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Sign Here! Handwriting in the Age of Technical Reproduction: Introduction

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On some computer screens, particularly large projection screens used for classroom presentations, you may find a peculiar pictogram, showing a right hand holding a pen, crossed out by a bold red diagonal line – not unlike a non-smoking sign – conveying the warning 'do not write here'.[1] Against a backdrop of an old-fashioned blackboard in the seminar room, the sign takes on a historical meaning. Indeed, we only rarely write with chalk or pen these days, as our private desktops and public classrooms are inundated with computers and media equipment, and our writing tools mostly consist of keyboards, screens, and projectors. Handwriting, in the age of the Internet and digital media, is considered by many to be a backward technique, a slowly deteriorating and gradually vanishing tradition, and the myth of its decline is as widespread as the pictogram. After all, the sign addresses only those rare specimens of the human race who are, as of yet, unfamiliar with the very basic principles of multimedia. Like the non-smoking sign, 'writing without a pen' is now supposed to become the default mode in our contemporary classroom.

Ever since the invention and spread of moveable type in modern times and of the typewriter in the late-19th century, the idiosyncrasy of manual writing has given way to standardized, replicable, power-driven letters produced by machines. With the advent of word processors, the significance of 'hand' in conjunction with 'writing' is expected to diminish even further, as the cultural emphasis on digital flexibility and infinite manipulation is displacing values traditionally attached to handwriting, such as authenticity, uniqueness, and personality. But despite the

widespread and invasive mechanization of writing, the power and meaning of handwriting goes way beyond its standardizing instruments of inscription. Handwriting has given rise to a number of cultural practices, such as letter writing, and cultural forms, such as diaries or Post-it notes. Moreover, handwriting is also an aesthetic category that we still uniquely associate with a manual craft: from calligraphy to urban graffiti, from tattooing to signing, the physical, the human hand is pivotal in the production of letters and texts.

Will handwriting actually disappear in the age of new (digital) media? In fact, we argue in this volume that this question is philosophically and historically incorrect. It is philosophically erroneous because it presumes a teleological relationship between media and their ensuing practices and forms. Technologies, cultural practices and forms, however, always change in conjunction with each other, and although specific apparatuses may be displaced in the course of time, related forms and practices hardly ever vanish. If we look at the history of handwriting, we may notice that in spite of the emergence of generations of 'writing machines', manual script has never disappeared; on the contrary, as it evolved, handwriting adjusted its practical functions, social meanings and cultural aesthetics. The introduction of the typewriter, for instance, shifted the emphasis to the standardization of script, but it may even have increased the notion of authenticity associated with handwriting. The invention of machines like the Xerox copier or the digital scanner once again shifted the use and meaning of handwriting by enabling the reproduction of individual handwriting, and, in the case of Optical Character Reading (OCR) as it is also used in the latest invention of the tablet PC, the automatic transcription of manual script into typeface. In addition, technologies that are not immediately script-related, such as photography and film, also affected the cultural meaning of handwriting, if only because these technologies allowed for an exact 'recording' of the manual act or its product. Handwriting, in other words, has never disappeared in the wake of new technologies, but has always adjusted its use and meaning in the face of larger technological, social, and cultural transformations. It is therefore hard to believe that handwriting will vanish, as long as its technologies are intimately tied to particular cultural practices and forms that are continued in the present.

Technologies, forms, and practices are inscribed with cultural values that change along with larger social and cultural transformations. Important cultural concepts, such as original and copy, authenticity, reproducibility, uniqueness, or iterability, are never anchored once and for all because the cultural value of these concepts shifts with every innovation or transformation. For instance, in the 19th century, the meaning of 'uniqueness' metamorphosed in the wake of apparatuses enabling mechanical reproduction. By the same token, the concept of 'authenticity' is currently undergoing a substantial overhaul now that computers are becoming the preferred tools for (written) communication. Signatures, for instance, were supposed to be authentic, idiosyncratic signs of selves, intimately tied to the hand that produced them; now that they are gradually replaced by memorized codes and biometrical scans, the former handwritten sign of identification is no longer considered foolproof. The exchangeability of original and copy prompts us to re-

consider conventional notions of manuscripts: what counts as an original 'document' in the current digitized office environment? And why do we value handwritten manuscripts as 'authentic' proofs of historical persons or events? Every new technology not only affects our everyday habits and practices in using them, but also situates handwriting in a new perspective, thus requiring a reinterpretation of its meaning.

This collection of essays will address three aspects of handwriting in the age of new media: authenticity, remediation, and (dis)embodiment. Each of these aspects will be further elucidated in the paragraphs below.

Authentic Copies

The articles collected in the first section of this volume focus on an aspect of handwriting that is dramatically challenged by mechanical and electronic reproduction practices: its claim to authenticity. Handwriting is traditionally regarded as an autography, as an un-exchangeable, unique and authentic 'signature' that claims to guarantee the presence of an individual writer during a historically unique moment of writing.[2] This claim for authenticity distinguishes handwriting from its cultural opposite, mechanical writing, in the sense of print or typed writing. After all, the cultural significance of mechanical writing resides in its capacity to be iterable and reproducible. The reproduction of authentic handwriting, on the other hand, risks being considered a forgery. This view on handwriting has a long tradition in different disciplines, most importantly in jurisprudence, but also in historical studies of original sources, and in art theory, where it delineates the status of the artist/author. In connection with the 20th-century's technological developments, the idea of the uniqueness of the signature has been challenged philosophically, most profoundly by Derrida in his famous essay 'Signature, Event, Context'. Derrida claims that the signature is a performative sign; its validity – or as Austin would say, its 'felicity' – is grounded in the fact that the signature is a singular event, and that it repeats or quotes a set of norms constituting a cultural or juridical context.

This section explores how the double structure of a signature as both singular and iterable needs to be redressed in the wake of technological reproduction. How do the concepts of uniqueness and iteration, of authenticity and counterfeit in relation to handwriting, change when the binary opposition 'authentic' vis-à-vis 'copy' no longer appears to be anchored in the distinctive materiality of the sign? And what are the consequences for both historical and contemporary cultural forms and practices still hinging on modernist notions of authenticity?

As a common starting point for the articles collected in this section, we chose Walter Benjamin's famous article 'The Work of Art in the Age of Mechanical Reproduction'. His article is still challenging, not only because it touches on the complexity of the problem of authenticity and its interrelations with notions of uniqueness and originality, but also because it anticipates many of the more recent theoretical debates about cultural objects in the age of new media, including digital me-

dia. In addition to putting contemporary debates in a historical perspective, it also renders the concept of authenticity relevant if not center stage for the disciplines represented in this volume.

In his renowned piece, Benjamin investigates the art status of reproduced artworks. Original artworks, such as paintings, are singular and durable, and they therefore have an 'aura' connecting them to a certain tradition. For Benjamin, authenticity relates to the here and now of the original artwork, 'its presence in time and space, its unique existence at the place where it happens to be' (220). Reproduced artworks, on the other hand, are regarded as iterable and transient, they lack this 'aura', as they primarily serve 'the desire of contemporary masses to bring things "closer" spatially and humanly, which is just as ardent as their bent toward overcoming the uniqueness of every reality by accepting its reproduction' (223). Unfortunately, Benjamin does not elaborate on the 'auratic' status of writing in his essay. The aim of this section, in a way, is to fill that gap. For now, we will tentatively argue that, according to Benjamin's classification of cultural objects, writing should be considered non-auratic. The basic principle of writing, after all, is repetition. The alphabet, a discrete number of distinct letters, is standardized for the sake of iteration and of mechanical reproduction – first by Gutenberg's movable type, later by the typewriter, and, most recently, by electronic media. It was for good reasons that Friedrich Kittler, in *Gramophone, Film, Typewriter*, categorized the typewriter as referring to Lacan's symbolic system:

> Only the typewriter provides writing as a selection from the finite and arranged stock of its keyboard. It literally embodies what Lacan illustrated using the antiquated letter box. In contrast to the flow of handwriting, we now have discrete elements separated by spaces. Thus, the symbolic has the status of block letters. (28-29)[3]

We will argue in response to Kittler that handwriting, in spite of its fluidity, is still bound up with the symbolic system of language – in the sense of a system of differences – and as such, it is spellable and repeatable. Still, it *does* make sense to contrast, as Kittler does, handwriting with its cultural opposite, *typed* writing, to explore the 'auratic' dimension of handwriting that resides in its authenticity. Let us tentatively describe the authenticity of handwriting by means of three criteria marking the boundaries between handwriting and typed writing, that is, singularity, individuality, and materiality.

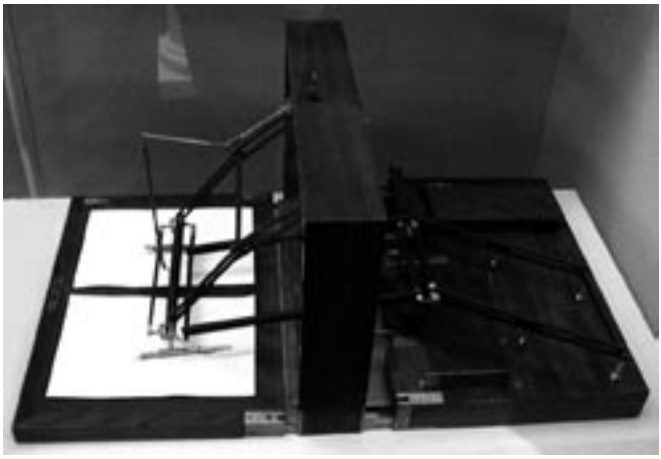
Singularity. A typed text may be printed in an unlimited number of ways and in an infinite variety of materials without it directly influencing its authenticity. Written text is reproducible, printable, and, as Nelson Goodman states in his *Languages of Art*, 'allographic', or 'spellable'.[4] The reproduction of handwriting, however, requires reproduction technologies that are closer to those of images than to those of writing. Handwriting, therefore, functions like painting or drawing, which are categorized by Goodman as 'autography' because their central quality resides in their uniqueness. Even though the basic principle of all writing is iteration, for handwriting there is no such thing as two manuscripts that look exact-

ly the same – except if one is a perfect Xerox copy of the other. But then, it can be expected that one will wish to distinguish between the original, 'auratic' version and the copy.

Individuality. The authenticity of handwriting, as opposed to typed writing, resides also in its potential to refer to an un-exchangeable individual. Handwriting is regarded as auratic because of its capacity to function as a signature that claims to guarantee the presence of an individual writer during a historically unique moment of writing. Whereas in typed writing, as Martin Heidegger (119) has argued, 'every person looks the same', for handwriting, there is no such thing as two individuals writing identically.[5] Except, of course, in Goethe's novel *Wahlverwandtschaften*, in which the lovers Eduard and Ottilie, miraculously enough, used the same handwriting (cf. Hörisch, chapter I/2).

Materiality. This subjectivity, then, is physically inscribed in the movement and the pressure of the pen led across the paper, leaving there an un-exchangeable, personal trace. If handwritten manuscripts are regarded as 'auratic', their 'aura' resides precisely in their material authenticity incorporating the undividable 'here and now' of the manuscript's historical origin.

The problem central to this first section of the book can be grasped by the example of the pentagraph, a multiple writing machine that made its appearance at the end of the 18th century (Illustration 2). James O'Toole describes the functioning of this machine as follows: 'The pentagraph was constructed so that, as the writer moved one pen along a sheet of paper, another pen, attached to it by wooden arms, wrote the identical words on a second sheet' (643). This writing practice exemplarily raises the questions central to this first section: who is writing here? Which one of these handwritings is the original? And which one is the duplicate copy? Can they both be unique? And authentic?



2. Jefferson's writing machine

Contributors to this section of the volume will both accentuate and question the distinction between handwriting and typed writing, autography and allography, original and copy, in relation to various types of handwriting. Sonja Neef addresses the problem of cultural memory of an 'authentic' past by discussing the contested 'authenticity' of the historical, handwritten diaries of Anne Frank and the alleged diaries of Adolf Hitler. Michael Wetzel discusses the concept of the hand by bringing it in dialogue with the ideas of authenticity and artistic authority as performed in the work of Marcel Duchamp; in his work, handwriting is distinctly linked to the logic of the 'trait'. The end of 'originality' is also proclaimed by John Mackenzie Owen, who relocates the issue of 'authorship' to a space where the 'aura' of authentic handwriting is literally volatilized in electronic impulses: the digital world. Within this digital space, and finally, Hannelore Dekeyser attempts to save what seems to have vanished in the process of digitization: the signature's authenticity that, even though it is deprived of its auratic dimension, can function perfectly as a legal instrument.

Re-Mediating Handwriting

For handwriting, seen as a Western cultural practice emerging from an age-long tradition, the primal writing implement has been the stylus, a tool that started as a wedge to incise traces in sand, in clay, or in wax. Over time, the stylus took on different shapes: as a brush which, once turned around, became a quill, then a pencil, a pen, and a ballpoint pen. In all these forms, the stylus was led by the hand, particularly by the right hand, and its basic product was a line or a 'trait'. In our contemporary communication society, the archaic stylus is to a large degree replaced by the typesetting tool of the keyboard. Paradoxically, the most threatening and – literally – most stirring threat to handwriting, electricity, turned out to be the vehicle that initiated a renaissance in handwriting. Technical print media and visual media enable the reproduction of images and thus of handwriting: photography, film, microfiche, Xerox, fax, scanner, and computer. On the one hand, these media supplant handwriting, on the other hand, they bring handwriting back to us, but in a different – what Bolter and Grusin call – a 'remediated' form. The central question of this section is to discuss handwriting in its relation to a second medium in which it is depicted, reproduced, or remediated. Hence, this section has a double focus: it is devoted both to the 'mediation' and to the 're-mediation' of handwriting.

Mediation. In the history of writing theory, from Plato's *Kratylos* to Saussure's *Cours linguistique générale*, writing has been regarded as derivative of speech. Until this very day, writing is defined as a sign system with a referential structure connecting writing to language and speech, and the relationship between sign and reference is described as arbitrary. Writing is specified as a system of difference, and this system is said to be productive, meaning that a finite stock of signs can produce infinite varieties of articulations. These philosophical and linguistic *epistemes* define writing's essential characteristics – its referential structure, its arbitrariness,

its functioning as a system of difference, and its productivity – without taking its *medial* or *material* mode into consideration.

Writing is indeed closely related to language and speech, but not exclusively. Writing is also and primarily a visual medium, rendering it complex as a system based both on the articulation strategies of alphanumeric text and of visual images. This visual dimension distinguishes standardized mechanical writing from handwriting, which is idiosyncratic and often risks being illegible. This specific materiality qualifies the handwritten text as allographic and autographic at once; its semiotics unfolds in this in-between-media, as 'text-image' or as 'image-text'. Moreover, handwriting as a specific form of writing emphasizing the individual dimension of it, finds an audible pendant in the voice, which is as un-exchangeable as handwriting. Because of this audible dimension, handwriting may also appear as a 'sound-image'. In conclusion, handwriting is 'mediated' because it is a hybrid medium composed of visual (writing), audible (speech), and verbal (language) media. Handwriting's hybrid structure becomes particularly visible when it is incorporated in another medium – when it is thus literally re-mediated.

ReMediation. In their now classic book on new media and digital culture, Jay Bolter and Richard Grusin (1999) have developed the concept of 'remediation' to trace how new types of media re-interpret and concurrently re-form other technologies and their uses. In this section, we deploy the concept of 'remediation' to examine the transformation of cultural practices and forms conventionally associated with manual writing, in order to explore what happens when 'script' is performed in a second medium. Bolter and Grusin's concept of 'Remediation' will be reformulated as 'ReMediation'; the capital 'M' producing two interrelated concepts of 'mediation' and 'remediation' is introduced to indicate that handwriting is a double-edged practice. Handwriting is itself mediated because it is grounded in the inscription technologies of other media, and, in turn, it remediates other media when it becomes a model for 'newer' media effectively intervening in the old ones, for example when the archaic stylus is resurrected as an electronic tool of the tablet PC.

Our current media culture is full of 'ReMediated' handwriting. We find it etched, photographed, Xeroxed, and digitally scanned. Intelligent Fond Analysis (IFA) allows us to write our own handwriting via a keyboard, to perform handwritten e-mail correspondence, indeed, even to write someone else's 'hand'. For example, Leonardo da Vinci's left-handed mirror writing, today still regarded an attribute of the genius, can be performed on a keyboard by using a free online transmitter (Illustration 3).[6] The focus of this section is the examination of handwriting at those loci where it is least expected: in digital environments. We will analyze how it gets 'incorporated' by a digital apparatus that privileges multimedia expression while erasing material signs of historicity and personality, but also in other environments where handwriting's inscription technologies are remediated: film and literature.

3. The Leonardo-Right to Left website, March 2005

The contributions in this section map out some implications for the ReMediation of traditional uses of handwriting. Richard Grusin reconsiders the status and meaning of the signature as a legal and cultural means to proving someone's individuality, at a time when audio-visual 'mediations of self' are taking center stage. José van Dijck discusses the cultural meaning of weblogs in relation to the former practice of diary writing. How do former notions of intimacy and personality change when the diary is transformed into a multi-medial form characterized by immediacy and public exposure? Arnold Dreyblatt and Jeffrey Wallen, then, focus on the effects that the specific materiality of handwriting has on the archive by analyzing the ReMediation of personal documents of a historical figure – a suspected Eastern European spy – found in archives around the world. Dreyblatt's art installation *The T Project* chal-

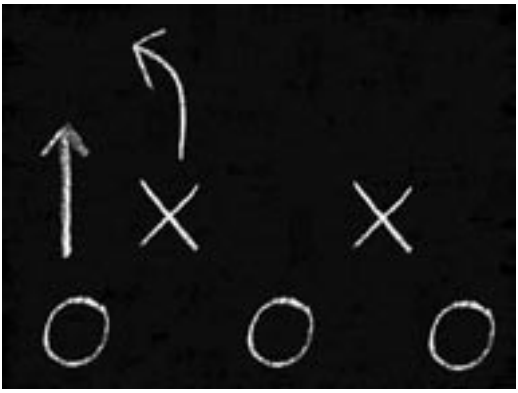
lenges us with poignant questions concerning the migration of lives and (handwritten) texts across different media. Mieke Bal takes us to literary studies, where she investigates the logic of handwriting in Proust's *A la recherche du temps perdu* in a double sense; the material reality of Proust's idiosyncratic handwriting functions as a medium that produces the diegetic reality of the second medium of literature, which, in itself ponders the status of handwriting: its aesthetics, its readability, its delayed arrival. Finally, Rembert Huser discusses the status of the signature and of filmic authorship in the film credits of Martin Scorsese.

(Dis-) Embodiment

In the Bible, the prophet Daniel recounts a miraculous act of writing that functions as a divine warning signal on a wall in the palace of King Belshazzar. The passage from the Bible reads: 'There appeared the fingers of a human hand writing on the plaster of the palace wall' (Daniel 5, verses 5-6). The sign is magically written in indecipherable script, and the *absence* of a physical piece of writing comes to stand for the *presence* of God.[7] This dialectical structure of absence and presence precisely pinpoints the great mystery of handwriting: that handwriting always gets its cultural authority from its claim of springing from a physical and living hand – a claim that Benjamin would call the undividable 'here and now' of presence. This corporeal dimension makes handwriting an absolutely individual and non-exchangeable sign, almost as unique as fingerprints or other biometrical data. And this holds even if the subject of writing is no longer there, as Derrida emphasizes, 'even after death' (1988, 5).

The concept of the hand and its role in the process of writing have been discussed in various academic disciplines. Pedagogy formulates rules to discipline the child's (right!) hand; philosophy connects the activity of the mind to the movement of the hand; and grapho-psychology uses the expression of the hand's movement to trace the writing subject's character.[8] Technical writing tools, in these discourses, are often regarded as detaching script from hand, as 'disembodiment' of what has traditionally been seen as a highly corporeal act, implying a 'loss of self'. The assumptions made in these discourses come to stand in another light however, if handwriting is not redeemed by technical writing methods but, instead, itself appears in a second medium. How do such writing methods affect our understanding of an authentic physical body? This problem can be described by the example of Microsoft screensaver *Sports*, published in Windows 98. This screensaver produces white stripes that emerge from a dark, marbled background, forming zeros, crosses, and other symbols, written in real time by a hand writing with chalk on a blackboard or tablet. This screensaver generates handwriting, but just like the divine writing on the wall, the screensaver's writing is written as if by magic, urging us to ask *who is writing here?* Is there some artificial intelligence with a virtual body inside the computer? Post-post-modern paranoiacs may suspect some lonely cyborg sending cryptic messages. Or perhaps it concerns one of those creatures N. Katherine Hayles describes as those who 'reconcile themselves to living inside

the computer', and who 'often create INTERFACES that allow them to preserve the illusion of ordinary human existence' (22). But how, then, are these interfaces to be conceived of? How can we as users with an 'ordinary human existence' interact with this bodiless subject of writing inside the screensaver, as if any intervention, any manipulation of the machine, might immediately erase the script from the screen, thus making the writer even more absent?[9] By simulating the physical inscription technologies of handwriting, the screensaver *Sports* emphatically claims the physical presence of an individual writing hand. Yet this presence then appears to be an effect of the user's absence. Conversely, one could say that the bodiless writer inside the screen produces this user only as an effect of its absence, reducing it so to speak to a physical leftover showing up only when the screensaver is put to rest (cf. Neef, 2004).



4. A screen capture from Microsoft screensaver *Sports*

The screensaver enacts handwriting both as the archi-writing of a hand that claims physical presence, authenticity, and uniqueness, and concurrently signifies the place of handwriting's disembodiment. As screen writing it does, indeed 'save' a hand, but not quite, because it simultaneously inscribes and suppresses the proliferation of manual writing; it embodies and disembodies at the same time.

The focus of this third section is to ask where the writing hand is to be located in a dialectics of presence and absence, man and machine, medium and hand, and how this dialectics is to be conceived of if handwriting is not immediately performed 'by hand' but in a second medium. Eric Ketelaar turns again to the archive when he asks for the ways in which writing *on*, *in* or *with* new archiving machines impresses the work of the archive, when the hand of handwriting has been transformed into a part of the machine. Thomas Fechner-Smarsly, then, concentrates on a form of handwriting in which the claim of corporeality takes shape most radically: the fingerprint. Fechner-Smarsly in his article relates the concept of hand-

writing to two concepts closely related to it and yet distinctly different from it: those of 'trace' and 'imprint'. When remediated in contemporary art, the fingerprints produced in both ink and blood can only be read through the grammar imposed by genetic codes. Begüm Firat concentrates on medial enactments of Arabic writing, which – due to its flowing movement – strikingly resembles handwriting, even if typed on a keyboard or visualized on a computer screen. Firat discusses Shirin Neshat's famous photographic work in which Arabic handwriting is dominant. Finally, Sonja Neef investigates the cultural practice of tattooing as a writing practice that takes the living body for its medium, a body that appears absolutely in-exchangeable and singular. And yet, Neef argues that a tattoo can only become meaningful as writing when it takes a repeatable, or citational form, when its presence will function as a sign and do this also in a past and in a future present. The combination of hand and writing, thus considered, can no longer be considered a stable and unitary source of authenticity, singularity and originality, since it is driven by difference.

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SIGN HERE!

SIGN HERE!

Notes

1. Thanks to Jan Simons, for having pointed out this particular symbol at the two-day conference *ReMediating Handwriting,* Weimar, June 18, 2004.
2. For a seminal study of the history of the signature see Fraenkel, *La signature,* 1992.
3. Arguing within a Lacanian frame, for Kittler, film refers to the realm of the imaginable, the gramophone with its emphasis on the presence of the voice refers to the realistic, and the typewriter is bound up with the symbolic system of language.
4. Goodman elaborates on the difference between allographie and autography in chapter 3 'Art and Authenticity'.
5. The topos of the hand in the work of Heidegger is studied in detail by Jacques Derrida in *La main de Heidegger.*
6. For detailed discussions of digital enactments of the handwriting of Leonardo as screensaver and as digital codex on CD-ROM, we refer to Neef 'The W/Ri(gh)ting Hand. Leonardo da Vinci as Screensaver', respectively 'Die (rechte) Schrift und die (linke) Hand'.
7. For a detailed analysis of this magic act of writing, we refer to Neef 2000, 64-68.
8. For a history of handwriting education from Victorian writing culture until automatic writing in the 20th century, see Plakins Thornton. An overview of the philosophical question of mind and hand from Quintilianus until Renaissance is given in Zwijnenberg, 65-82. For graphology as a modern science in the humanities we refer to the work of Ludwig Klages (1905-1927).
9. This is what Hayler would call a 'technotext', texts which 'interrogate the inscription technology that produces it, it mobilizes reflexive loops between its imaginative world and the material apparatus embodying that creation as a physical presence' (25).

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