**Shaping Expression:**

**The Influence of Material Signification**

**on Editorial Illustration**

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**ABSTRACT**

Keywords: editorial illustration, material signification, media transformation, technological impact, reproduction processes, expression.

Abstract: Where the way illustration appears in its reproduced statehas a meaningful impact on all forms of illustration, this paper presents the hypothesis that for editorial illustration, framed by the material and ideological settings of both the singular story and its wider publication, the quality of this *material signification* is fundamental. Through the exploration of the principal technological developments of the editorial illustration, wood engraving, halftone printing process, digital printing and online publishing this paper traces the signifying impact of media transformations on illustration. It shows that story and illustration are not necessarily distinguished through the way they are expressed within a medium, but through the way these are used and interrelate. It exposes editorial illustration as a specific dialogical mode of communication, based on a particular underlying continuity, defined by material, intertextual and social constructions, rather than appearance.

As no other visual medium, editorial illustration, the illustration of articles and covers of newspapers and magazines, is shaped by the publishing context in which it is reproduced. Even though individual methods of creation can offer a wide range of expression, those too are framed and determined by the reproduction technologies available and their material culture. Where illustration appears in its reproduced state is of importance to all forms of illustration. It is my hypothesis that, for editorial illustration, which is framed by the material and ideological settings of both the singular story and its wider publication, the quality of this material signification is fundamental to its signifying ability.

In order to explore how reproduction technologies and cultures impact on the material signification of illustration, I will trace the media transformations between three major image reproduction technologies in news publishing, using Katherine Hayles notion of intermediation (My Mother Was a Computer 30). After a short description of the particular

qualities of editorial illustration, and an introduction to particular notions of transformation, I will explore three stages in the development of editorial illustration. I will start with the introduction of wood engraving, which, in the mid-19th century, made illustration a ubiquitous mode of representation within newspaper publishing. It was followed by the halftone printing process, which was introduced around 1880. This allowed direct translation of an original artwork and thus enabled the photographic image as part of news-printing culture. Next I will point to digital print reproduction, at the end of the 20th century, which drastically changed printing processes and technologies. Automated computer processes not only vastly improved the quality and reach of printed publications but also gave access to new and enhanced abilities to visual expression in design and illustration. Finally I will discuss online1 technologies, developed around the same time, which extended these digital processes with a network of globally connected computers and multi media expression. Commonly known as new media2, online technologies have not only transformed the processes, but the entire structure of publishing and within the publication, it has redefined the way the story and its illustration are revealed. In new media publications, the distinction between these two modes of communication, between story and illustration is no longer necessarily through pre-defined media difference, but through expression of modality and the way story and illustration interact.

This essay presents editorial illustration, not as a pictorial object, but as a specific dialogical mode of communication, which might change in appearance, but is based on exhibiting an underlying continuity, defined by material, intertextual and social constructions.

Editorial illustration is distinct from other forms of illustration in its relation to articles that reveal a strong link to current issues and a clear editorial voice, such as opinion pieces, news analysis, reviews and lifestyle. This type of illustration establishes a particular dialogical relationship, not only with the written text to which it is directed (as in other forms of illustration), but in its relationship to the ideological editorial message held within the articles as well as the entire publication.

1 The term ‘online’ stresses accessibility through a computer and the active use of a computer system.

2 New Media is defined by Lev Manovich as computer-based constructs that are digitised, net-worked and multi-medial, based on a process of transcoding, where computer output is understood by humans and computers in a networked chain (Manovich 43-65).

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In the understanding of the ideological intention of editorial publication, I refer to Stuart Hall’s model of decoding and encoding (515- 17). Hall discusses the relay of meaning within a television production3. He presents television production as created through a particular distribution network which should be understood in the light of the overall intent of the producers. But whether the consumer will read the ‘preferred code’ (515) – in other words, interpret the broadcast production as intended – is not guaranteed. By analogy, editorial print publishing is similarly a one-to-many distribution network, where publications distinguish themselves through their ideological slant setting the individual article, as well as the entirety of the publication. Each publication favours a particular direction of interpretation and there is no guarantee that the readers will understand it as such. Within this publishing context, it is therefore important that content and form reinforce this underlying message, either through outspoken statements or, more subtly, through more subliminal (visual) directives. Here illustration functions not only as an appealing invitation to read, or as illumination of a written text, but also as a means to direct the way an article should be interpreted, by showing an exemplary interpretation.

# Intermediation

How an illustration can be understood, is to an extent determined by its narrative pictorial content, its interrelation with the story and the ideological context of the publication. Equally of importance is its appearance. This however is not just defined by the individual aesthetic choices, but equally of major influence are the technological make-up of its publishing medium and its particular material culture (Kress and van Leeuwen 215-38; Hayles 97- 103).

How material signification, in other words the influence of materialisation technologies and cultures on the expressive abilities, impacts on illustration and thus influences its signifying powers is perhaps best understood through the processes of media transformation that have played a part in the development of illustration.

3 Stuart Hall discusses the nature of mass-television production in the early 1980s at the time of his writing.

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Media transformation is described by Marshall McLuhan as the result of human design in response to developing capabilities within media technology. McLuhan points out that each media development reveals a change of scale or pace that extends the possibilities of all media involved, and thus influences the agency of the entire media network of which it is part (8). This progressive and technology-driven idea of media absorption is echoed in Bolter and Grusin’s concept of ‘remediation’: ‘Remediation in media is the representation, absorbing or repurposing of pre-existing media into newer forms and in doing so influence pre-existing media formats’ (19).

In contrast, Hayles presents media transformation as more ‘messy’ and non-linear, a process she calls ‘intermediation’ and which shows ‘complex feedback loops [that] connect humans and machines, old technologies and new, language and code, analogue processes and digital fragmentation’ (31). This process of intermediation should include interactions between systems and modes of representation, and manifestations in both analogue and digital form (33). Hayles argues that communication technologies are still in full development and that the computer is not the ‘solvent that is dissolving all other media into itself’ (31), but it is at present the dominant medium through which all other forms are viewed.

Though Hayles develops her concept related to digital media transformation, the term ‘intermediation’ is also useful within the context of analogue media. Intermediation does not only point to translation of already manifest media qualities, but also allow for the exposure of inherent but dormant qualities within a medium. What might appear as new development, can be a continuation and reveal of an already existing ability. Through a transformation this quality can suddenly become apparent, but might not necessarily appear in a known form. This quality can present itself in a new form enabled and possibly foregrounded by new technologies and their use.

How media transformation influences editorial illustration, I will explore through three critical stages of technological transformation that have shaped editorial illustration at various moments in its development: firstly, when illustration became part of newspaper expression; secondly, when the change from wood engraving to halftone printing process occurred; and lastly, when the change from print publishing to digital and online publishing ensued. What will become clear is how, through these developments, the form of illustration drastically changes; yet the quality of material signification is revealed as continuous and essential.

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# Wood Engraving

At the end of the 18th century and in the early 19th century, the mass reproduction of images in publication became possible through wood engraving, a reproduction technique based on delicate engraved lines and patterns, which made for more detailed and durable reproductions. It took until 1842, with the first edition of *The Illustrated London News*, for the commercial potential of illustration in newspapers to be discovered. Herbert Ingram, a newsagent and printer, noticed that even if there was just the simplest illustration in a paper, its sales increased (Beegan 38). This led him to develop a news-weekly which was dominated by wood- engraved illustrations that were specifically commissioned to depict news events. *The Illustrated London News* captured popular imagination, and its success soon spawned a host of other picture-based periodicals, which became a central feature of Victorian popular culture (Pykett 102).

The competition between news titles, the popularity of illustration, the ubiquitous method of wood engraving, as well as the laborious process of their production, made for a cost-conscious image industry that was driven to remain at the pinnacle of what was technically possible (Beegan 40). In terms of production, wood engravings were collaborative products, with their own hierarchies and specialisations such as illustrator, draughtsman, specialised wood engravers and superintending artist. In terms of appearance, editors had no problem with changing content, and all techniques seemed to be accepted as long as they could deliver the most effective image with the strongest visual impact, set against tight newspaper deadlines (Jackson 317; Beegan 55). Mason Jackson, himself an engraver, describes this editorial process as not necessarily harming the value of the image:

Sometimes the sketch to be dealt with is the production of an amateur, or is so hastily or indifferently done that it had to be remodelled or rearranged in drawing it on the wood. Faulty or objectionable portions have to be left out or subdued, and perhaps a point in the sketch that is quite subordinate, is brought forward and made to form a prominent part of the picture. All this had to be done without doing violence to the general truth of the representation and with due consideration for the particular conditions of the moment, such as the amount of finish and distribution of light and shade suitable for rapid engraving and printing. (Jackson 317)

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Periodicals like *The Illustrated London News* claimed documentary realism as their representational mode, making wood engraving synonymous with claims for documentary accuracy in reportage (Kooistra) – though Beegan noted that ‘slavish realism’ was not necessarily expected (55). But the interpretative and expressive qualities of news illustration were dictated by the aesthetic and narrative conventions originating from Victorian values (Sinnema 47). Such a type of illustration presented a new world, carefully composed, with sanitised and dramatised scenes that left no room for confusion as to what was meant to be seen. The audience would read4 the illustration for visual clues to position themselves in this changing world (Pykett 102). But in order for the illustration to be read, the clues needed to be in a visual language the reader could understand, based on pre-existing visual knowledge and recognisable contemporary beliefs and values.

What might have further intensified this over-literal yet highly dramatised visual quality of wood-engraved illustration, particularly in the early illustrated periodicals, is the presentation of the written story and of the illustration on separate pages. In his discussion of the signifying relationship between image and text, literary theorist and semiotician Roland Barthes presents the physical proximity of image and text as the determining factor of signification (‘The Photographic Message’ 25; ‘The Rhetoric of the Image’ 37-42). In contrast with the written story and illustration on different pages, the illustration had to be understood without the directive support of the written story. Without the ability to ‘sublimate, patheticise or rationalise’ – three terms used by Barthes to indicate the possible interpretative relationships between image and text –, the image was restricted (25). The illustration could only be directed by its caption (the one or two descriptive sentences underneath the picture), forcing the illustration to be descriptive as well as interpretative, and self- contained as well as relational.

With visual expression constrained by lay-out, production techniques and popular Victorian image culture, the ability for news illustration to

4 Though an illustration is a pictorial object which can be viewed in terms of its non- linguistic components such as colouring, composition and symbolic arrangements, in this essay I discuss the interpretive relational role of illustration as a visual linguistic interpretation. For that reason, I use the term ‘reading’ rather than ‘viewing’ for illustration.

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present distinctions between fact and fiction, and between story and illustration, was limited. Set against the background of technical developments and the popularisation of the photographic image, the quality of wood engraving as a manual translation – something that ‘stood between the viewer and the object it depicted’ (Beegan 12) – became more evident.

# Halftone Printing Process

Photography had already been part of Victorian popular culture since the mid-19th century, but the direct reproduction of a photograph, or any tonal image, into print, only became possible in the last part of the century, with the invention of the halftone printing process. This faster and ultimately cheaper method of image reproduction (Reed 44) could directly replicate an image and its tone, based on a chemical-mechanical translation of the surface of the original image into a pattern of barely visible dots or lines.

Though the first successful halftone reproduction appeared in 18805, it would be at least another thirty years for wood-engraved illustration to be overtaken and eradicated (Reed). This transformation was not only a matter of expensive investment, as it demanded the shift of an entire image production chain; it also took time for the established image culture to adapt to a new visual language. The photograph, with its indexical quality as a ‘mechanical copy of reality’, could give a higher degree of verity and news-worthiness. But with the reproduction of reality comes the visual noise of unstructured and unedited detail. With a photographic image readers needed to adapt to these ‘chaotic and noisy’ pictures (Beegan 186-209). Photographs did not contain the considered visual hierarchy, the editing, structuring and deliberate ocmposition they got to understand from the illustration.

As for the practice of illustration, the halftone process made it possible for the original artworks to be directly reproduced. This meant that the illustrator’s own expressive marks became part of the illustration, and these marks gained a particular signification. That this was valued shines through the appreciation of Joseph Pennell’s expressive illustration in the special May 1910 remembrance edition of *The Illustrated London News*

5 According to David Reed, *The New York Daily Graphic* is most widely accepted as having published the first photo reproduction in the edition of 4th March 1880 (30).

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marking the death of King Edward VII (Figure 1). The main image caption reads:

THE HOUSE OF MOURNING: A GREAT ARTIST’S IMPRESSION FROM A SKETCH BY JOSEPH PENNELL

Below the illustration you find these words:

Then black despair, the shadow of a starless night, was thrown over the world’ – Buckingham Palace immediately after King Edward’s death – a sketch by Joseph Pennell […].

[…] We feel sure that our readers will be particularly interested in this drawing, showing the impression made upon the mind of a famous artist at the moment of great bereavement. A moment at which all those of King Edward’s subjects who had heard the sad news were suffering from a sense of irreparable personal loss. The impression is all the more interesting in that it was set down while it was fresh in memory, and is not the result of methodical setting down to a task, or to the production of a picture illustrating an event. (*The Illustrated London News* 708)



**Figure 1:** Joseph Pennell, ‘The House of Mourning: A Great Artist’s Impression’, illustration for *The Illustrated London News*, 14th May 1910.

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The halftone screen process, together with more flexible lay-out and typesetting, the growing availability of photographic images, as well as advancements in paper and printing technologies, gave rise to new magazine formats. The possibilities for layout, such as scaling, the variety of typography, and the expanded use of images (Reed 103-43) offered more flexible and intricate possibilities to position story and illustration together. This enhanced the distinction and appeal of the magazine and of the individual articles, bringing story and illustration together. It also enabled a more deliberated design of the intertextual relationship and use of material expressions, which gave a much wider scope for signification.

From the uniformity of wood-engraved illustration, news publications transformed into dual-mode image culture presenting photographs and illustrations. In this way, the employment of illustration became a choice, not only on aesthetic grounds, but also on technical grounds, between the ‘handmade’ and the ‘mechanical’, and all the connotations, values and intent which these terms came to represent over time. As the comment on the Pennel illustration (Figure 1) shows, the artistic and individual response by the illustrator became as essential as the narrative pictorial content of the image itself. Other than for its lack of realism, illustration was valued for its ability to convey directness of emotion and personal observation (Beaudelaire 4; Beegan 20). No longer having to represent the full details of a story, illustration could assume the role of the authored reflection on the essence and message of a story, given the understanding that this was confined within the editorial setting.

Over the next decades, the photographic image became the dominant form of visual expression, yet its use did not eradicate editorial illustration. Instead, it shaped its distinctive role. Within 20th-century publishing, editorial illustration became a distinct discipline within the field of illustration6.

6 Lawrence Zeegen describes editorial illustration as ‘a fundamental aspect of the job of illustration [which] is often bread and butter work for most professionals’ (88).

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# Digital Structures

In the early 1980s, automation and digitisation technologies started to enter and alter the production and dissemination of mass print publication7. Within this digital structure, all content components were treated as modular informational units, which allowed for every component to be altered independently. This offered a very different structuring process where automation and digitisation decentralised, streamlined and sped up production processes.

The use of powerful graphic computers, with equally potent and compatible software packages, offered the ability to fuse multiple media manipulation techniques. Text editing, lay-out and image manipulation software enabled expressive possibilities that previously were considered not possible, too costly, or too complex to achieve.

Though digitisation profoundly affected production methods and gave light to new expressive possibilities, the way illustration appeared in mass publications still largely followed the pre-digital format for magazines and newspapers: showing written text and illustration as two separate entities contained within a single printed publication.

I propose that a more significant change in publishing came with mass access to online technologies, based on the development of the World Wide Web in 1989 and of mobile devices. The modular digital system, together with a powerful global computer network, offered unprecedented access to information, enabled the real-time dissemination of information, instant and worldwide access to archived digital material, extended user interaction, and automated content management.

Taken together, these abilities and properties formed the basis of the online editorial publishing platforms we currently know, such as news sites like theguardian.com and huffingtonpost.com, editorial aggregation sites such as Google news reader (news.google.com) and Flipboard (flipboard.com), or social media sites like Facebook (facebook.com) and

7 Digitisation points to the ability to create an electronic copy of a ‘real-world’ object. Further this copy can be stored, displayed and manipulated on a computer and an exact form of this copy, can be disseminated over computer networks.

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Twitter (twitter.com). From news sites of large publishing corporations to blogs of individuals, many of these platforms are based on a content management system, so called CMS. These automated editing systems allow for quick retrieval and placement of large quantities of content, automatic linking and distribution of this content in a wide variety of media, as well as content maintenance from a central interface. With the introduction of responsive web design technology and principles8 , the presentation of content in terms of lay-out and visual properties is automatically adapted to individual settings and constraints of the device on which it is presented.

In other words, an online editorial production appears differently every time it is viewed on a different media device, with individualised user preferences, using different browsers, and at different moments in time9. As the illustration and the written text are understood as separate modules, the resulting effect, in many cases, is that written text and illustration are no longer presented within a considered fixed placement on the page. In fact they are often no longer guaranteed to be visible in the same physical space (Hoogslag 73). When it comes to the story and its illustration, this means that the intertextual relationship, which within printed publications had become key to meaningful expression of editorial illustration, is no longer a priority or guaranteed (Hoogslag 75).

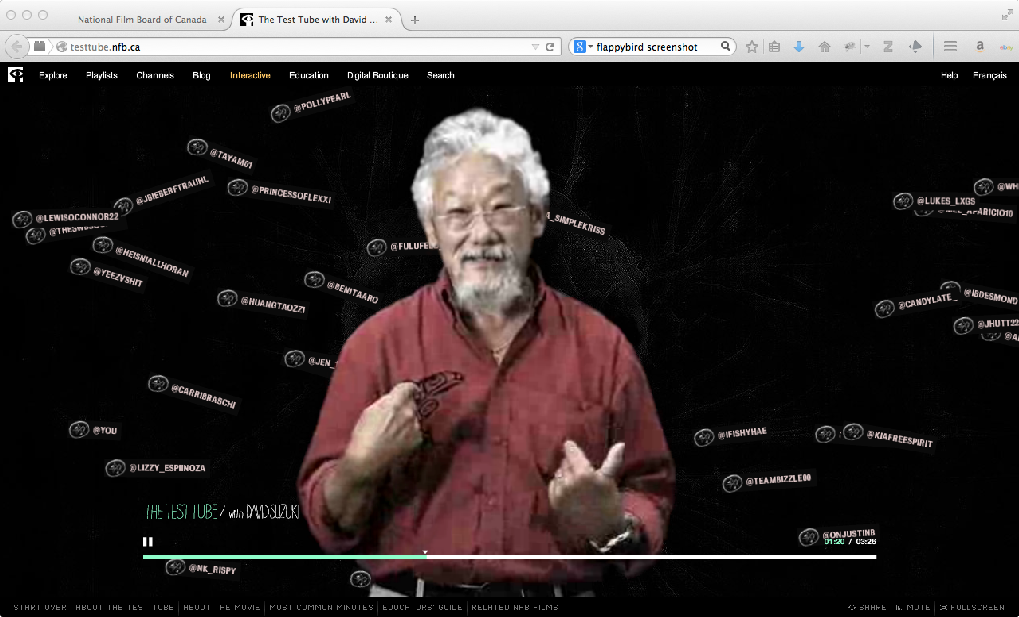
Such hindrance of the dialogical quality of illustration is the result of a design approach, which prioritises speed and display performance as is clear within most sites driven by content management systems. But it equally reveals a particular cultural understanding of how illustrations are to be read. Within this environment, rather than relational, the illustration is treated as informational, where the meaning of the illustration is self-contained possibly motivated by its direct captions, something reminiscent of the period of wood engraving.

However this reading structure based on a content management system is one kind of online reading experience on offer. As the following example will show, other new ways of constructing illustrated editorial stories, which equally use the automated interactive and multimedia abilities of new media, use these to emphasise and intensify the intertextual relationship between story and illustration. Though this quality might present itself in a very different manner than the written story next to an image-based illustration.

8 Originally defined by Ethan Marcotte in 2010, ‘responsive web design’ responds to the needs of the users and the devices they use. The layout of the presented content changes, based on the size and capabilities of the device. For example, on a phone, users would see content shown in a single column view, whereas a tablet might show the same content in two columns (LePage).

9 ‘This is our way forward. Rather than tailoring disconnected designs to each of an ever- increasing number of web devices, we can treat them as facets of the same experience. We can design for an optimal viewing experience, but embed standards-based technologies into our designs to make them not only more flexible, but more adaptive to the media that renders them’ (Marcotte).

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**FIGURE 2:** The Vacuum Design for National Film Board of Canada, Test Tube, David Suzuki, screenshot, 2012.

In the interactive media-production Test Tube (Figure 2), which presents the qualities of an illustrated editorial article: a strong and clearly defined story, based on current issues with a particular editorial voice, where illustration is used to engage, illuminate, interpret and direct. The central story around the issues of overpopulation, is presented and illustrated through a wide range of expressions. The story is told through written and spoken word, image, user-interaction and live Twitter feeds. Whilst an equal, sometimes the same, range of media express the illustration; in this particular example video-footage, animation, spoken word as well as the Twitter feed. On the surface there appears no media distinction between story and illustration and there is no possibility to differentiate story from illustration, other than through their distinct modalities.

This means that illustration is no longer necessarily conveyed through a separated pictorial expression, nor limited to one kind of expression. The same can be said about the story it illustrates: the story is no longer necessarily defined by written words.

Test tube is intentionally created as an independently readable production, something that might appear in social media listing without any or appropriate introduction. In order to fix the interpretation of this production, part of its embedded content presents its aims and purpose. Test Tube contains a background information page; offers ready-made links to a ‘like-minded’ community through social media and provides instructions for educational contexts as well as to publishing organisations (Hoogslag 102), all expounding values through which this production should be understood (96-98).

This overt ideological declaration could be understood as the result of the unstable editorial control within new media distribution systems. The guarantee that the this production reaches the intended reader and that he or she decodes the message according to Stuart Hall’s ‘preferred code’ (515) has become even more precarious than in previous editorial systems. Distribution is no longer one-to-many; one distributor sending out his or her message to a selected readership, but many-to-many; readers have become distributors themselves and can easily and automatically select and separate media objects such as blog articles from their primary editorial context.

Each individual reader has the ability to forward a media production within his or her own particular network. This means that it is the reader who defines the objective of this circulation. There is no control over the quality or reach of this circulation, which can be positive and create a surge of interest, but equally this can be contrary to the original intent and reflect badly on both production and publisher.

This independent and interwoven multimodal nature of illustrated editorial production can be experienced in many digitally native forms, such as interactive documentaries, data-visualisations or editorial games. In the experience of these productions, when illustration is used to engage, enhance or illuminate the content of the story, it is revealed through the way it is constructed, and through the material possibilities on offer to do so.

Editorial illustration has intermediated through wood engraving, halftone, and digital printing technologies into the present online technology that is currently driving editorial publishing and its illustration methods. Whether through wood engraving or online technologies, it is through the possibilities of particular media technologies and their cultures that the signification of illustration is shaped.

Every transformation might have meant the end of particular illustration practices, the evolving reproduction technologies and reading cultures have equally offered new kinds of material signification. Halftone screen gave rise to authored reflection and the movement towards individualised and divers visual expression, extended greatly through the processes of digitisation. Online technologies brought the new dimension of real-time interaction, offering networked, screen-based experiences and relationships. New media technology and culture has given rise to dissemination structures where the traditional interrelationship between story and illustration is no longer understood as a priority, reducing greatly the ability for signification for the editorial illustration. Yet at the same time, new media offers a wide-range of multi media expressions and a reading experience where story and illustration are deeply interrelated. Here illustration is only distinct as a particular mode of communication and fully integrated in the communication text. It is through the way the illustration relates that it offers insight and deeper engagement.

Looking back over its historic development, editorial illustration always already has had this enduring quality where only through closeness signification can be created for the story available and where signification is shaped from the material available; to be no other that a ‘manual translation’, deliberately positioned between reader and essence.

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