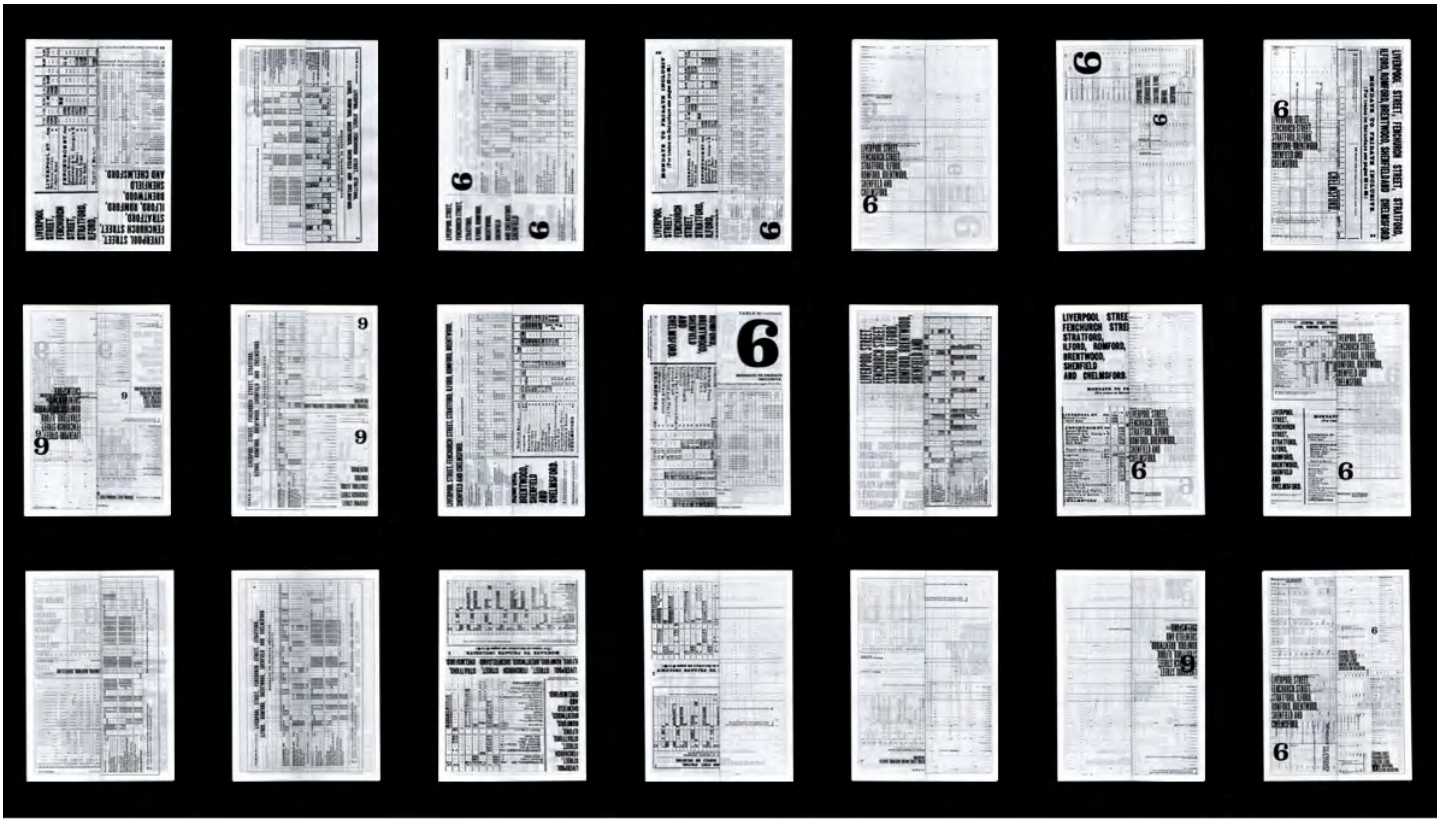
Out of the Picture: What Travels with an Image?

Earlier in this unit, my project Timetable placed one railway timetable within different grids, resolutions and media to observe what each version lost or changed.

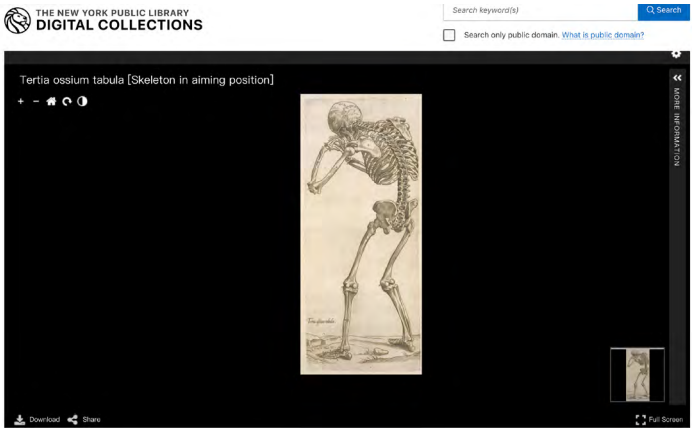


Timetable (2026)

Δ1 began with the word “position”. The Cambridge Dictionary groups one of its senses under “arrangement”: how parts are placed (Cambridge Dictionary, n.d.). Following this sense, I searched the New York Public Library’s Digital Collections, gathered images matching its different meanings, and cut and recombined them to explore how information shifts between the meanings of one word.



Cambridge Dictionary (n.d.) ‘Position’, screenshot



NYPL Digital Collections, search result for ‘position’, screenshot

In this process, anatomical figures drew my attention to the body itself: how it stands, what supports it and what surrounds it, the literal sense of how parts are placed. Following these images, I found Thomas Geminus's *Compendiosa totius anatomie delineatio* (1545) and the woodcuts it adapted from Andreas Vesalius's *De humani corporis fabrica* (1543). Geminus rearranged the figures on copper, omitted most of their landscape and gathered elements from separate pages onto single plates. Rearranged and redrawn, they can still be compared with their sources one by one.



Thomas Geminus(1545)



Andreas Vesalius'(1543)



Geminus (1545), plate

Walter Benjamin's 'The Work of Art in the Age of Mechanical Reproduction' helps me analyse this material, and stands in direct tension with my work. His central claim is that "the technique of reproduction detaches the reproduced object from the domain of tradition", and that, meeting the beholder "in his own particular situation, it reactivates the object reproduced" (Benjamin, [1935] 1969, p. 223). His examples move between situations: an ancient statue of Venus stood in one tradition for the Greeks and in another for the clerics of the Middle Ages (p. 225). Yet his measure remains what the copy lacks: "its presence in time and space, its unique existence at the place where it happens to be" (p. 222). Reproduction appears first as loss: "that which withers in the age of mechanical reproduction is the aura of the work of art" (p. 223).

One might subsume the eliminated element in the term "aura" and go on to say: that which withers in the age of mechanical reproduction is the aura of the work of art. This is a symptomatic process whose significance points beyond the realm of art. One might generalize by saying: the technique of reproduction detaches the reproduced object from the domain of tradition. By making many reproductions it substitutes a plurality of copies for a unique existence. And in permitting the reproduction to meet the beholder or listener in his own particular situation, it reactivates the object reproduced. These two processes lead to a tremendous shattering of tradition which is the obverse of the contemporary crisis and renewal of mankind. Both processes are intimately connected with the contemporary mass movements. Their most powerful agent is the film. Its social significance, particularly in its most positive form, is inconceivable without its destructive, cathartic aspect, that is, the liquidation of the traditional value of the cultural heritage. This phenomenon is most palpable in the great historical films. It extends to ever new positions. In 1927 Abel Gance exclaimed enthusiastically: "Shake-

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II

Even the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be. This unique existence of the work of art determined the history to which it was subject throughout the time of its existence. This includes the changes which it may have suffered in physical condition over the years as well as the various changes in its ownership.[1] The traces of the first can be revealed only by chemical or physical analyses which it is impossible to perform on a reproduction; changes of ownership are subject to a tradition which must be traced from the situation of the original.

The presence of the original is the prerequisite to the concept of authenticity. Chemical analyses of the patina of a bronze can help to establish this, as does the proof that a given manuscript of the Middle Ages stems from an archive of the fifteenth century. The whole sphere of authenticity is outside technical—and, of course, not only technical—reproducibility.[2] Confronted

IV

The uniqueness of a work of art is inseparable from its being imbedded in the fabric of tradition. This tradition itself is thoroughly alive and extremely changeable. An ancient statue of Venus, for example, stood in a different traditional context with the Greeks, who made it an object of veneration, than with the clerics of the Middle Ages, who viewed it as an ominous idol. Both of them, however, were equally confronted with its uniqueness, that is, its aura. Originally the contextual integration of art in tradition found its expression in the cult. We know that the earliest art works originated in the service of a ritual—first the magical, then the religious kind. It is significant that the existence

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Benjamin, ([1935] 1969) p223, p222, p225

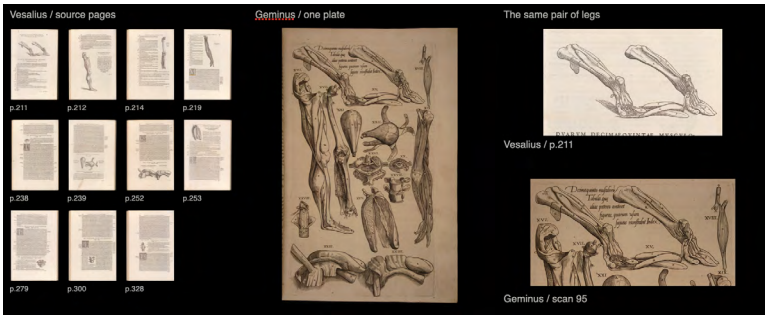
This measure can be turned on my own work. The anatomical images survive in rare books I cannot touch; from the moment I selected scans from online collections, I was working with copies that had already lost their aura. Printing them at original scale on different papers added another translation, and cutting and collage then layered further operations onto copies of copies. By Benjamin's measure, each step moved the image further from the original.



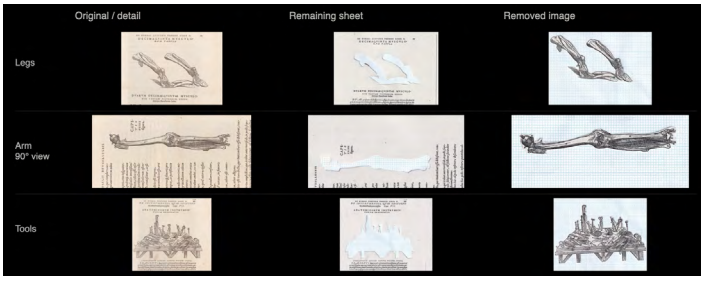
Cutting and collage

The body's position

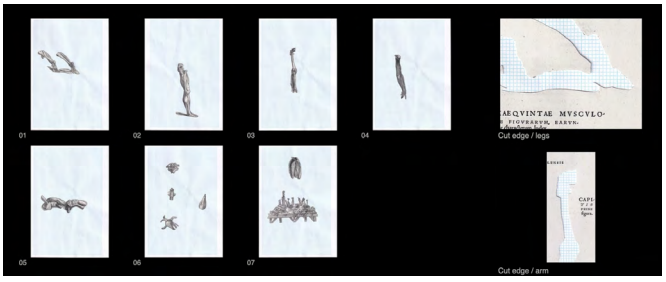
I repeated Geminus's selection. I printed pages of the Fabrica at original scale and, on pages 211, 212 and 214, cut along the contours of the bodies that Geminus later combined on a single plate. The extracted figure and the void it left could each be compared with the source, showing how information changed through reediting. I laid both the fragments and the cut pages on graph paper, a standardised measure for the "real" dimensions of fragment and absence. Keeping the headings and index on the page left this rearranged information traceable.



Repeating Geminus's selection

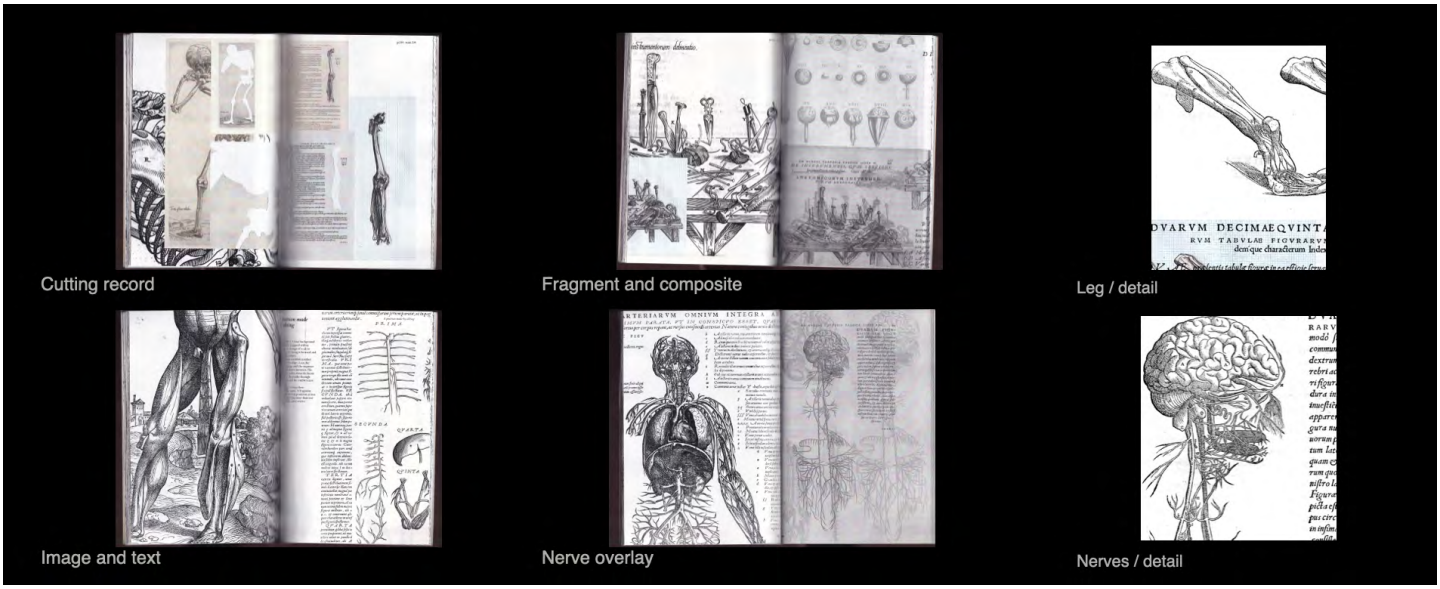


Cutting as reading



Fragment

I then overlapped the 1543 page, the 1545 plate and my cuts in a publication, setting Geminus's historical edit beside my own, second edit.



Publication

Benjamin's history begins where my material begins: "With the woodcut graphic art became mechanically reproducible for the first time" (p. 220). He notes that the invention of the woodcut "may be said to have struck at the root of the quality of authenticity" (p. 245, n. 2). The page I cut was a print of a library scan of one copy of a printed edition. My blade never touched the original: it divided one copy into two parts and set them against another copy. What the cut reveals, then, is not the loss of original information but the act of separation and reediting itself: which parts of an image's surroundings leave with it, which remain, and how these operations will direct viewers in later rearrangements.

Mechanical reproduction of a work of art, however, represents something new. Historically, it advanced intermittently and in leaps at long intervals, but with accelerated intensity. The Greeks knew only two procedures of technically reproducing works of art: founding and stamping. Bronzes, terra cottas, and coins were the only art works which they could produce in quantity. All others were unique and could not be mechanically reproduced. With the woodcut graphic art became mechanically reproducible for the first time, long before script became reproducible by print. The enormous changes which printing, the mechanical

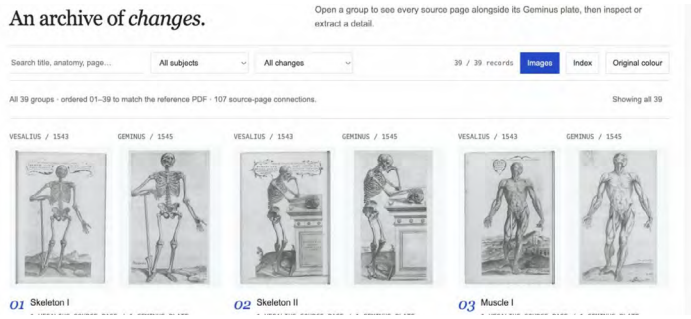
220

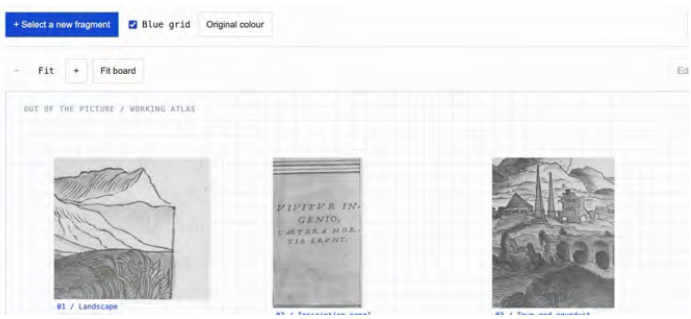
2. Precisely because authenticity is not reproducible, the intensive penetration of certain (mechanical) processes of reproduction was instrumental in differentiating and grading authenticity. To develop such differentiations was an important function of the trade in works of art. The invention of the woodcut may be said to have struck at the root of the quality of authenticity even before its late flowering. To be sure, at the time of its origin a medieval picture of the Madonna could not yet be said to be "authentic." It became "authentic" only during the succeeding centuries and perhaps most strikingly so during the last one.

Benjamin, ([1935] 1969) p220, p245,n2

The image's position

To see what Geminus adapted across the whole book, I changed scale and medium and built an online archive: 39 comparisons linking his plates to 107 source pages, using scans from three libraries. Comparison made the details of reediting legible: a landscape omitted, figures from distant pages combined, an inscription missing, a figure number rewritten. I deliberately made the site present copies as copies: paper tone and colouring belong to particular volumes, not to the composition. Users can also drag, crop and combine images, deciding how they are paired, filtered and overlaid. In this way the archive itself becomes a rearrangement.

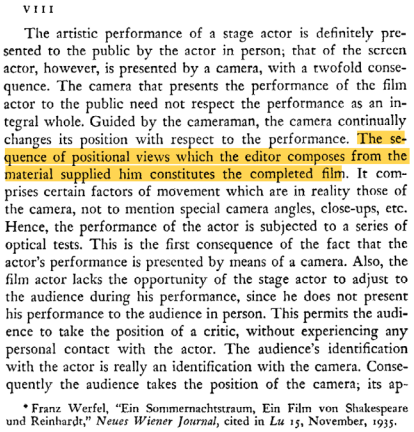




An archive of changes
taogcd.github.io/out-of-the-picture

The editor's position

Benjamin places editing in film: "The sequence of positional views which the editor composes from the material supplied him constitutes the completed film" (p. 230). The cameraman resembles a surgeon who "cuts into the patient's body" (p. 235), producing "multiple fragments which are assembled under a new law" (p. 236), so that film offers "an aspect of reality which is free of all equipment" (p. 236).

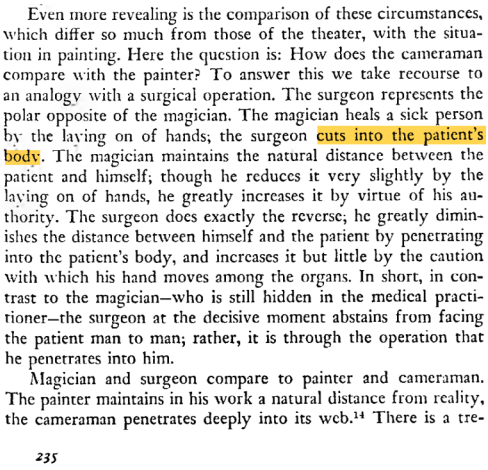


VIII

The artistic performance of a stage actor is definitely presented to the public by the actor in person; that of the screen actor, however, is presented by a camera, with a twofold consequence. The camera that presents the performance of the film actor to the public need not respect the performance as an integral whole. Guided by the cameraman, the camera continually changes its position with respect to the performance. The sequence of positional views which the editor composes from the material supplied him constitutes the completed film. It comprises certain factors of movement which are in reality those of the camera, not to mention special camera angles, close-ups, etc. Hence, the performance of the actor is subjected to a series of optical tests. This is the first consequence of the fact that the actor's performance is presented by means of a camera. Also, the film actor lacks the opportunity of the stage actor to adjust to the audience during his performance, since he does not present his performance to the audience in person. This permits the audience to take the position of a critic, without experiencing any personal contact with the actor. The audience's identification with the actor is really an identification with the camera. Consequently the audience takes the position of the camera; its ap-

* Franz Werfel, "Ein Sommernachtstraum, Ein Film von Shakespeare und Reinhardt," *Neues Wiener Journal*, cited in *Lu* 15, November, 1935.

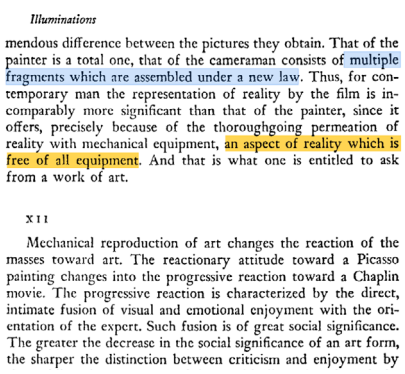
230



Even more revealing is the comparison of these circumstances, which differ so much from those of the theater, with the situation in painting. Here the question is: How does the cameraman compare with the painter? To answer this we take recourse to an analogy with a surgical operation. The surgeon represents the polar opposite of the magician. The magician heals a sick person by the laying on of hands; the surgeon cuts into the patient's body. The magician maintains the natural distance between the patient and himself; though he reduces it very slightly by the laying on of hands, he greatly increases it by virtue of his authority. The surgeon does exactly the reverse; he greatly diminishes the distance between himself and the patient by penetrating into the patient's body, and increases it but little by the caution with which his hand moves among the organs. In short, in contrast to the magician—who is still hidden in the medical practitioner—the surgeon at the decisive moment abstains from facing the patient man to man; rather, it is through the operation that he penetrates into him.

Magician and surgeon compare to painter and cameraman. The painter maintains in his work a natural distance from reality, the cameraman penetrates deeply into its web.[14] There is a tre-

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Illuminations

mendous difference between the pictures they obtain. That of the painter is a total one, that of the cameraman consists of multiple fragments which are assembled under a new law. Thus, for contemporary man the representation of reality by the film is incomparably more significant than that of the painter, since it offers, precisely because of the thoroughgoing permeation of reality with mechanical equipment, an aspect of reality which is free of all equipment. And that is what one is entitled to ask from a work of art.

XII

Mechanical reproduction of art changes the reaction of the masses toward art. The reactionary attitude toward a Picasso painting changes into the progressive reaction toward a Chaplin movie. The progressive reaction is characterized by the direct, intimate fusion of visual and emotional enjoyment with the orientation of the expert. Such fusion is of great social significance. The greater the decrease in the social significance of an art form, the sharper the distinction between criticism and enjoyment by

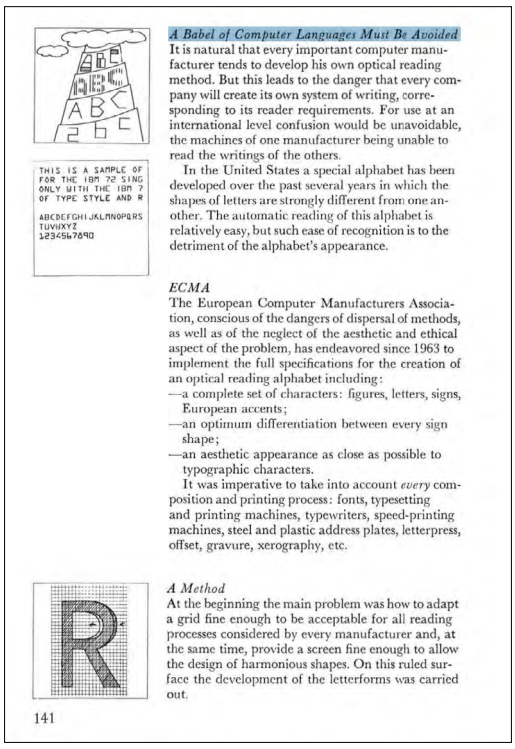
Geminus's plates work similarly, by hand and four centuries earlier: rearranged figures sit together as if they had always belonged there, and the operation that gathered them is hidden. My cuts keep that operation visible: the edge, the void and the grid show that another context has been made.

This is where my position moves, and where my own method is exposed. In Timetable I asked what a timetable loses or changes at each resolution; Benjamin, too, measures reproduction by what the copy lacks. By that measure my material was lost from the start; measuring further loss tells me little. The question becomes which relations are carried into a new situation, which are left behind, and who decides. This is the recontextualisation I want to explore. Looking back, however, I have to admit that cutting, collage and archiving did not observe this process; they performed it again and again. I set out to trace recontextualisation and instead performed it once more, so that method replaced the object of study. The project's scale is also limited: beyond Geminus, the later uses I can verify are few.

The Design Museum's permanent display, Designer Maker User, showed me where this question might lead. A photograph of Adrian Frutiger's sketch for OCR-B (1968) sits above two labels. The OCR-B label tells a sequence: OCR-A, developed in 1966, "couldn't be read by humans"; two years later Frutiger was commissioned to rework the type so that it "could be quickly read by machines, but also understood by people" (Design Museum, 2026). Frutiger's own account is less linear. He presents OCR-B as a European standard set against an existing American alphabet whose ease of machine recognition was "to the detriment of the alphabet's appearance" (Frutiger, 1967, p. 141). The museum's narrative of progress from machine to human reading is itself a recontextualisation.



Designer Maker User, Design Museum, London. 2026



A Babel of Computer Languages Must Be Avoided

It is natural that every important computer manufacturer tends to develop his own optical reading method. But this leads to the danger that every company will create its own system of writing, corresponding to its reader requirements. For use at an international level confusion would be unavoidable, the machines of one manufacturer being unable to read the writings of the others.

In the United States a special alphabet has been developed over the past several years in which the shapes of letters are strongly different from one another. The automatic reading of this alphabet is relatively easy, but such ease of recognition is to the detriment of the alphabet's appearance.

THIS IS A SAMPLE OF FOR THE IBM 72 SING ONLY WITH THE IBM 7 OF TYPE STYLE AND R

ABCDEFGHIJKLMNOPQRS TUVWXYZ 1234567890

ECMA

The European Computer Manufacturers Association, conscious of the dangers of dispersal of methods, as well as of the neglect of the aesthetic and ethical aspect of the problem, has endeavored since 1963 to implement the full specifications for the creation of an optical reading alphabet including:

—a complete set of characters: figures, letters, signs, European accents;
—an optimum differentiation between every sign shape;
—an aesthetic appearance as close as possible to typographic characters.

It was imperative to take into account *every* composition and printing process: fonts, typesetting and printing machines, typewriters, speed-printing machines, steel and plastic address plates, letterpress, offset, gravure, xerography, etc.

A Method

At the beginning the main problem was how to adapt a grid fine enough to be acceptable for all reading processes considered by every manufacturer and, at the same time, provide a screen fine enough to allow the design of harmonious shapes. On this ruled surface the development of the letterforms was carried out.

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Frutiger (1967), p. 141

This leads to a more focused question. How has a letterform designed for machines, and presented as neutral, changed historically, politically and in its position as it has been standardised, redrawn, used at scale and exhibited? Through OCR, a case of vast circulation, I want to explore not a single act of redrawing but the story behind recontextualisation: who repositioned this letterform at different moments, from what positions, and who tells its history.

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