



<http://www.diva-portal.org>

This is the published version of a paper published in *Digital Humanities Quarterly*.

Citation for the original published paper (version of record):

Lindhé, C. (2013)

"A visual sense is born in the fingertips": towards a digital ekphrasis.

*Digital Humanities Quarterly*, 7(1)

Access to the published version may require subscription.

N.B. When citing this work, cite the original published paper.

Permanent link to this version:

<http://urn.kb.se/resolve?urn=urn:nbn:se:umu:diva-64434>

# DHQ: Digital Humanities Quarterly

2013

Volume 7 Number 1

## "A Visual Sense is Born in the Fingertips": Towards a Digital Ekphrasis

Cecilia Lindhé &lt;cecilia\_dot\_lindhe\_at\_humlab\_dot\_umu\_dot\_se&gt;, Umeå University

### Abstract

In this article, the significance of the rhetorical and modern definitions of ekphrasis will be discussed through the lens of digital literature and art. It attempts to reinscribe the body in ekphrastic practice by adding touch to the abstracted visualism of the eye, and emphasize defining features of the ancient usage: orality, immediacy and tactility. What I call the digital ekphrasis with its emphasis on enargeia, its strong connections with the ancient definition, and on the bodily interaction with the work of art, conveys an aesthetic of tactility; digitalis=finger. By tracing and elucidating a historical trajectory that takes the concept of ekphrasis in the ancient culture as a starting point, the intention is not to reject the theories of the late 1900s, but through a reinterpretation of ekphrasis put forward an example of how digital perspectives on classic concepts could challenge or revise more or less taken-for-granted assumptions in the humanities. In this context 'the digital' is not only a phenomenon that could be tied to certain digital objects or used as a digital tool, but as an approach to history, with strong critical potential. The aim is to show that one of the most important features of our digital culture is that it offers new perspectives – not only on current technology – but also on literary, cultural and aesthetic historical practices.

An investigation of ekphrasis in this sense also reveals some of the energies that dwell within the texts that, to us, are black words lying still on the white page but which, to the ancient reader, were alive with rich visual and emotional effects. (Ruth Webb, *Ekphrasis, Imagination and Persuasion in Ancient Rhetorical Theory and Practice* (2009), 5 [Webb 2009])

### Introduction

In his manifesto "Tactilism" (1921), the futurist F. T. Marinetti sketches out the principles of a tactile art form. He suggests that theaters where the spectators interact by holding on to ribbons that "produce tactile sensations with different rhythms" and tactile rooms where the floor beneath the dancers' feet flows with running water can accomplish a multisensory engagement [Marinetti 1924, 199]. This futurist aesthetics that emphasizes immediacy and aims at penetrating the senses of the reader, viewer, and listener, without interpretative reflection, is physiological in nature, and obviously intimately connected to interactivity and touch: "A visual sense is born in the fingertips," Marinetti claims [Marinetti 1924, 199].<sup>[1]</sup> Touching artifacts, such as sculptures, paintings and the objects of the *Wunderkammer*, was commonplace practice in the seventeenth and eighteenth centuries, and in ancient times cult statues and images were not mere representational objects – physical interaction was expected.<sup>[2]</sup> Since the conceptual art movements of the 1950s and 60s, touching artifacts has again become customary and more recently due to the increased corporeal engagement with digital interfaces [Classen 2005]. This emphasis on tactility contradicts "the tactiloclasm" that permeates aesthetic theory where the work of art is viewed as untouchable, and concerned with ocular scrutiny only [Huhtamo 2008].<sup>[3]</sup> How are we to account for the change in aesthetic expression when the interface

1

encourages the spectator to touch the artifact and thus positions the entire body as essential for the experience and interpretation of the artwork?<sup>[4]</sup> A productive way to discuss these issues is through an examination of *ekphrasis* – a concept this article aims to revise.

The established definition of the term — the description of pictorial art in words — is actually a twentieth-century invention that has been modified for the analysis of printed texts. I will hereafter term it the *printed ekphrasis*.<sup>[5]</sup> As a critical term and literary genre, this type of *ekphrasis* focuses on words describing visual objects – a well-known ekphrastic poem is John Keats' "Ode on a Grecian Urn" (1820). The *printed ekphrasis* is derived from the nineteenth-century museum – "the shrine where all poets worship in the secular age," in the words of Heffernan — and has since been defined and discussed with reference to the printed word.<sup>[6]</sup> The ancient rhetorical practice of *ekphrasis* is, on the other hand, defined by the assumption of a live audience and emphasizes immediacy and the impact on the listener. Further, it is much broader and includes not only artistic representations but also *any* description in nature or culture. When an orator spoke about a place, a monument or an event unseen or unfamiliar to the audience he was supposed to use details to create a visual image "in the eyes of the mind" of the listeners [Quintilian 1953, 8.3.62]. The *rhetorical ekphrasis* encompasses aspects relevant for our digital age that have not been fully perceived before; digital literature and art align with this concept of *ekphrasis*, especially in the way that its rhetorical meaning is about effect, immediacy, aurality, and tactility. The multimodal patterns of performativity in the rhetorical situation stage a space-body-word-image-nexus with relevance for how we could interpret and discuss digital aesthetics.

By paying attention to the *rhetorical ekphrasis* and the oral culture's focus on the audience, I wish to bring out a *digital ekphrasis* in which the primary focus is not the description of the subject matter, or the visual object, but rather the process of visualization.<sup>[7]</sup> This article attempts then, via the *rhetorical ekphrasis*, to reinscribe the body within the *printed ekphrasis* by adding touch to the abstracted visualism of the eye, and emphasize defining features of the ancient usage: orality, immediacy and tactility. The *digital ekphrasis* with its emphasis on *enargeia* (vividness), its strong connections with the ancient definition, and on the bodily interaction with the work of art, conveys an aesthetic of tactility; *digitalis=finger*. By tracing and elucidating a historical trajectory that takes the concept of *ekphrasis* in the ancient oral culture as a starting point, the intention is not to reject the theories of the late 1900s, but through a reinterpretation of *ekphrasis* put forward an example of how digital perspectives on classic concepts could challenge or revise more or less taken-for-granted assumptions in the humanities.

Here, the significance of the ancient rhetorical definition, as well as the modern definition of *ekphrasis*, will be studied through the prism of digital literature and art.<sup>[8]</sup> In this context "the digital" is not only a phenomenon that could be tied to certain digital objects or used as a digital tool, but as an approach to history, with the same critical potential as for example post-structuralism, gender theory or post-colonialism. The aim is to show that one of the most important features of our digital culture is that it offers new perspectives – not only on current technology, but also on our literary and cultural history, or our *literacy*, even. The dominance of print technology during the last five hundred years has certainly formed how we relate to art objects. With the advent of print technology, the rhetorical emphasis on speech over writing generated "a reordering in which writing – in the remediated form of print – would come increasingly to dominate the most important social venues of communication," writes John Guillory in an essay on the concept of mediation [Guillory 2010, 326]. This could be compared to the ways in which the rhetorical meaning of *ekphrasis* has been obscured by print technology in a similar way to how the "explosive currency of the [media concept], in the communicative environment of modernity has relegated the genesis of the media concept to a puzzling obscurity" [Guillory 2010, 321].

This article, then, has as its wider scope to deconstruct the filter of printing technologies, with which we look at cultural history, and instead – with "the digital" as a lens in the form of digital literature and art – renegotiate an aesthetic practice that emanates from both rhetoric *and* print technology. Accordingly, I want to highlight one possible way for the digital humanities: the digital as a critical lens on aesthetic concepts and cultural history.

## Rhetorical and Printed Ekphrasis

*Ekphrasis* is a millennia-old concept that works both as a technical device and a literary mode. As a technical term within the study and practice of rhetoric, the origin of *ekphrasis* is documented in the first centuries AD where it occurs in the *Progymnasmata* – compositional exercises used in the Hellenistic schools. The *Progymnasmata* consists of four treatises attributed to Theon, Hermogenes, Nikolaos, and Aphthonios. Theon defines *ekphrasis* as "descriptive language, bringing what is portrayed clearly before the sight" [Kennedy, ed. 2003, 45]. Etymologically, *ekphrasis* originates from Greek *ek* (out) *phrazein* (to explicate, declare) and meant originally "to tell in full" (*εκφραζω*). The goal of *ekphrasis* was *enargeia* (*εναργεια*) – to make the motif graphic and alive for the spectator to "see" what was before him. *ekphrasis* is also a literary genre and frequently used in Greek and Latin literature where it appears for instance during the Homeric period in the *Iliad*, later in Hesiod's *Shield of Herakles*, Euripides' *Electra* and *Ion*, in Vergil's *Aeneid* and in *Eikones* by Philostratus. Some later well known and frequently quoted *ekphrases* features in Dante's *Divine Comedy*, in Shakespeare's *The Rape of Lucrece*, in John Ashbery's *Self-Portrait in a Convex Mirror* and in Rita Dove's "Agosta the Winged Man and Rasha the Black Dove," to mention just a few.

6

In the past few decades, attempts at defining *ekphrasis* conclude that it is a verbal description of, or interpretation of a visual work of art. For a long period of time, Leo Spitzer's definition from 1955 set the tone: "[T]he poetic description of a pictorial or sculptural work of art, which description implies [...] the reproduction through the medium of words, of sensuously perceptible objets d'art ('ut pictura poesis')" [Spitzer 1962, 72]. In *Museum of Words* James A. W. Heffernan works out a now well established definition: [*E*]kphrasis is the verbal representation of visual representation [Heffernan 1993, 3]. Even Heffernan's definition has been criticized though, primarily for being too narrow since it does not include literature on literature or abstract art. Claus Clüver has suggested the following expansion of Heffernan's definition: "Ekphrasis is the verbal representation of a real or fictitious text composed in a non-verbal sign system" [Clüver 1997, 26]. By using a semiotic concept of text that also embraces music and architecture, the limits of *ekphrasis* are expanded to allow for art that is not merely visual. Tamar Yacobi chooses instead to depart from so-called *ekphrastic models*. These refer to qualities that are common to many images such as a specific technique, form, shared motifs or certain traits that are characteristic of an artist's production [Yacobi 1999]. While Yacobi wishes to open up the concept to different kinds of image associations, other researchers maintain that *ekphrasis* must build on lucidity, *enargeia*. Somewhere in between Heffernan and Yacobi is Murray Krieger, who in *ekphrasis: The Illusion of the Natural Sign* starts from the classical demand for lucidity but extends the concept to include everything that links up with spatiality. Krieger's description of how *ekphrasis* arrests the temporal flow of the narrative as it is dedicated to explore spatial dimensions, displays how strongly, still, this discussion is anchored in *paragone*, the tradition of the rivalry of the "sister arts" articulated in the aesthetic theories of e.g. G. E. Lessing and Edmund Burke [Krieger 1992, 7].<sup>[9]</sup> This line of thought, which establishes a binary between spatial and temporal art forms in relation to *ekphrasis*, has been continued by scholars such as Krieger and Heffernan. W. J. T. Mitchell also writes about the struggle of domination between word and image and further argues that *ekphrasis* is an ideological tension between text and image: "The central goal of ekphrastic hope might be called 'the overcoming of otherness.' Ekphrastic poetry is the genre in which texts encounter their own semiotic 'others', those rival, alien modes of representation called the visual, graphic, plastic or 'spatial' arts" [Mitchell 1995, 156]. Scholars have also written about musical, pictorial and reverse *ekphrasis* and consequently it has been used to describe not only verbal transformations of the visual.<sup>[10]</sup> Attempts have thus been made to expand the concept in different directions, but common to the theorists discussed above, is their stressing the primary relevance of the referent, the visual object. However, in her important study of *ekphrasis* and film, *Writing and Filming the Painting*, Laura M. Sager Eidt claims that *ekphrasis* does not need to be a purely verbal representation of a visual object [Eidt 2007]. If the goal of the *ekphrasis* is to make the reader or spectator see, it is possible to push the emphasis from the verbal representation to the *effect* it has on the audience/spectator. To assume such an *enargeia*-perspective ties *ekphrasis* to reception rather than to the referent, and Eidt presents both a potential opening towards the rhetorical *ekphrasis* with her "cinematic ekphrasis" and for studying artworks that are not merely verbal. Another important exception is Andrew Sprague Becker's *The Shield of Achilles and the Poetics of Ekphrasis*, in which he uses the rhetorical *ekphrasis* to analyze the Homeric Shield described in chapter 18 of *The Iliad*. Becker criticizes the focus on *ekphrasis* and "picture-like representation" and writes, "phrasis describes an experience of representations, not just their appearance" [Becker 1995, 11].

7

As we have seen above, in contemporary research, *ekphrasis* is a technical device that is used mainly to analyze texts or textual fragments that describe visual objects. But that was not the case in antiquity when *ekphrasis* could refer to a specific manner of speaking and writing, and could also include descriptions of places and people, as well as of events and stories. In fact, only Nikolaos mentions sculptures and pictures as object of *ekphrasis* and is doing so as a subcategory of *ekphrasis* [Kennedy, ed. 2003, 166–8]. Contrary to modern usage then, the purpose of the ancient definition was not to primarily describe works of art even if reference literature such as *Oxford Classical Dictionary* incorrectly defines *ekphrasis* "as the rhetorical description of a work of art, one of the types of *progymnasmata* " [Oxford Classic Dictionary 1996].<sup>[11]</sup> In *Ekphrasis, Imagination and Persuasion in Ancient Rhetorical Theory and Practice*, Ruth Webb summarizes the important distinction between the rhetorical and the modern printed *ekphrasis*: "[I]n the ancient definition the referent is only of secondary importance; what matters [...] is the impact on the listener" [Webb 2009, 7]. Crucial for an effective *ekphrasis* was an underlying quality of *enargeia* a stylistic effect that appeals to the senses of a listener; an event or a place were to be depicted so vividly as to make it come alive in the listener's mind or eye [Zanker 1981]. The effect of *enargeia* is direct and defers interpretation as well as assessment of the credibility of the images to a later moment in time. The oral speaker situation entails there not being much room for interpretation, which of course requires images to be cogent and speak directly to the listener. Theorists that accept the modern definition are often content with establishing that it is an effect that makes the reader envision what is being described. But *enargeia* is not first and foremost a way to imitate an object, scene or person with words, but rather about the *effect* of seeing an object or an event; it concerns the process of visualization [Webb 2009, 95]. Quintilian, who in his *Institutio Oratoria* comments on the *Progymnasmata*, asserts that it is not necessary for the text to contain *enargeia*-markers, in Latin *evidentia*, (such as detailed descriptions, focus on events or symbols instead of actions), but it is rather the experience of metamorphosing from listener into spectator that may define a speech as being ekphrastic [Scholz 1998]; [Webb 2009, 9]. Quintilian writes:

It is a great gift to be able to set forth the facts on which we are speaking clearly and vividly. For oratory fails of its full effect, and does not assert itself as it should, if its appeal is merely to the hearing, and if the judge merely feels that the facts on which he has to give his decision are being narrated to him, and not displayed in their living truth to the eyes of the mind. [Quintilian 1953, 8.2.62]

Quintilian's exposition implies that *ekphrasis* penetrates the listener more deeply, which creates a distinction between words that, as it were, stays on the surface of the body and those that penetrate the inside and reach the mind's eyes.<sup>[12]</sup> Quintilian describes language as close to a physical power that influences the listener's body, and Longinos writes of its potential to affect the listener when the words works against the body similar to a physical force [Longinos 1991, 15.9]; [Webb 2009, 98].<sup>[13]</sup>

*Ekphrasis* and *enargeia* are sometimes difficult to define independently of each other, which is confirmed also in the ancient sources.<sup>[14]</sup> So, to better understand the physical and perceptible workings in ancient rhetoric, I will briefly discuss a theory of memory and imagination on which *enargeia* and *ekphrasis* are grounded: *phantasia*. In a rhetorical context *phantasia* signifies the orator's internal image that he communicated to the listener and in doing so activated images that were latently stored in the listener's mind.<sup>[15]</sup> Interesting and noteworthy in the rhetorical sources are the weight put on the viewers' reception and how, as orator, one should practice foreseeing which mental pictures would be required to make the *ekphrasis* successful. According to Aristotle, *phantasia* is a process by which images were presented to the mind and he describes how sense impressions were imprinted on the soul, or in a physical way, inscribed to that part of the body that constitutes memory, creating so called memory-images (*phantasmata*) and in doing so emphasizes the physicality of these images.<sup>[16]</sup> According to Ruth Webb [Webb 2009, 107], this creates a "simulacrum of perception itself. It is the act of seeing that is imitated, not the object itself, by the creation of a phantasia that is like the result of direct perception" [Quintilian 1953, 2.6.1]. Ruth Webb [Webb 2009, 128] argues further that the "ancient theory of *enargeia* thus sidesteps the problem of how to represent the visual through the non-visual medium of language because of the connection that is assumed between words and mental images. Words do not directly represent their subjects, but are attached to a mental representation of that subject" [Webb 2009, 128]. Consequently, in modern practice of *ekphrasis*, focus lies on the ontological status of the

visual object where the visual is a quality of the referent, whereas the rhetoricians emphasized the process of visualization and the effect it had on the listener.<sup>[17]</sup> The significance of the body and the emphasis on bodily senses in the rhetorical situation were thus crucial.<sup>[18]</sup> However, it must be remembered that the descriptions of how vivid description worked in the minds of the audience, according to Vasaly, suggest that "ancient, nonliterate society may well have possessed powers of pictorial visualization much greater and more intense than our own" [Vasaly 1993, 99].<sup>[19]</sup> I will return to this below.

## Why, or, Why not Ekphrasis?

As Robert Denham's bibliography *Poets on Paintings* shows, the critical interest in *ekphrasis* has increased since the 1950s [Denham 2010]. And a propos the widespread use of *ekphrasis* in twentieth-century literature, one calls to mind Edna Longley's 1988 essay "No More Poems About Paintings?" During this time, artistic, technological and ideological conditions have changed, but theories of *ekphrasis* have remained relatively constant and current research deals, above all, with the printed *ekphrasis*. As we have seen above, the ancient practice of *ekphrasis* and the concept used in modern literary criticism belong to fundamentally different systems, as well as different media configurations. Hewlett Koelb, in her highly relevant book *The Poetics of Description*, even claims that "this new ekphrasis with its emphasis on obviously mediated subject matter is not just narrower but in its most basic character exactly the opposite of ancient Greek *ekphrasis*, whose aim is immediacy" [Hewlett Koelb 2006, 5]. This discrepancy between the two systems could account for why new media theorists place the two concepts in the same category, but also are reluctant to use *ekphrasis* as a critical tool and artistic device in computer based media art.<sup>[20]</sup> When for example Jay David Bolter claims, "the breakout of the visual in contemporary prose and multimedia is a denial of *ekphrasis*. Popular prose and multimedia are striving for the natural sign in the realm of the visual rather than through heightened verbal expression" [Bolter 1996, 265], and Marie-Laure Ryan contends that "[i]n advanced VR system there will be no need for *ekphrasis* – the verbal description of a visual artwork – because the system will encompass all forms of representation, action and signification. The multisensory will also be the omnisemiotic" [Ryan 2011, 60–61],<sup>[21]</sup> the premises as well as the conclusion of such criticism invite reconsideration.<sup>[22]</sup>

11

## Ek-stasis

Aya Karpinska's digital poem *ek-stasis* appears to be a three-dimensional architectural object that can be navigated by "walking" or "flying" around in it.<sup>[23]</sup> The words and the textual fragments, in different shades of gray, can be read from the front as well as from the back and some words are suspended in the air against a black background. No directions are given as to how or in which order the poem should be read, rather it is about paving your way among rectangles and words: "In a word, 'ek-stasis' constitutes an odd arrangement of letters in a very sparsely illustrated space where geometry gives the reader/user a few orientational cues for exploration and reading," writes Maria Engberg [Engberg 2007, 47]. The title *ekstasis* (ἐκστᾶσις: Greek *ek*: "out of", "from" and *stasis*: "state of") means "being put out of its place" and ecstasy signifies a state of rapture where memory is lost and transcendence to a non-corporeal realm takes place. As Engberg points out: "These works create an experience of a place in which the text is one part, at times with surprisingly stark and minimalist visual expression. The 'virtual reality' of these works does not rely on high intensive graphic representation, but rather on our imagination and those few cues that are needed for the reader/user to experience the work spatiotemporally" [Engberg 2007, 85]. *Virtual reality*, which *ek-stasis* metaphorically stages, is characterized by a new way of looking if compared to photography or film since the perspective no longer is static; in *virtual reality* the beholder has, as it were, fallen through the frame and finds herself in a world completely made up of visual data. But, in Karpinska's poem, things do not really work that way, since the reader can never be immersed into the graphical world. The reading takes place in an oscillation between presence and absence and in the midst of bodily interaction and decoding. By using letters instead of pictures, while simultaneously creating images in the form of text shaping geometrical and spatial formations, the work forces the reader to interact with the interface and it continuously stages play that oscillates between the corporeal and the *extra*-corporeal. The poem alienates traditional reading and emphasizes – thematically as well as formally – the necessity of touch. This is not an ekphrastic poem, Engberg claims, although its title

12

could be said to allude to the concept.<sup>[24]</sup> This interpretation is of course plausible if the materiality of the printed text and the modern *ekphrasis* is taken as our point of reference. Meanwhile, it is observed how the poem stages an illusory place that is experienced in parallel with the reading of the text. As we will see below, a similar tension between presence and absence constitutes the *ekphrasis* of antiquity. *Ek-stasis* stages simultaneity and in N. Katherine Hayles' words, a *feedback loop* through the reader's interaction with the work. According to Hayles the electronic text is processual. This means that the existence of a work is dependent on computer files and software that execute words of command and hardware that can run the software: "These digital characteristics imply that the poem ceases to exist as self-contained object and instead becomes a *process*, an event brought into existence when the program runs on the appropriate software loaded onto the right hardware" [Hayles 2006, 181–2]. The computer produces the text as an event and the reader's interactions modify and thus determine the direction of the text, functioning like a physical feedback looping back to the machine admonishing it to change its behaviors. This feedback is a form of simultaneity that can be described as more direct than the experience of reading printed literature.<sup>[25]</sup>

According to Oliver Grau, immersion is a key to understanding the development of new media and in *Virtual Art* he reports the long history of the dream of stepping into the artwork itself. Grau's point of departure is the European tradition of mural paintings, like the ones in the Villa dei Misteri in Pompeii, which were intended to create immersion and illusion [Grau 2003, 7]. Grau claims that "the expression 'virtual reality' is a paradox, a contradiction in terms, and it describes a space of possibility or impossibility formed by illusionary addresses to the senses." He contends further, "the visual strategies of immersion in the virtual reality of the computer and its precursors in art and media history" differ fundamentally from imagination addressed through words, as expressed by the concept of *ekphrasis* [Grau 2003, 15]. Obviously, the interaction between visual, verbal, auditive and kinetic elements in digital literature and art puts the concept of *ekphrasis* in a different light: the visual object can be described by a voice or a text while also being possible to mobilize and in that way assume new formations. Further, the visual object may transform into a verbal formation and vice versa and can actually be staged when the reader or user to a higher degree creates the artwork through physical actions. And even though virtual reality environments stage a total impression of the image, the user is still interacting with interfaces in the form of a headmounted display, goggles and gloves.<sup>[26]</sup> Just as Grau describes the characteristics of VR and immersion as a space of possibility and impossibility, the ancient *ekphrasis* is dependent on an "as-if-presentness." In Quintilian's description of *enargeia* an "as if" (*quam si*) always figures: *enargeia* is about illusion and takes place in an ongoing tension between presence and absence [Webb 2009, 168–9]. It is this oscillation or process of visualization that is of interest here, not the representation of the object. The opposition between what is seen and what is imagined is misleading. Even advanced VR-systems where the spectator is exposed to a full visual presence could be said to play on an "as-if-presentness." In "There Are No Visual Media", W. J. T. Mitchell maintains that the term "visual media" is misleading since it is so strongly associated with vision. He asserts that the visual is intimately linked with other senses like hearing and touch. But this, he states, does not include the *ekphrasis*:

The crucial role of ekphrasis, however, is that the "other" medium, the visual graphic, or plastic object, is never made visible or tangible *except* by way of the medium of language. One might call ekphrasis a form of nesting without touching or suturing, a kind of action-at-distance between two rigorously separated sensory and semiotic tracks, one that requires completion in the mind of the reader. This is why poetry remains the most subtle master-medium of the *sensus communis*, no matter how many spectacular multimedia inventions are devised to assault our collective sensibilities. [Mitchell 2007, 402]

This could be true if we assume the modern print-based definition and do not take qualities, such as tactility, immediacy and aurality, of the multisensory qualities of the ancient *ekphrasis* into consideration. However, Mitchell does argue that all media are *mixed media* and in their realization depend upon all the senses. In a complex media ecology the verbal is not simply verbal but is also intimately connected with the senses and other medial expressions. The occurrence of visual elements in VR-environments, digital art and literature, could, with Bolter, Ryan and Grau, be said to deny, or make ekphrasis a redundant concept, but this is only if we apply the print-based definition of the term and do not take the immediacy, performativity and multisensory circumstances of rhetoric into account. One reason why theorists make no difference between the rhetorical

13

14

and the printed *ekphrasis* and argue that *ekphrasis* is redundant within new media art could be discussed in the light of Guillory's analysis of the origin of the media concept, where he argues that a current problem with the media concept is related to how "[c]ultural disciplines founded on the older scheme of the fine arts [...] manifest a falsely residual character because they remain theoretically unintegrated into the system of the media" [Guillory 2010, 360]. To stimulate cultural disciplines that are founded on the older scheme of the arts it is of importance not only to discuss, analyze and understand non-digital artifacts in relation to "older technologies" (for example how print technology influenced the novel and the concept of genre), but also to investigate how the digital perspective could challenge theory, method and our view on history. Guillory again: "If a new instauration of the cultural disciplines is to be attempted, it is all the more necessary that scholars of culture strongly resist relegating the traditional arts to the sphere of antiquated technologies, the tacit assumption in the losing competition between literature and the new media" [Guillory 2010, 361]. Consequently, it is vital to understand digital culture and technology, not only as the latest and currently predominant technology, but also as a critical perspective that could revitalize media historical approaches in the traditional disciplines. And naturally, it is equally important to let older media theory (rhetoric for example) influence analyses of digital culture.

## Screen

In her *Representations: Images of the World in Ciceronian Oratory*, Ann Vasaly stresses the importance of place and the occasional presence of the visual object in Ciceronian oratory: "a study of Cicero's references to the visual environment show that, in fact, such references frequently depend for their success upon an audience's imaginative reconstruction of an event" [Vasaly 1993, 129]. The difference between a verbally constructed scene and the one where the audience could gaze at, for example, the scene of a crime, is a matter of degree. However, the goal for an orator was not mainly to describe the visual object, but was rather about the *process* of visualization and of how he led his "audience to a predictable emotional and intellectual stance" [Vasaly 1993, 104]. This type of visual setting when the images could be said to set in motion a variety of imaginative, emotional, and rational reactions in motion, even before a voice starts to speak, characterizes the interactive installation *Screen*.<sup>[27]</sup> *Screen* problematizes language's ability to represent memory and it does so through the orchestration of an aesthetics that combines oral, print and digital communication strategies. The user can listen to words, read words and touch words. Words are read out loud, they are displayed in temporal sequence on a page-like wall, but they also move around in a three dimensional space. *Screen* is created and can be viewed in a CAVE environment, typically a four-surfaced room that includes three walls and a floor display. Text or graphics can be projected on to the three surrounding walls as well as to the floor. When the reader enters the cave wearing goggles and gloves a text is displayed at one of the walls as well as read out loud by a male speaker. Words that sometimes feel "so vivid [...] that we feel we can almost reach out and touch them" could not only be read as a description of *enargeia*, but also become enacted in a literal way when the words start to peel away from the walls and float freely in the space that surrounds the reader. She can try to put them back in place with the data glove but it becomes increasingly difficult when the words are detaching themselves faster and faster. This could be compared to Ruth Webb's description of *ekphrasis* as words being a force acting on a listener [Webb 2009]. Eventually, when too many words are floating around the reader, the rest come off and the texts collapse.

15

As Roberto Simanowski points out, *Screen* raises questions about memory and place: "[...] what [...] defines memory. Is it what is stored in an external medium or what one carries around in the mind?" [Simanowski 2011, 46] Put differently, *Screen* raises questions about the spatiality of memory recollection. The mnemonic system developed in the ancient period is based on loci, the placement of allegorical images within constructed mental architectures such as a building or a landscape ([Carruthers 2008], [Yates 2010]). *Memoria* and the practice of *loci communes* thus stressed the importance of linking spatiality to memory images [Quintilian 1953, 11, li] *sqq.* *Screen* brings the close connection between visualization and memory in ancient theories and techniques of memorization to the fore. Memory and meaning are temporarily established through the bodily interaction with words that peel off and are put back in place. But the words keep coming off at an increasing speed, which places the reader in a constant tension between presence and absence, between significance and non-significance. As we have seen, a similar tension between presence and absence constitutes the rhetorical *ekphrasis*. Webb explains: "The audience (whether readers, listeners, viewers or spectators) combine a state of imaginative and emotional involvement in the worlds represented

16

with an awareness that these worlds are not real" [Webb 2009, 168–9] The oscillation between presence and absence has points of contact also with *enargeia* and the rhetorical *ekphrasis*, which accentuates the tension present in all reading between being situated and physically anchored, while creating presence in the fictive universe that we attempt to visualize while reading.

A defining feature of the rhetorical *ekphrasis* was not just an efficient use of verbal description, but concerned also immediacy and immersion through the senses. In *Progymnasmata*, Hermogenes describes *ekphrasis* as an expression that brings about sight through sound: "Virtues (aretai) of an ekphrasis are, most of all, clarity (saphêneia) and vividness (enargeia); for the expression should almost create seeing through hearing" [Kennedy, ed. 2003, 65]. The auditive dimension of *ekphrasis* has been lost in the modern definition, but was of course an important element in the rhetorical situation. The audible features of *Screen* could be compared to the speaker as guide showing the listener around. The spoken words direct the reader's attention towards the text and the speakers lead the reader through the work. Again, let us read the definition of *ekphrasis* as it could be translated: "Ekphrasis is a descriptive [periegematikos] speech which brings [literally 'leads'] the thing shown vividly before the eyes" [Webb 2009, 51]. *Periegematikos* is an adjective that equals the speaker with a *guide* showing the listener around the sight – "shows its audience around, gives it a tour" [Webb 2009, 54].<sup>[28]</sup> Quintilian also writes about how visual impressions aroused by *enargeia* "makes us seem not so much to narrate as to exhibit the actual scene while our emotions will be no less actively stirred than if we were present at the actual occurrence" [Quintilian 1953, 6.2.32]. Thus, in a successful *ekphrasis*, the scene is not so much narrated as exhibited, and Ruth Webb describes the rhetorical situation as a theater or exhibition: "Drawn as they are from different domains, these metaphors all suggest slightly different relationships between speaker, addressee and referent: the subject matter may be 'brought' into the presence of the audience (speaker as theatrical producer), or the audience may be led around the subject (speaker as tour guide)" [Webb 2009]. Interactive installations and virtual reality art have evolved from and in relation to architecture, sculpture and performance and these artworks are realized in virtual spheres that generate tangible spatial experiences; however, Hellenistic visual art and poetry also created modes of viewing in order to involve and integrate viewers and readers visually as well as spatially into compositions.<sup>[29]</sup>

17

In the digital *ekphrasis*, emphasis is moved from the problem of representing a visual object with words, to the user's bodily interaction with an environment, her relational experience where the words act as a quasi-physical force acting upon her.<sup>[30]</sup> Digital interfaces direct attention to the physical interaction and to the materiality of the work, and thus encourage a rediscovery of a bodily/tactile and multisensory experience in relation also to non-digital artifacts. That reading takes place, and always has, in a tension between the corporeal, the spatial and the metaphorical goes without saying, but digital works inevitably foreground and refocus the relation between immediate and embodied touch, since the reader is so distinctly inscribed in its structure through the active feedback loop [Scarry 1999]. The print-based definitions of *ekphrasis* often disregard the immediacy that was its condition in antiquity. Immediacy is characteristic of processual electronic literature, which at the same time demands of its user a more painstaking interpretative or decoding practice. Both *Ek-stasis* and *Screen* stage immediacy, or a direct *feedback loop* through the reader's interaction with the work. Without drawing a direct analogy between the ancient and the contemporary view of the reader/listener it could be illuminating to bring out the ancient rhetor's emphasis on involving the listener in the course of events. Webb writes: "To emphasize the rhetorical nature of *ekphrasis* is also to draw attention to the vestigial orality of the phenomenon, the way in which the discussions of both *ekphrasis* and *enargeia* assume live interactions between speaker and audience, with language passing like an electrical [sic] charge between them" [Webb 2009, 129]

18

## Digital Ekphrasis

During the last years a substantial critique of the hegemony of vision in our western cultural heritage has surfaced.<sup>[31]</sup> Indeed, sight was considered the noblest of senses during antiquity, which we find in the writings of for example Heraclitus, Plato and Aristotle. However, the emphasis on aurality and physical engagement was also important in the oral, rhetorical situation. In *The Senses of Touch*, Mark Paterson has shown how Greek histories of measurement were multisensory and dependent on the body. Paterson writes:

19

Before it becomes an abstracted, visual set of symbols on a surface, at one stage

geometry involved the actual bodily process of measuring space. In the measuring process, the hands, feet, eyes and body are all involved in spatial apprehension and perception. Spatial relations mediated through the body become represented in abstract form through a set of visual symbols. As we know, such visual symbols become part of a whole system of representation, geometry, which is subtracted from the original, embodied measuring process. [Paterson 2007, 60]

The development of geometry into an abstract form also meant an active forgetting of the senses, which implies a move from "the variability of the senses and sensory experience to the static invariability of a desensitized, abstract space" [Paterson 2007, 65]. This is, according to Paterson, symptomatic for the way the body has been written out of the cultural history of the West and instead emphasis has been put on the visual sense. The development of geometry represents a parallel to the way printing technology has cemented the concept of *ekphrasis* to something that is concerned with ocular scrutiny only, and as a consequence *ekphrasis* has been described as a redundant critical tool for analyzing digital artifacts. The *digital ekphrasis*, though, could be used as a critical device that picks up immediacy and tactility, that were so central during antiquity, and by doing so rejects discourses that try to transcend the body. Taking touch and physical interaction into account could then enable a reactivating of all the senses in analyses of earlier (print-bound) ekphrastic practice as well. As we have seen, in antiquity *ekphrasis* was an important link to creating the desired intimate communication situation between speaker and listener, and the emphasis on all the bodily senses played a crucial role. Digital interactive installations foreground the importance of space in a similar sense to how ancient rhetoric was based on its performance in particular (public) spaces – such as the agora and the stage – or with Mary Carruthers: "[T]he heart of rhetoric, as of all art, lies in its performance; it proffers both visual spectacle and verbal dance to an audience which is not passive but an actor in the whole experience, like the chorus in a drama" [Carruthers 2010a, 2]. By uncovering the past through the digital interfaces, it becomes clear how the printed *ekphrasis* is permeated with assumptions grounded in analyses of printed literature. Not only has this led to a dismissal of *ekphrasis* in relation to digital artifacts, the hegemony of the modern definition has according to Hewlett Koelb also "given us a distorted filter through which to perceive ecphrases in earlier literature" [Hewlett Koelb 2006, 4] A revision of the concept could help us discover overlooked aspects of *ekphrasis* in relation to earlier examples as well, or in other words, the digital as perspective could introduce new ways of reading that could defamiliarize — affirm, correct or overturn — our approach to literature, or, rather, to printed texts.

20

As shown by the discussions above, it seems possible to re-interpret the concept of *ekphrasis* through digital interfaces and, in a wider sense, this shows the importance and fruitfulness of reassessing older, traditional literary practices and categories. If *ekphrasis* is discussed in accordance with its rhetorical function, the focus on the representations of the subject matter and the detailed comparison between text and image become less interesting, and *ekphrasis* turns into a productive tool for discussing digital artifacts as well as a basis for the re-interpretation of printed texts (not the least would it be interesting to re-examine a canonized *print ekphrasis* like Keats "Ode..."). It reveals the illusion of a static fixing of boundaries between image and text and demonstrates how the rhetorical non-text based *ekphrasis* with its call for interaction and tactility stages dissolution of traditional forms. Rereading the printed *ekphrasis* by way of the ancient emphasis on *enargeia* and the immediacy of the rhetorical multisensory situation, and further taking into consideration the dependence upon physical interaction of digital works, the process of visualization or, differently put, the constant tension between presence and absence together with physical interaction, becomes the constituting factor of *ekphrasis*. By exploring tactical and auditive aspects in relation to ancient rhetoric and digital interfaces, one can also begin to ask with Paterson "whether it is possible to go beyond the ocular centric in traditional aesthetic and literary practices, and consider other modes of experience and forms of attention, such as those made available by touch" [Paterson 2007]. Further, the digital interface as a critical lens could renegotiate rhetorical and aesthetic theories, but also offer new ways to think about the specificity of print – for example, to see the printed codex as an interactive object rather than a static artifact.<sup>[32]</sup> Or, in other words, to re-discover written and printed language and, as a consequence, Humanities as such.

21

## Notes

[1] Compare the title of Mark B. N. Hansen's chapter "Seeing through the Hand" in [Hansen 2006].

[2] See for example [Morris 1995], [Weddle 2010], [Alcock and Osborne, eds. 1994].

[3] Huhtamo writes, "We could speak of 'tactiloclasms' – cases where physical touching is not only absent, but expressly prohibited and suppressed" [Huhtamo 2008, 75]. The emphasis on sight in western cultural practices is well documented. See e.g. [Paterson 2007], [Classen 1993], [Crary 1990] [Jay 1993], [Huhtamo 2006, 17–21].

[4] Mark B. N. Hansen has written extensively about how digital environments profoundly has affected embodied meaning. See for example Mark B. N. Hansen, [Hansen 2004], [Hansen 2006]. I am aware of the distinction between body and embodiment, where the former concept was introduced by theorists to establish a difference between the body as a static and biological given concept and the body as a historically situated experience. Here I use "body," but in the sense of "embodiment." For a discussion about body and embodiment, see also [Hayles 1999].

[5] This article is grounded on Ruth Webb's distinction between the modern and ancient *ekphrasis*, see [Webb 2009], but to emphasise the influence of printing technology on *ekphrasis* during the last centuries I have chosen to use *the printed ekphrasis* and *the rhetorical ekphrasis*. There are other scholars that have noted a modern tendency to associate ekphrasis with art only, see for example [Maguire 1981], [Hewlett Koelb 2006].

[6] James A. W. Heffernan writes: "Twentieth century ekphrasis springs from the museum, the shrine where all poets worship in a secular age." [Heffernan 1993, 138]

[7] I should already here hasten to add that the aim of this study is not to attempt to account for the reader's perception, but for the reading strategies that are inscribed in the work.

[8] For a discussion about the delicate difference between digital literature and art, see [Simanowski 2011].

[9] Heffernan also emphasis the rivalry between the art forms: "Because it verbally represents visual art, ekphrasis stages a contest between rival modes of representation: between the driving force of the narrating word and the stubborn resistance of the fixed image" [Heffernan 1993, 6].

[10] See for example [Bruhn 2000], [Stewart 2006], [Bolter 1996].

[11] This has been observed by other scholars, see for example [Bartsch 1989]. However in the third edition of *The Oxford Classical Dictionary*, *ekphrasis* is described as "an extended and detailed literary description of any object, real or imaginary" [Oxford Classic Dictionary 1996].

[12] This is also emphasized in the Greek sources, and Nikolaos writes about the difference between descriptive speech and *ekphrasis* where the latter "tries to make the hearers into spectators", see [Kennedy, ed. 2003, 127].

[13] Ruth Webb writes about how Quintilian in the *Institutio Oratoria* compares the simple description of fact with the ekphrastic description and how differently they influence the listener on a physical plane: "The plain statement reaches only the ears while the vivid version, the equivalent of ekphrasis, 'displays the subject to the eyes of the mind' " and how "The Latin distinguishes between inner and outer senses of sight, where our Greek sources do not" [Webb 2009, 98].

[14] [Zanker 1981]; [Quintilian 1953, 4.2.63–65] (*evidentia, enargeia*); [Quintilian 1953, 123] (*rerum imago*); [Quintilian 1953, VI.2.32] (*enargeia*); [Quintilian 1953, 8.3.61–71] (*enargeia, evidentia, repraesentatio*).

[15] For a difference between poetic and rhetorical *phantasia*, see Quintilian 6.2.29-32.

[16] Aristotle, *On Memory and Recollection*, 450a, 30-32; [Webb 2009, 111–113]. For a discussion about *phantasia* and *memoria* see also [Carruthers 2008], especially chapter "Models for the Memory."

[17] For example, both Quintilian and Longinos are concerned with the effect on the listener, rather than the ontological status of the subject of the visions [Webb 2009, 95, 118].

[18] This has also been emphasized by Mary Carruthers: *Enargeia* addresses not just the eyes, but all the senses. It is easy to forget this when we read rhetoric texts, because the emphasis is so much on the visual sense. But the visual leads on to and is accompanied by an engagement of all the other senses in a meticulously crafted fiction." See [Carruthers 1998, 132].

[19] See also [Yates 2010, 20]: "Ancient memories...could depend on faculties of intense visual memorization which we have lost."

[20] In *Remediation* Bolter and Grusin describe both the ancient and modern ekphrases as "literary descriptions of works of art" [Bolter and Grusin 1999, 45]. However, in *Progymnasmata*, *ekphrasis* is just

mentioned in passing when general subject matters are listed. Works of art have no special status. However, in a recent essay Aaron Kashtan argues that interactive fiction can be analysed within the same literary tradition as for example visual prose and ekphrastic textuality. See "Because It's Not There: Ekphrasis and the Threat of Graphics in Interactive Fiction," *Digital Humanities Quarterly*, 2011:5.1, <http://www.digitalhumanities.org/dhq/vol/5/1/000101/000101.html>. The term digital ekphrasis has been used by Lanfranco Aceti in his dissertation *European Avant-Garde: Art, Borders and Culture in Relationship to Mainstream Cinema and New Media* [Aceti 2005].

[21] See also [Grau 2003, 15].

[22] Here I want to emphasize the fact that classicists were early adopters of digital technology and have consequently been at the forefront of digital humanities research. Early and ambitious projects – both from 1972 - within the field are the *Thesaurus Lingua Graecae* and *The Lexicon of Greek Personal Names*. See [Crane 2004, 47–55]; [Bodard and Mahony 2011]. Other important projects are creations of digital 3D-models and digital archives such as *Rome Reborn: A Digital Model of Ancient Rome* at University of Virginia (<http://www.romereborn.virginia.edu/>); *Digital Romanum Forum* at UCLA (<http://dlib.etc.ucla.edu/projects/Forum>); Stanford Digital Forma Urbis Romae Project at Stanford University (<http://formaurbis.stanford.edu/>), to mention just a few. Other efforts have shown how working in digital environments – such as the visualizing and analyzing of geospatial information – could offer a re-thinking of a concept such as "space." See [Dunn 2011, 53–69].

[23] <http://epc.buffalo.edu/eazines/lume/moment1/karpinska/>. In Maria Engberg's highly relevant dissertation, *Born Digital. Writing Poetry in the Age of New Media*, a CD that includes a clip of *ek-stasis* accompanies the book.

[24] "The poem 'ek-stasis', however, does not seem to be a verbal description of an art object. Indeed, if anything, 'ek-stasis' is the object, the house." [Engberg 2007, 48].

[25] Of course, already Marshall McLuhan associated simultaneity with the instant speed of electricity, in opposition to the sequential logic of print. See [McLuhan 1964].

[26] There is also the case of augmented reality where the computer is not drawing the whole visual scene but augment the user's view of the physical world.

[27] By Noah Wardrip-Fruin together with Josh Carroll, Robert Coover, Shawn Greenlee, Andre McLain and Benjamin Shine. *Screen* was first shown in 2003, a later version was made for *SIGGRAPH* in 2007.

[28] This could be compared to the rhetorical concept of *ductus* that: "analyse the experience of artistic form as an ongoing, dynamic process rather than as the examination of a static or completed object. Ductus is the way by which a work leads someone through itself." See [Carruthers 2010, 214]

[29] See [Wands 2006] and [Zanker 2003, 27].

[30] In this context it would be highly relevant to also discuss the concept of performativity (*actio*, *pronuntiatio*) that lies at the heart of rhetoric. In a forthcoming article I discuss how rhetorical *actio* (the realization of a speech by vocalization and accompanying physical movements) in digital literature and art is performed by the user rather than the speaker.

[31] See footnote 3.

[32] That digitalization offers the possibility to re-examine the notion of the printed codex-bound book have among others Jerome McGann, Johanna Drucker and Andrew Piper shown. On this view, the codex book is distinguished by being a "program" that "does" and "executes" rather than a static artifact and in that sense constitutes a prerequisite of digital programming: both are distinguished by performativity. McGann writes that a book is never "self-identical" – it does not stand in opposition to digital literature's presupposed openness and performativity; it does not close upon itself as a static, life-less artifact. See #mcgann2009, [Drucker 2009], [Piper 2009].

## Works Cited

**Aceti 2005** Aceti, Lanfranco. *European Avant-Garde: Art, Borders and Culture in Relationship to Mainstream Cinema and New Media* (dissertation). London: University of the Arts London, 2005.

**Alcock and Osborne, eds. 1994** Alcock, S. and R. Osborne (eds.) *Placing the Gods: Sanctuaries and Sacred Space in Ancient Greece*. Oxford: Clarendon, 1994.

**Bartsch 1989** Bartsch, Shadi. *Decoding the Ancient Novel: The Reader and Role of Description in Heliodorus and Achilles Tatius*. Princeton: Princeton Univ. Press, 1989.

- Becker 1995** Becker, Andrew Sprague. *The Shield of Achilles and the Poetics of Ekphrasis*. Lanham, Maryland: Rowman & Littlefield, 1995.
- Bodard and Mahony 2011** Bodard, Gabriel, and Samuel Mahony, eds. *Digital Research in the Study of Classical Antiquity*. Farnham; Ashgate, 2011.
- Bolter 1996** Bolter, Jay David. *Ekphrasis, Virtual Reality and the Future of Writing, The Future of the Book*, ed. Geoffrey Nunberg. Berkeley: Univ. of California Press, 1996. p. 253–272
- Bolter and Grusin 1999** Bolter, Jay David, and Richard Grusin. *Remediation: Understanding New Media*. Cambridge, MA: MIT Press, 1999.
- Bruhn 2000** Bruhn, Siglind. *Musical Ekphrasis: Composers Responding to Poetry and Painting*. Hillsdale, N.Y.: Pendragon, 2000.
- Carruthers 1998** Carruthers, Mary. *The Craft of Thought. Meditation, Rhetoric, and the Making of Images, 400–1200*. Cambridge: Cambridge University Press, 1998.
- Carruthers 2008** Carruthers, Mary. *The Book of Memory: Second Edition*. Cambridge: Cambridge University Press, 2008.
- Carruthers 2010** Mary Carruthers, "The Concept of Ductus, Or Journeying through a Work of Art," *Rhetoric Beyond Words. Delight and Persuasion in the Arts of the Middle Ages*, ed. Mary Carruthers. Cambridge: Cambridge Univ. Press, 2010. p. 214
- Carruthers 2010a** Carruthers, Mary. "Editor's Introduction." *Rhetoric Beyond Words: Delight and Persuasion in the Arts of the Middle Ages*. Ed. Mary Carruthers. Cambridge: Cambridge University Press, 2010.
- Classen 1993** Classen, Constance. *Worlds of Senses: Exploring the Senses in History and Across Cultures*. London: Routledge, 1993.
- Classen 2005** Classen, Constance. "Touch in the Museum." *The Book of Touch*. Ed. Constance Classen. Oxford and New York: Berg, 2005. 275-286.
- Clüver 1997** Clüver, Claus. "Ekphrasis Reconsidered: On Verbal Representations of Non-Verbal Texts." *Interart Poetics: Essays on the Interrelations of the Arts and Media*. Eds. Ulla Britta Lagerroth, Hans Lund, Erik Hedling. Amsterdam: Rodopi, 1997.
- Crane 2004** Crane, Greg. "Classics and the Computer: An End of the History". *A Companion to Digital Humanities*, eds. Susan Schreibman, Ray Siemens and John Unsworth. Oxford: Blackwell, 2004.
- Crary 1990** Crary, Jonathan. *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*. Cambridge, Mass.: MIT Press, 1990.
- Denham 2010** Denham, Robert D. *Poets on Paintings: A Bibliography*. Jefferson, North Carolina: McFarland & Company
- Drucker 2009** Drucker, Johanna. *SpecLab: Digital Aesthetics and Projects in Speculative Computing*. Chicago: University of Chicago Press, 2009.
- Dunn 2011** Dunn, Stuart. *Space as an Artefact: A Perspective on "Neogeography" from the Digital Humanities*. *Digital Research in the Study of Classical Antiquity*, ed. Gabriel Bodard and Simon Mahony. Farnham; Ashgate, 2011.
- Eidt 2007** Eidt, Laura M. Sager. *Writing and Editing the Painting: Ekphrasis in Literature and Film*. Amsterdam: Rodopi, 2008.
- Engberg 2007** Engberg, Maria. *Born Digital: Writing Poetry in the Age of New Media*, diss. Uppsala: Uppsala University, 2007.
- Grau 2003** Grau, Oliver. *Visual Art: From Illusion to Immersion*. Cambridge, Massachusetts: The MIT Press, 2003.
- Guillory 2010** Guillory, John. "Genesis of the Media Concept." *Critical Inquiry*. 36.2 (Winter 2010). 321-362.
- Hansen 2004** Hansen, Mark B.N. *New Philosophy for New Media*. Cambridge, Mass.: The MIT Press, 2004.
- Hansen 2006** Hansen, Mark B.N. *Bodies in Code. Interfaces with Digital Media*. New York & London: Routledge, 2006.
- Hayles 1999** Hayles, N. Katherine. *How We Became Posthuman. Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago: Univ. of Chicago Press, 1999.
- Hayles 2006** Hayles, N. Katherine. "The Time of Digital Poetry: From Object to Event." *New Media Poetics*,

*Contexts, Technotexts, and Theories*. Eds. Adalaid Kirby Morris and Thomas Swiss. Cambridge, Massachusetts: The MIT Press, 2006. 181-209.

- Heffernan 1993** Heffernan, James A. W. *Museum of Words: The Poetics of Ekphrasis from Homer to Ashbery*. Chicago: University of Chicago Press, 1993.
- Hewlett Koelb 2006** Hewlett Koelb, Janice. *The Poetics of Description: Imagined Places in European Literature*. New York: Palgrave MacMillan, 2006.
- Huhtamo 2006** Huhtamo, Erkki. "Shaken hands with statues...": On Art, Interactivity and Tactility". *Second Natures*. Faculty Exhibitions of the UCLA Design-Media Arts Department. Los Angeles: Univ. of California, 2006. p. 17–21.
- Huhtamo 2008** Huhtamo, Erkki. "Twin-Touch-Test-Redux: Media Archaeological Approach to Art, Interactivity, and Tactility." *MediaArtHistories*. Ed. Oliver Grau. Cambridge, Massachusetts: The MIT Press, 2008. 71-101.
- Jay 1993** Jay, Martin. *Downcast Eyes: The Denigration of Vision in Twentieth Century French Thought*. Berkeley: The Univ. of California Press, 1993.
- Kashtan 2011** Kashtan, Aaron. "Because It's Not There: Ekphrasis and the Threat of Graphics in Interactive Fiction," *Digital Humanities Quarterly*, 2011:5.1, <http://www.digitalhumanities.org/dhq/vol/5/1/000101/000101.html>.
- Kennedy, ed. 2003** *Progymnasmata: Greek Textbooks of Prose Composition, Translated into English with Introductions and Notes*. Ed. George A. Kennedy. Atlanta: Society of Biblical Literature, 2003.
- Krieger 1992** Krieger, Murray. *Ekphrasis: The Illusion of the Natural Sign*. Baltimore and London: The Johns Hopkins University Press, 1992.
- Longinos 1991** Longinos. *On Great Writing (On the Sublime)*. Trans. G. M. A. Grube. Indianapolis: Hackett Publishing Company, 1991.
- Maguire 1981** Maguire, Henry. *Art and Eloquence in Byzantium*. Princeton: Princeton Univ. Press, 1981.
- Marinetti 1924** Marinetti, F. T. "Tactilism" (1924). *Manifesto: A Century of isms*. Ed. Mary Ann Caws. Lincoln: University of Nebraska Press, 2001. 197–200.
- McGann 2001** McGann, Jerome J. *Radiant Textuality. Literature after the World Wide Web*. Palgrave: McMillan, 2001.
- McLuhan 1964** McLuhan, Marshall. *Understanding Media: The Extensions of Man*. London: Routledge, 1964.
- Mitchell 1995** Mitchell, W. J. T. *Picture Theory: Essays on Verbal and Visual Representation*. Chicago and London: University of Chicago Press, 1995.
- Mitchell 2007** Mitchell, W. J. T. "There Are No Visual Media." *MediaArtHistories*. Ed. Oliver Grau. Cambridge, Massachusetts: The MIT Press, 2007. 395-406.
- Morris 1995** Morris, Sarah P. *Daidalos and the Origins of Greek Art* Princeton: Princeton Univ. Press, 1995.
- Oxford Classic Dictionary 1996** *The Oxford Classical Dictionary*. Oxford; Clarendon Press, 1970.
- Paterson 2007** Paterson, Mark. *The Senses of Touch: Haptics, Affects and Technologies*. Oxford, New York: Berg, 2007.
- Piper 2009** Andrew Piper, *Dreaming in Books. The Making of the Bibliographic Imagination in the Romantic Age*. Chicago: The Univ. of Chicago Press, 2009.
- Quintilian 1953** Quintilian. *Institutio Oratoria, with an English translation by H. E. Butler*. Cambridge, Massachusetts: Harvard University Press, 1953.
- Ryan 2011** Ryan, Marie-Laure. *Narrative as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media*. Baltimore and London: The Johns Hopkins University Press, 2001.
- Scarry 1999** Scarry, Elaine. *Dreaming by the Book*. New York: Farrar, Strauss and Giroux, 1999.
- Scholz 1998** Scholz, Bernard F. "'Sub Oculos Subiectio': Quintilian on Ekphrasis and Enargeia." *Pictures into Words: Theoretical and Descriptive Approaches to Ekphrasis*. Ed. Valerie Kay Robillard and Els Jongeneel. Amsterdam: VU University Press, 1998. 73-99.
- Simanowski 2011** Simanowski, Roberto. *Digital Art and Meaning: Reading Kinetic Poetry, Text Machines, Mapping Art, and Interactive Installations*. Minneapolis: University of Minnesota Press, 2011.

- Spitzer 1962** Spitzer, Leo. "The 'Ode on a Grecian Urn,' or Content vs. Metagrammar." *Essays on English and American Literature*. Ed. Anna Hatcher. Princeton, New Jersey: Princeton University Press, 1962.
- Stewart 2006** Garrett Stewart, *The Look of Reading: Book, Painting, Text*. Chicago & London: Univ. of Chicago Press, 2006.
- Vasaly 1993** Vasaly, Ann. *Representations: Images of the World in Ciceronian Oratory*. Berkeley: University of California Press, 1993.
- Wands 2006** Wands, Bruce. *Art of the Digital Age*. London: Thames & Hudson, 2006.
- Webb 2009** Webb, Ruth. *Ekphrasis, Imagination and Persuasion in Ancient Rhetorical Theory and Practice*. Farnham, England: Ashgate, 2009.
- Weddle 2010** Weddle, Polly. *Touching the Gods: Physical Interaction with Cult Statues in the Roman World*. Durham: Durham Univ., 2010. available at Durham E-Theses Online: <http://etheses.dur.ac.uk/555/>
- Yacobi 1999** Yacobi, Tamar. "The Ekphrastic Figure of Speech." *Text and Visuality: Word and Image Interaction 3*. Ed. Martin Heusser. Amsterdam: Rodopi, 1999.
- Yates 2010** Yates, Frances A. *The Art of Memory*. London: Pimlico, 2010.
- Zanker 1981** Zanker, Graham. "Enargeia in the Ancient Criticism of Poetry." *Rheinischces Museum N.F.* 124 (1981). 297-311.
- Zanker 2003** Zanker, Graham. *Modes of Viewing in Hellenistic Poetry and Art*. Wisconsin: Univ. of Wisconsin Press, 2003. p. 27.