

The battle for the neuron's wings

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Abstract: The following study uses as its starting point the ancient battle between philosophy and theatre and takes as a road companions its two most famous protagonists: Plato and Aristotle. Taking a close look at their writings, I found not only an answer considering their battle for knowledge, for the encirclement of the spectator's mind, but also the traces of one 'predecessor' of neuroscience – Aristotle. Informed by John Onians's theories regarding neuroscience, art and history, and also adding neural plasticity as an ingredient, I've built my own personal (sup)position regarding catharsis, which I see as a two-fold experience/process - an emotional catharsis and a reasoning, reflexive catharsis.

Keywords: neuroscience; mirror neurons; catharsis; neuroarthistory; sentimental catharsis; reasoning, reflexive catharsis.

Once upon a time there were Plato and Aristotle and had they never existed, we would not have debated or painted. One stands on one side of theatre, the other, on its other side. And in times gone by, they carried a great battle.

But was it truly a fight in which they used aesthetical, ethical and philosophical weapons? Or, was it actually about the resultant force - the force that came out after the collision between a human activity and a science built from an ensemble of concepts and ideas? I'd rather hedge my bets on the latter. Not only I hedge my bets, but I use neuroscience¹ and neuroarthistory² as my gambling chips.

The battle revolves around two main directions: to prejudice or to envelop the spectator's soul. This is, in brief, the battle for the neuron's wings, the neuron that flies on the sky guarded by the spectator. The sky that once

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¹ Neuroscience has its roots in the ancient past of humankind, but, with the development of technology, it has received new meanings.

² Neuroarthistory is a concept developed by John Onians in his book *Neuroarthistory From Aristotle and Pliny to Baxandall and Zeki*, Yale University Press, 2007.

imagined by Raphael Sanzio's in his *The School of Athens*: Plato, his *Timaeus*, in one hand while the other points the sky, and Aristotle, his *Ethics* in his hand, aiming his forefinger at the ground. Sky always bordered by catharsis. That means: battle for the lucidity of ideas, or for pity and fear inherent in mimesis.

Reading their works, I wish I had the infinite power to transcend time and space, and offer them an fMRI (functional magnetic resonance imaging) device. This way, perhaps, Aristotle could have detected more accurately Plato's conceptual fear. This way, perhaps, Plato could have argued more compellingly against Aristotle's ideas concepts of pity and fear. Passing through space and time, I wish I had the power to visually and auditory record the first theatrical gatherings of Ancient Greece, those events started at dawn and finished at sunset, in order to experience the force that theatre inscribed on the faces of those first fifteen thousand spectators. Or, at least, to cast an eye over those dithyrambs, poetry and tragedies born out of Plato's mind³, before his encounter with Socrates.

But maybe, I can gain a part of that immeasurable power while reading Edith Hall's *The Theatrical Cast of Athens. Interactions between Ancient Greek Drama and Society*. In this case I won't need snapshots or cinematographic tricks, but only the simple act of reading: "Agave made an impression on one mother, who killed her own three-year-old son after dreaming that she was a Bacchant (...)" (Hall 16).

Socrates suggested that his son Lamprocles could control himself in the face of his mother's abuse by remembering that her insults and threats were no more real than those exchanged by actors (*hupokritai*) in the tragic theatre; there was a contradiction between her acted behaviour and her true stance towards her son, whose best interests she had at heart (Hall 27). "So were Athenian lawsuits. If an Athenian woman was indicted for murdering her husband, it created an opportunity to claim that she had been acting out the role of Clytemnestra" (Hall 28).

"(...) the children whom Epictetus observed, around the end of the first century ad, pretending to be figures in tragedies as well as wrestlers, gladiators, and trumpet-players" (Hall 25).

Here are just a few snapshots and, this kind of snapshots are desirable for every theatrical author. The force exerted by the spectacular event was (might be?) enormous. No wonder the fight was (is it still?) tooth and nail.

All the above examples are governed by the same key-word: *to act*.

³ See Laërtius, Diogenes, *The Lives and opinions of Eminent Philosophers*, literally translated by C.D. Yonger, M.A., London, George Bell and Sons, 1901, p. 114.

A mother takes her child's life, after she has a dream filled with stage scent.

A son shows emotional intelligence, intelligence gained after watching a stage pattern.

Someone is trying to back out of a criminal act by arguing stage processes.

Children play and their game's innocence comes out of the encounter with stage actions.

Someone watches an action, it gets engraved in their mind, and this event gives birth to a new action, action based on a previous on a stage pattern.

Movement.

Motere.

Drama.

*Action*⁴.

Theatre.

I allude here to the first meaning of this concept.

Could action drive someone to ... knowledge?

While reading Aristotle and Plato, it seems to me that the same set of words comes out almost obsessively from their writings. Just that the first is situated on one side of the action and movement, and the latter on the other side of the thought which carries the action.

The sound of Plato's soul seems to have come out of Hades, out of the Idea's world, out of The Form, the absolute, out of genuine truth. For the Greek philosopher, the material, and by default art - the copy of the material - does not bring out purification. Only the thought, that is to say the intellect, which can rise up to true knowledge, is the one that can touch the truth, and therefore, purification - "namely parting the soul from the body as much as possible and habituating it to assembling and gathering itself from every part of the body, alone by itself, and to living alone by itself as far as it can, both now and afterwards, released from the body as if from fetters?" (Plato, "Meno and Phaedo" 54). Once this condition reached, or once in Hades, near the Gods - a place obviously aimed for lovers of wisdom, one will touch what is "Just itself" (Plato, "Meno and Phaedo" 52) "Beautiful" (Plato, "Meno and Phaedo" 52), "everything that is unalloyed" (Plato, "Meno and Phaedo" 53), "pure encounter with wisdom" (Plato, "Meno and Phaedo" 55), "Equal itself" (Plato, "Meno and Phaedo" 63), "the beautiful itself as it always is, one of a kind, by itself with itself" (Plato, "The Symposium and the Phaedo" 39). And the soul that travels from one body to another, from the dead to the living, from the living to the

⁴ See Patrice Pavis, *Dictionary of the Theatre - Terms, Concepts and Analysis*, Translated by Christine Shantz, Preface by Marvin Carlson, University of Toronto Press Incorporated, Toronto, 1998, p. 112.

dead, learns how to rationalize through recall and never through senses. Near someone who has built such a cognitive system, a system where one can obviously hear "philosophy (...) the greatest music" (Plato, "Meno and Phaedo" 46), someone who deals with "a kind of illusion" (Plato, "Meno and Phaedo" 56) (that is to say copies of the copies, that is to say movement, that is to say action, that is to say theatre) doesn't belong here. And this *doesn't belong here* might even get dictatorial tones throughout actions such as 'expelling' from the ideal citadel of that theatrical craftsman, who constructs goods that don't satisfy the necessary. And because of that, theatrical craftsman, who is a "lover of opinion" ("The Republic of Plato" 161) and not a "lover of wisdom" ("The Republic of Plato" 161), finds inspiration in myths, these myths must be selected and cut, so that one deals only with stories in which "the god's works were just and good" ("The Republic of Plato" 58), because the soul "full of confusion" ("The Republic of Plato" 69) and painted through imitation, 'haunts' the one who listens or watches. Moreover, "none of the craftsmen fabricates the idea itself" ("The Republic of Plato" 278), therefore, by means of imitation, they can't touch the truth, nor the reality, nor wisdom.

Let us get back to one of the quasi-statements made before colliding with Plato's philosophy:

Could action drive someone to ... knowledge?

O my friend, be persuaded by me, and hear the Delphian inscription,
"Know thyself"

SOCRATES: And self-knowledge we agree to be wisdom?

ALCIBIADES: True. (Plato, "Alcibiades I")

Philosophy and wisdom move the thought's action towards knowledge. But are they the only ones? What about theatre – that enemy on whom Plato aims his wise arrows?

On the other side of movement, on the other side of theatre, one finds the more 'pragmatic' Aristotle. In his writings, movement and action seem to be those tools used by the Greek philosopher in order to argue rationally. For an instant, let's listen, in a literary manner, to his voice: "In most of these cases the soul appears not to act or be affected separately from the body, for example in the cases of being angered, being emboldened, desiring, and perceiving in general. Thinking seems most of all peculiar to soul (...)" (Aristotle, "De Anima" 27).

Soul, then, has to be a substantial being in the second way, as the form of a natural body that has life as its potency. But this kind of substantial being is being-fully-itself; so soul is the being-fully-itself of such a body (Aristotle, "De Anima" 48).

For the Greek philosopher, theatre seems also to be in a close relation with the action. And, to theatre, he devoted two books. Unfortunately, the only book that survived and reached us is the one about tragedy; the other one, about comedy, lost itself in the footsteps of time; maybe, as Umberto Eco⁵ suggests, it was helped to lose its track by the lovers of the new wisdom – Christianity.

First, in a literary manner, and then 'scientifically', in order to understand better the old "quarrel between philosophy and poetry" ("The Republic of Plato" 290), let's take a close look at the enemy's features: Jorge, the character in Umberto Eco's novel, describes theatre's (in this case comedy) monumental force: This book would have justified the idea that the tongue of the simple is the vehicle of wisdom (Eco 280).

Aristotle, while analyzing imitation, also talks about a similar power: "The cause of this again is, that to learn gives the liveliest pleasure, not only to philosophers but to men in general; whose capacity, however, of learning is more limited. Thus the reason why men enjoy seeing a likeness is, that in contemplating it they find themselves learning or inferring (...)" (Aristotle, "Poetics").

My analytical steps have led to what I was suggesting at the beginning of this article, is at stake: the sky bordered by catharsis - the battle for the neuron's wings, neuron that flies on the sky guarded by the spectator.

Before moving on to the following step of my analysis, let me unchain, for a short while, Aristotle's voice fettered in the chains of the past: "As was said before, perception involves being moved and undergoing something, since it seems to be some kind of alteration" (Aristotle, "De Anima" 58).

Maybe if Aristotle would have been more accurate in clarifying theatre's enormous stake – catharsis – tones of critical ink wouldn't have been poured away trying to clarify these *alterations*. Catharsis, the pity and fear elicited in the spectator, feelings meant to be purged; "psychological and moral enrichment" (Pavis 416), "the communicative value of aesthetic experience" (Bălan 76) associated by Hans Robert Jauss with the same catharsis; "(...) clarification (or illumination) concerning experiences of the pitiable and fearful kind" (Nussbaum 391); "The degree to which the spectator can enter into the life upon the stage, adjusting his own feelings to what is portrayed there" ("The Essential Moreno" 48); the catharsis-dream, in Anne Ubersfeld's opinion – "There is imitation of people and their actions, while the laws that govern them appear, in that imaginary world, to be suspended. This is catharsis (...)" (25).

⁵ In this sense, see the literary version of how the second book of *Poetics* loses in the history's fog in Umberto Eco's *In the Name of the Rose*.

And all this chorus of ‘cathartic’ voices, with its infinite lines and columns, could go on singing, if I wouldn’t stop these voices and place them in their own theoretical box. And the critical glance (but let’s call it, for now, orientated towards science glance) sees a new box: beautifully arranged, one can find inside neuroscience and neuroarthistory.

At this point I almost obsessively hear in my mind Peter Brook’s voice, a voice also heard by Giacomo Rizzolatti and Corrado Sinigaglia and used as the opening line in their book entitled *Mirrors in the Brain*:

Peter Brook commented that with the discovery of mirror neurons, neuroscience had finally started to understand what has long been common knowledge in the theatre: the actor’s efforts would be in vain if he were not able to surmount all cultural and linguistic barriers and share his bodily sounds and movements with the spectators, who thus actively contribute to the event and become one with the players on the stage. (Rizzolatti IX)

Until clarifying with definitions what mirror neurons are, let us hear John Onians’⁶ words; Onians seats Aristotle in the front row and watches all his theoretical endeavor using neuroarthistory’s lenses. The new field ‘invented’ by Onians with all its components sounds like this:

Neuroarthistorians exploit all the tools used by other art historians, but they also use an additional tool, neuroscience, to help them to understand all aspects of the making and viewing processes. Today there is so much new knowledge in this field that our understanding of art can be transformed. (Onians and Fernie)

And there is no wonder that Onians chooses Aristotle to be the first philosopher analyzed in his study – it is adequate just to remember the Greek philosopher’s emphasis on movement and action. Therefore, like with Onians, I also see in Aristotle the predecessor of the discovery of mirror neurons:

While for Plato the mind is the divine within us, for Aristotle it is a material thing and something which we share with the rest of nature. Aristotle is unashamed of treating man as an animal, and this enables him to appreciate the role of nerves in our inner life. (...) it allowed Aristotle to understand something of the working of ‘mirror neurons’, that is the neurons that help us to understand and imitate the movements of those we observe. He rightly noted how if we feel or express an emotion, we can communicate it much more effectively. (Onians and Fernie)

⁶ Reading the articles published online on their Facebook page by Tate London, I’ve discovered, after I have started to study about movement and action in Plato and Aristotle’s writings, the already published theories assumed by John Onians in his *Neuroarthistory: From Aristotle and Pliny to Baxandall and Zeki*. Because his perceptions were prior to mine, I’ve chosen to assign him a well-deserved area in this study.

But what are mirror neurons?

Using the fMRI procedure (functional magnetic resonance imaging), in area F5, part of frontal motor areas, Rizzolatti and his team discovered, first in the monkeys, a set of neurons that “became active both when the animal itself executed a motor act (for example, when it grasped food) and when it observed the experimenter doing it. These neurons were recorded in the cortical convexity of F5 and were named *mirror neurons*” (Rizzolatti and Sinigaglia 79-80). After a while, the experiments and procedures concentrated also on the humans, revealing for the scientific, and also for the sensible world, the fact that: “the activation of Broca's area reflects the typical behaviour of mirror neurons. Moreover, the experiment by Buccino *et al.* shows that the mirror neuron system in humans includes large portions of the premotor cortex and the inferior parietal lobule as well as Broca's area. It also provides evidence that the mirror neuron system is not confined to hand movements and transitive acts alone, but also responds to mime” (Rizzolatti and Sinigaglia 79-80). The premotor cortex:

(...) receives inputs from the posterior parietal cortex, an area important for spatial orientation. These anatomical features, taken together, suggest that the premotor cortex plays a role in orienting the body and readying the postural muscles for forthcoming movements. (...) the premotor cortex also helps select movement trajectories. (...) The premotor cortex is also involved in cross-modal sensory integration (...) the premotor cortex plays a role in integrating visual and tactile input. (Rosenbaum 75-76)

Regarding the inferior parietal lobule we can stress that areas 39 and 40 “correspond to the inferior parietal lobule (the angular and supramarginal gyri). These areas in the dominant hemisphere function in relation to reading and writing as higher integrative areas for language. This area is part of the posterior speech area. In the nondominant hemisphere, these areas relate to our concepts of visual space” (Jacobson and Marcus 203). As for Broca's area, it: “...is essentially a continuation of premotor cortex and can be considered a specialized motor association area with regard to the tongue, lips, pharynx, and larynx” (Jacobson and Marcus 382).

Therefore, all these areas and structures which have been activated when the mirror neurons were discovered prove that:

We do not need to reproduce the behavior of others in full detail in order to understand its emotive meaning, just as action understanding does not require the actions to be replicated. Even if they involve different cortical circuits, our perceptions of the motor acts and emotive reactions of others appear to be united by a mirror mechanism that permits our brain to immediately understand what

we are seeing, feeling, or imagining others to be doing, as it triggers the same neural structures (motor or visceromotor respectively) that are responsible for our own actions and emotions (Rizzolatti and Sinigaglia 190).

At this point of my analysis, it is enough to take a look at volumes authored by Bruce McConachie, *Engaging Audiences. A cognitive Approach of Spectating in the Theatre* or the volume authored by Stephen Di Benedetto, *The Provocation of Senses in Contemporary Theatre* (and these are just two titles from the numerous about this subject) just to confirm that the collision between neuroscience, mirror neurons and theatre has been argued.

As Bruce McConachie states in the introduction to his book, the encounter between theatre and cognitive science might help us understand better the way in which the public reacts while watching a theatre performance - and this is just one side of the 'story'. As he stresses in the introduction, this kind of theoretical endeavor could be useful also for "academics who teach theatre history, dramatic literature, dramaturgy, and performance courses in acting and directing" (McConachie 6). McConachie takes as his road companion case-studies (performances of well-known plays) and his examples cover the theatre's journey from Ancient times (McConachie takes as a 'starting point' Sophocles' *Oedipus the King*) to present-day (in this case, the analysis is following Caryl Churchill's *Top Girl*), without leaving aside performances based on plays written by Shakespeare, Chekhov or Tennessee Williams. When colliding with theatre, cognitive science might 'annoy' semiotics and semioticians - just to offer one example. But, as McConachie states, we should probably take into consideration the fact that

audiences do not combine (...) millisecond images into signs and read them as part of a semiotic process. Nor will most spectators step back from their involvement in the flow of the scene to make deliberative conclusions about her condition. Rather, most viewers will directly experience Yelena's exhaustion, irritation, and embarrassment through their mirror neuron systems and also get a sense of her vanity as she enjoys the effect of her beauty on the men. This empathetic process is mostly automatic, but the kind of awareness it produces lodges in memory and is easily brought into consciousness. (McConachie 6)

Using the latest discoveries in neuroscience, Stephen Di Benedetto analyzes what 'buttons' might be used by theatre creators in order to offer the viewers a memorable experience. His theoretical steps move inside the matrix that contains elements which trigger our attention (such as light, space, movement) and probably, more importantly, help us stimulate our brain: "it is this process of triggering uncontrollable involuntary responses

that is of most interest to any discussion of how we can account for the role of sensation in communication, perception, and theatrical expression. If we understand how this happens, then we can understand its power and how we can harness it to create a powerful theatrical experience. Theatre practice can help train neural preferences" (Di Benedetto 8).

Let me get back for a few moments to the words that started these pages, I mean the great battle of the Antiquity. I would like to insert, for a short while, a new contemporary element – the Italian theatre director Romeo Castellucci, who stated that "the spectator's encephalon is interesting here, not his soul (that comes later)" (Castellucci, Castellucci et. al. 36). If I would have had the immeasurable power to offer Plato and Aristotle a functional magnetic resonance imaging device, their point of interest would have been similar to Castellucci's. Somehow those two great philosophers 'sensed' the discoveries of the second millennium and, maybe, this is the reason why the debate was so fierce. After all, as I have tried to see the nature of this battle, it seems to me, after long research, that everything was nothing more than a very well-orchestrated 'marketing strategy' that was supposed to present in front of the Athenian public the winning product – philosophy or theatre – as the two boxes that contained knowledge, truth and real.

Once again, what comes to my mind is Plato's conceptual fear, hidden deep in his soul. And I picture him, as Socrates did before me, sitting in the middle of the ancient Athenians when Agathon won the public's appreciation, together with "more than thirty thousand witnesses"(Plato, "The Symposium and The Phaedo" 5), spectating his eyes on Oedipus' tragedy. And, I picture Plato, filled with expelling thoughts when, right in front him, Iocasta confesses the old crime to her husband / son: "As for the child, it was not three days old / When Laius fastened both its feet together / And had it cast over a precipice" (Sophocles 48). And maybe, at that precise moment, Plato remembered the Delphian inscription and he himself confronted with the true knowledge of the Athenian people, those people who, sometimes, 'deposited' their children on the edge of precipices. Perhaps Plato was also referring to this kind of myths that were supposed to vanish from his ideal citadel.

Coming back to theatre's force, a force exerted at its beginnings (it suffices here to remember Edith Hall's examples), I can't help but ask those two questions from the beginning: is the force exerted by the spectacular event still enormous? Are we still engaged in a tooth and nail fight between X and Y? And let me ask another question: is catharsis still experienced?

Using as a starting point my own theatrical experience, as an informed spectator, and rolling down the theatrical events I've witnessed, I have built my own personal (su-p)position regarding catharsis. With Aristotle's words in

my mind: "Now sensory imagination, as has been said, is present even in the unreasoning animals, while deliberative imagination is present in the reasoning ones (...)" (Aristotle, "De Anima" 96), temporary, I reclaim my belief (is it a belief full of wisdom?) in the existence of an emotional catharsis and in the existence of a reasoning, reflexive catharsis.

My assumption doesn't expel the simultaneous or the separate presence of the two cathartic branches on the neuron's wings, be it mirror or not. On the sensory side (emotional catharsis) I place Hideaki Kawabata and Semir Zeki's neuroscience study, which proved very scientifically that when I examine paintings (their case study): "... the orbitofrontal cortex, which is known to be engaged during the perception of rewarding stimuli, was active, and it was more active when viewing a beautiful painting. The motor cortex was also active, becoming more active when viewing an ugly painting, as it is with other unpleasant stimuli, such as transgressions of social norms, and with fearful stimuli, including scary voices and faces, and anger" (Gazzaniga 232). In the same area of the cathartic square, I deposit a second study, *Activation of the prefrontal cortex in the human visual aesthetic perception* (Cela-Conde et. al.), which proved me that "that when something was judged beautiful, there was more activity in the left hemisphere" (Gazzaniga 233).

On the reasoning side (reasoning, reflexive catharsis) I place neural plasticity "the functional properties of neurons and the functional architecture of the cerebral cortex are dynamic, constantly under modification by experience, expectation, and behavioral context. (...) Plasticity has been seen under a number of conditions, including functional recovery following lesions of the sensory periphery of central structures, perceptual learning and learning of object associations, spatial learning, visual-motor adaptation, and context-dependent changes in receptive field properties" ("The MIT Encyclopedia of the Cognitive Sciences" 598).

Having arrived at this reflexive point, because the emotional sensation born from the neuroscience's discoveries was absorbed a long time ago, I can't end before revealing a psychic phenomenon induced by a physiologic stimulation felt when I encountered with neuroscience, Plato and Aristotle: if I would have the immeasurable power to bring in the same art gallery Aristotle, Plato, Damien Hirst, Marcel Duchamp and Marina Abramović, I would bet my mirror-soul on that exact place where those five would sit. Before revealing their position, I will stress some of these works of art features.

Marcel Duchamp is associated with conceptual art, ready-made and probably the most important re-action of his art is connected with the fact that he managed to displace the tone from the aesthetic perspective to the idea itself. His

famous *Fountain* (a urinal – of course, with a title bellow - displayed in a space dedicated exclusively to art) raises questions such as what is art, what's its goal, but as Will Gompertz, I believe that Duchamp thought: "(...) the role in society of an artist was akin to that of a philosopher (...). An artist's job was not to give aesthetic pleasure – designers could do that; it was to step back from the world and attempt to make sense or comment on it through the presentation of ideas that had no functional purpose other than themselves" (Gompertz 10).

In *A Thousand Years*, Damien Hirst uses materials such as "glass, steel, silicone rubber, painted MDF, Insect-O-Cutor, cow's head, blood, flies, maggots, metal dishes, cotton wool, sugar and water" (www.damienhirst.com) to create a work of art that speaks about cycles of life, death, humanity: "It consists of a large rectangular glass case measuring approximately 4 meters long by 2 meters high by 2 meters wide – with a dark steel frame. At the center of the case – acting as a divider – is a glass wall into which four fist-size round holes have been drilled. On one side of the divide is a white cube box made out of MDF that looks like an oversize dice, except that all sides are marked with only a single black spot. In the middle of the floor on the other side of the glass partition lies the rotting head of a dead cow. Above it hangs an insect-o-cutor (the sort of ultraviolet light-cum-electrocution device seen in butcher's shops). In two opposing corners of the glass case are bowls of sugar. To complete the piece, Hirst has introduced flies and maggots. The result is something approaching a biology tutorial, a teacher's aid for demonstrating how the life cycle works: fly lays egg on cow's head, egg turns into maggot, which feeds off cow's decaying flesh before hatching into a fly, which then eats some sugar, mates with another fly, lays some eggs on the cow's head, gets zapped by the insect-o-cutor (taking on the role of an apparently indiscriminate God), falls onto cow's head where the now-dead fly becomes part of the decaying organic matter that provides a diet for the newly hatched maggots" (Gompertz 372).

Damien Hirst's *A Thousand Years* has features comparable with those of Duchamp's works. Once again we meet a "philosopher". Regarding *Rhythm 0*, Marina Abramović states the rules: "There are 72 objects on the table that one can use on me as desired. I am the object. During the period I take full responsibility" (qtd. in Richards 87-88). Among those 72 objects, the spectators could use: "a pistol, an axe, a fork, a bottle of perfume, a bell, a feather, chains, nails, needles, scissors, a pen, a book, a hammer, a saw, a lamb bone, a newspaper, grapes, olive oil, a rosemary branch, a rose and other things" (Richards 88).

As Mary Richards argues: "the performance took place in the Studio Morra, Naples in the six hours between 8 p.m. and 2 a.m. As a consequence of her performance choices, Abramović left herself open to invasion and even abuse;

this was precisely the point. The work is constructed through the interaction of the spectator with the objects and her body. How the spectators took up the opportunities presented to them certainly revealed something of the dynamics of group psychology where a collective presence may anonymize individual action and decision-making. As such, exposing herself to this group situation was potentially a more dangerous situation than setting out the same scenario for a one-to-one encounter because responsibility for actions is shifted from the individual to the collective with group members encouraging each other to push the boundaries and experiment with the objects on offer" (Richards 88).

All these being stated, I suppose Plato would approve of Duchamp's *Fountain* and Damien Hirst's *A Thousand Years*, and, Aristotle would allow himself be overwhelmed by pity and fear while watching at all those 72 objects handled during Marina Abramović's performance of *Rhythm 0*.

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