure is a pedagogical lever, according to Aristotle, that makes learning possible for the not yet educated. The more original the serious artwork is, the more time its audience needs to catch up with it through developing a critical response to it. The mimetic quality of the artwork immediately engages the audience initially on its own term, that is: uncritically, in order to give the film time to mature the seeds of future learning. Post-War European art films such as Fellini's *La dolce vita* did not stand a chance to succeed internationally without the very 'vulgarity' that was censored in American film productions. My anachronistic example – following the path broken by Alexander Nehamas's 'Plato and the Mass Media'²⁰ – imagining Plato scoffing at Fellini is meant to bring out a serious point: Can cinema enable a potentially even more democratic, universally accessible learning than staged drama in the time of Aristotle? If the answer is 'yes', then it is worthwhile to take note of the fact that this powerful potential of the medium cannot only be used in education, but in marketing and propaganda as well. Liberal education has a serious role in claiming the art of film from the market and current politics by leading the audience from sensual mime through analytical *technē* to an ennobled mimesis that unites intellectual and sensual pleasure.

Aristotle makes the critical study of the arts the foundation of his educational system in order to enable democratic access to knowledge. The Aristotelian system of learning that comes to us as liberal arts education allows the student entry through

²⁰ Alexander Nehamas, 'Plato and the Mass Media' in *The Monist*, Vol. 71, No. 2, (April 1988), pp. 214-234.

mimetic and vernacular learning, which mode is available for all humans without any educational prerequisite: 'To be learning something is the greatest of pleasures not only to the philosophers but also to the rest of mankind, however small their capacity for it.'²¹ This is in stark contrast with the Platonic education in which higher education is only accessible for the elite. Aristotle explicitly agrees with Plato that the mimetic aspect of drama is in fact pleasing the vulgar audience, yet, on the other, Aristotle builds his defense on the premise that drama is not what Plato says it is: it is not in fact purely mimetic. Aristotle teaches drama under the heading of *technē* because it is not only produced by mimesis but also partly by *technē*. His proviso to the label of *technē* is that certain elements of poetics – such as the capability of mimetic grasping of likeness in differences or the likeliness of unlikely incidents – are un-teachable. It is remarkable that the aesthetic quality of drama depends exactly upon this inimitable capability of making unlikely incidents – ranging from unusual events to miracles – believable. The more unlikely they are, Aristotle says, the more poetic effect they have if they are still made convincing.²²

Aristotle rolls out the most powerful argument against Plato's condemnation of mimesis and the arts, when he says that it is rational to assume that the unlikely will happen 'for there is a probability of things happening also against probability'.²³

'Unlikely' in Aristotle's *Poetics* is said to be ranging from unusual to rare and unique to completely impossible incidents and as he repeats emphatically: persuasive

²¹ Arist. Poet. 1448b13-15.

²² 'The poet's function is to describe, not the thing that has happened, but the kind of thing that might happen.' Arist. Poet. 1451a36-37.

²³ Arist. Poet. 1461b15.

impossibilities should be preferred to facts put unpersuasively.²⁴ This, I claim, is not the kind of rationality to which Plato refers; rather, it's what I term – following an etymological clue (*tugkhano*) from Aristotle – stochastic rationality. Mimetic learning is not based upon conclusive or instrumental rationality, but it is rational after all. It is the stochastic rationality of the gambler, or children with their mimetic instinct for trial and error, guess and estimation which enables them to master language and culture at the native (un-teachable) level without a teacher. Stochastic rationality, I claim, is an important aspect of heuristic cognition.²⁵

Aristotle uses the ancient Greek verb *tugkhano* to make a distinction between the everyday intellectual engagement of the people who try and err, and guess and gamble as best as they can, often enough hitting upon (*tugkhano*) the truth in the process; and the intellectual elite (experts) who calculate in order to get it exactly right and in order to achieve some goal instrumentally. As Aristotle put it, 'the true and the approximately true are apprehended by the same competence; it may also be noted that men have a sufficient natural instinct for what is true, and usually do arrive at the truth.'²⁶ The natural instinct - as it is explained in the beginning of *Poetics* – is the mimetic instinct to learn stochastically and by social mimicry.²⁷ The importance of the stochastic rationality of mimetic discovery is that it enables the immature and those without the

²⁴ 'A likely impossibility is always preferable to unlikely possibility.' Arist. Poet. 1460a27. 'For the purposes of poetry a convincing impossibility is preferable to an unconvincing possibility.' Arist. Poet. 1461b11-12.

²⁵ My idea of stochastic rationality is first proposed in 'The Rules of the Game: Stochastic Rationality in Oakeshott's Rule of Law Theory' (in *Law, Liberty, and State*, edited by David Dyzenhaus and Thomas M. Poole, Cambridge University Press, 2015) and is further developed in a forthcoming book.

²⁶ Arist. Rhet. 1355a14-18.

²⁷ Arist. Poet. 1448b5-24.

enlightenment of formal education ‘to hit upon truth’. With mimetic as opposed to analytical rationality we are back with Grand Theory’s engagement with myths and the cognitivist film scholars’ scoffing at it as irrational. If Bordwell really wants film scholars to emulate Aristotle’s *Poetics*, however, he should bury the hatchet and instead try to bridge the chasm between the ‘mystifying’ mimetic approach of Grand Theory and the technical approach of middle-range theory. Instead of escaping the tension, which I argue gives rise to critical thinking, he should make it his discipline to withstand it. Critical thinking is the bridge between myth and logos, mimesis and *technē*, vernacular and analytical learning.

Aristotle thus presents the evolutionary story of drama as a history of education, as a learning process: The mature form of literary drama has evolved gradually: first through mimetic learning according to mimicry, habit, the method of trial and error, and estimation, then more and more through learning by *technē*.²⁸ Drama thus evolves by a reversal from its exact opposite – speechless mime – into a form that persuades through words only, not through the acoustic, visual and kinesthetic senses addressed by theatrical staging. Eventually, speech got disembodied from mime, the natural mimetic combination of movement, sound, and sight. Verbalization occurred first as the song of the choir, then, as speeches delivered by individual actors, who gradually took over the deliverance of the whole dramatic plot enabled by the juxtaposition of dramatic speeches in the form of dialogue. The dialogue form – although it has evolved from mimetic learning accessible for all – is also one of the first forms of analytical learning –

²⁸ ‘It was through their original aptitude, and by a series of improvements for the most part gradual on their first efforts, that they created poetry out of their improvizations.’ Arist. Poet. 1448b22-23.

employed, for example, by Plato, as Aristotle, maybe ironically, points out in his *Poetics*.²⁹

This is 18 out of 27 pages forthcoming in *The Journal of Aesthetic Education*.

²⁹ 'We have no common name for a mime of Sophron or Xenarchus and a Socratic conversation.' Arist. Poet. 1447b9-10.