

GRAMOPHONE, FILM, TYPEWRITER

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Translated, with an Introduction, by

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words; therefore, silent films have to transfer them directly from type-script to screen. In addition, Demeny's experiment delivered the grand kaleidoscope of human speech, as Villiers would have put it, to the deaf and dumb, and Minnie Tipp even delivered it to writers. The decomposition and filtering of love ensured that her new customer would rise to the particular work ethic that characterizes "professional women" and marks within that group a necessary, though not always sufficient, distinction between typists and whores.²¹¹ With the result that a man, too, grasped the secular difference between poet and writer. From handwriting to typed dictation, from the loneliness in front of mirrors to the sexual division of labor and best-selling poetry: as a "moral film," "Lyre and Typewriter" shows "how an industrious woman can educate a man." Or how, in a fine animated sequence, the old snake becomes the Eve of the twentieth century.

"There are more women working at typing than at anything else."²¹² Film, the great media self-advertisement, has reached its target group and its happy ending.

TYPEWRITER

"Typewriter" is ambiguous. The word meant both typing machine and female typist: in the United States, a source of countless cartoons. (Typed letter of a bankrupt businessman to his wife: "Dear Blanche, I have sold all my office furniture, chairs, desks, etc. etc., and I am writing this letter under difficulties with my typewriter on my lap.")¹ But the convergence of a profession, a machine, and a sex speaks the truth. Bermann's word "stenotypist" gradually came to require footnotes explaining that since 1885, it has referred to women who have completed Ferdinand Schrey's combined training program in the Hammond typewriter and stenography. In the case of "typewriter," by contrast, everyday language for once matches statistics (see the accompanying table).

The table unfortunately does not distinguish between stenographic handwriting and Remington's typewriting. Nevertheless, it is clear that the statistical explosion begins in 1881, with the record sales of the Remington II. Although the number of men dwindles like a bell curve, the number of female typists increases almost with the elegance of an exponential function. As a consequence, it might be possible—as we approach the threshold of infinity—to forecast the year in which typist and woman converge. Minnie Tipp will have been Eve.

An innocuous device, "an 'intermediate' thing, between a tool and a machine," "almost quotidian and hence unnoticed,"² has made history. The typewriter cannot conjure up anything imaginary, as can cinema; it cannot simulate the real, as can sound recording; it only inverts the gender of writing. In so doing, however, it inverts the material basis of literature.

The monopoly of script in serial data processing was a privilege of men. Because orders and poems were processed through the same channel, security protocols evolved. Even though more and more women were

Stenographers and Typists in the United States by Sex, 1870-1930

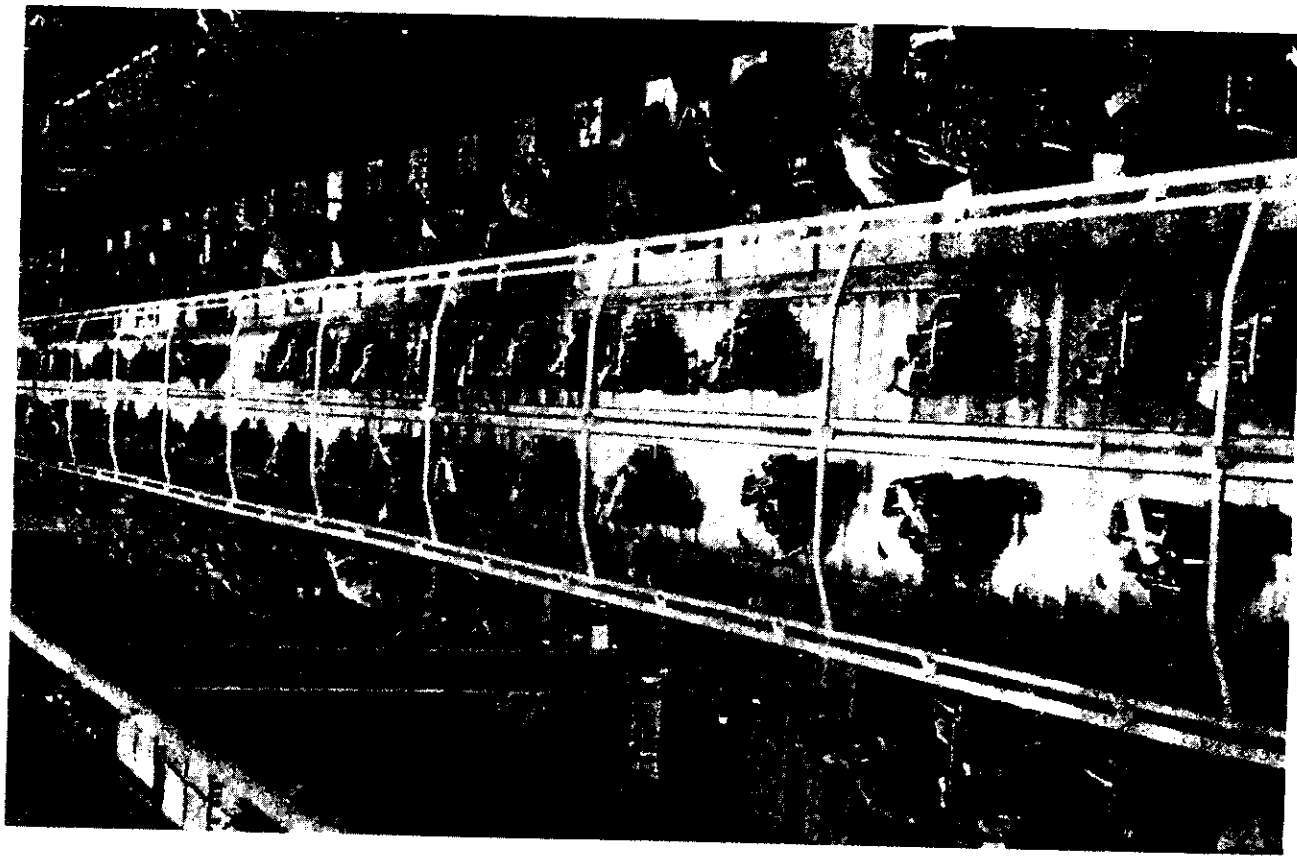
Year	Total	Men	Women	Women as a percentage of total
1870	154	147	7	4.5%
1880	5,000	3,000	2,000	40.0
1890	33,400	12,100	21,300	63.8
1900	112,600	26,200	86,400	76.7
1910	326,700	53,400	263,300	80.6
1920	615,100	50,400	564,700	91.8
1930	811,200	36,100	775,100	95.6

SOURCE: U.S. Bureau of the Census, *Sixteenth Census of the United States, 1940: Population* (1943), as cited in Davies 1974, 10.

taught letters in the wake of general educational reform, being able to read was not the same as being allowed to write. Prior to the invention of the typewriter, all poets, secretaries, and typesetters were of the same sex. As late as 1859, when the solidarity of American women's unions created positions for female typesetters, their male colleagues on the presses boycotted the printing of unmanly type fonts.³ Only the Civil War of 1861-64—that revolutionary media network of telegraph cables and parallel train tracks⁴—opened the bureaucracy of government, of mail and stenography, to writing women; their numbers, of course, were as yet too small to register statistically.

The Gutenberg Galaxy was thus a sexually closed feedback loop. Even though Germanists are fundamentally oblivious to it, it controlled nothing less than German literature. Unrecognized geniuses swung the quill themselves, whereas national poets had personal secretaries, as in the case of Goethe, John, Schuchardt, Eckermann, Riemer, and Geist. It is precisely this media network—namely, that the Ur-author can bring forth his spirit in Eckermann—that Professor Pschorr had been able to prove phonographically in Goethe's study.⁵ One's own or dictated script was processed by male typesetters, binders, publishers, and so on, in order finally to reach in print the girls for whom Goethe wrote. As Goethe put it in conversation with Riemer (who of course recorded it), "he conceives of the Ideal in terms of female form or the form of Woman. What a man is, he didn't know."⁶

Women could and had to remain an ideal abstraction, like Faust's Gretchen, as long as the materialities of writing were the jobs of men, far



too close for them to be aware of it. One Gretchen inspired the work; her many sisters were allowed to consume it through their identification with her. "Otherwise," that is, without sales and female readers, "things would be bad" for him, the "author." Friedrich Schlegel wrote to his lover.⁷ But the honor of having a manuscript appear in print under the author's proper name was barred to women, if not factually then at least media-technologically: the proper name at the head of their verse, novels, and dramas almost always has been a male pseudonym.

If only because of that, an omnipresent metaphor equated women with the white sheet of nature or virginity onto which a very male stylus could then inscribe the glory of its authorship. No wonder that psychoanalysis discovered during its clean-up operation that in dreams, "*pencils, pen-holders, . . . and other instruments are undoubted male sexual symbols.*"⁸ It only retrieved a deeply embedded metaphysics of handwriting.

And consequently did not disclose any unconscious secrets, either. For that, the "symbols" of man and woman were too closely attached to the monopoly of writing. When, in 1889, the editors of the illustrated journal *Vom Fels zum Meer* (as usual) made a pitch for Hammond typewriters and Schrey, their general representative, the "writer of these lines" was thrilled by a self-study: "Already after a couple of weeks he reached a speed of 125 letters per minute." Only two things were "lost" during this mechanization of writing: first, "the intimacy of handwritten expression, which nobody is willing to relinquish voluntarily, particularly in personal correspondence"; and second, a centerpiece of occidental symbolic systems:

Machines everywhere, wherever one looks! A substitute for numerous types of labor, which man would otherwise do with his industrious hand, and what economy of exertion and time, and what advantages in terms of flawlessness and regularity of work. It was only natural that after the engineer had deprived woman's tender hand of the actual symbol of female industriousness, one of his colleagues hit upon the idea of replacing the quill, the actual symbol of male intellectual activity, with a machine.⁹

The literal meaning of text is tissue. Therefore, prior to their industrialization the two sexes occupied strictly symmetrical roles: women, with the symbol of female industriousness in their hands, wove tissues; men, with the symbol of male intellectual activity in their hands, wove tissues of a different sort called text. Here, the stylus as singular needlepoint, there, the many female readers as fabric onto which it wrote.

Industrialization simultaneously nullified handwriting and hand-

based work. Not coincidentally, it was William K. Jenne, the head of the sewing-machine subdivision of Remington & Son, who in 1874 developed Sholes's prototype into a mass-producible "Type-Writer."¹⁰ Not coincidentally as well, early competing models came from the Domestic Sewing Machine Co., the Meteor Saxon Knitting-Machine Factory, or Seidel & Naumann.¹¹ Bipolar sexual differentiation, with its defining symbols, disappeared on industrial assembly lines. Two symbols do not survive their replacement by machines, that is, their implementation in the real. When men are deprived of the quill and women of the needle, all hands are up for grabs—as employable as employees. Typescript amounts to the desexualization of writing, sacrificing its metaphysics and turning it into word processing.

A transvaluation of all values, even if it arrived on pigeon toes, as Nietzsche would have it, or on "high-buttoned shoes" (in the words of the most amusing chronicler of the typewriter).¹² To mechanize writing, our culture had to redefine its values or (as the first German monograph on the typewriter put it, in anticipation of Foucault) "create a wholly new order of things."¹³ The work of ingenious tinkerers was far from achieving that. In 1714 Henry Mill, an engineer with the New River Water Co. in London, received his inconsequential British patent (no. 395) "for a machine or artificial method, to print letters continuously one after another while writing, in a fashion so clean and precise that they are indistinguishable from the printing of letters."¹⁴ The precision of this concept or premise, namely, to introduce Gutenberg's reproductive technology into textual production, was contradicted by the vagueness of the patent's phrasing. The work of Kempelen, the engineer of phonographs, to design an appropriate writing instrument for a blind duchess was similarly inconsequential. Under the discursive conditions of the age of Goethe, the term "writing-machine" was bound to remain a non-term, as was proven rather involuntarily by another Viennese.

In 1823, the physician C. L. Müller published a treatise entitled *Newly Invented Writing-Machine, with Which Everybody Can Write, Without Light, in Every Language, and Regardless of One's Handwriting; Generate Essays and Bills; the Blind, Too, Can, Unlike with Previous Writing Tablets, Write Not Only with Greater Ease but Even Read Their Own Writing Afterward*. What Müller meant and introduced was a mechanical contraption that, its name notwithstanding, only enabled the blind to guide their hands across paper while writing. The mapping of the page and the concentration of ink even afforded them the possibility of rereading their writing through touch. For Müller could "not deny" an

authorial narcissism that prompts "all those so inclined," like Minnie Tipp's poet, "to reread what he has written."¹⁵ Significantly enough, the invention was aimed primarily at educated but unfortunately blind fathers for the purpose of illuminating their morally blind sons with letters and epistolary truths. "How often would a man of good standing write a few lines to save a lost estate or the welfare of whole families, how often would the handwritten letter of a father steer a son back on the right track, if such men could, without restraint and prompting, write in such a way as if they had been endowed with vision."¹⁶

The "writing-machine," in that sense, only brought to light the rules regulating discourses during the age of Goethe: authority and authorship, handwriting and rereading, the narcissism of creation and reader obedience. The device for "everybody" forgot women.

Mechanical storage technologies for writing, images, and sound could only be developed following the collapse of this system. The hard science of physiology did away with the psychological conception that guaranteed humans that they could find their souls through handwriting and rereading. The "I think," which since Kant was supposed to accompany all of one's representations, presumably only accompanied one's readings. It became obsolete as soon as body and soul advanced to become objects of scientific experiments. The unity of apperception disintegrated into a large number of subroutines, which, as such, physiologists could localize in different centers of the brain and engineers could reconstruct in multiple machines. Which is what the "spirit"—the unsimulable center of "man"—denied by its very definition.

Psychophysics and psychotechnology converted into empirical research programs Nietzsche's philosophical and scandalous surmise that "humans are perhaps only thinking, writing, and speaking machines." *Dysfunctional Speech* (*Die Störungen der Sprache*), following Kufsmann's insight or monograph of 1881, could only be cleared up under the premise that speech has nothing to do with the "I think":

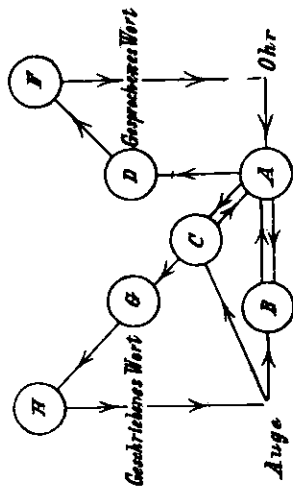
One can conceive of language in its initial development as a *conditioned* reflex. It is the character of reflected intentionality that distinguishes conditioned from inborn movements of expression, their greater ability to adapt, in appropriate form and degree, to the intended purpose. Because of this quality, we are not quite prepared to see in them anything but the play of mechanical circuits acquired through exercise. And yet, pantomime, the spoken word, and the written word are nothing but the products of internal, self-regulating mechanisms that are channeled and coordinated through emotions and conceptions, just as one can operate a sewing, typing, or speaking machine without knowing its mechanism.¹⁷

When, from the point of view of brain physiology, language works as a feedback loop of mechanical relays, the construction of typewriters is only a matter of course. Nature, the most pitiless experimenter, paralyzes certain parts of the brain through strokes and bullet wounds to the head; research (since the Battle of Solferino in 1859) is only required to measure the resulting interferences in order to distinguish the distinct subroutines of speech in anatomically precise ways. Sensory aphasia (while hearing), dyslexia (while reading), expressive aphasia (while speaking), agraphia (while writing) bring forth machines in the brain. Kufsmann's "sound board," with its "cortical sound keys,"¹⁸ virtually conjures up the rods and levers of old Remingtons.

Disabilities or deformations therefore suggest not only Müller's "sweet hope" to be "of use to his fellow humans" and "to alleviate the suffering of many unfortunates."¹⁹ Blindness and deafness, precisely when they affect either speech or writing, yield what would otherwise be beyond reach: information on the human information machine. Whereupon its replacement by mechanics can begin. Knie, Beach, Thurber, Malting Hansen, Ravizza: they all constructed their early typewriters for the blind and/or the deaf. The Frenchmen Foucauld and Pierre even constructed them for the blind as blind people themselves.²⁰ Interest in authorship, or in the possibility of reading one's unconscious outpourings in the mirror, disappeared completely.

What the typewriters for the blind in mid century were still missing was speed. But ever since 1810, the introduction of the rotary press and continuous form into the printing trade made typesetting machines desirable in which ("as with a piano") "the various types fall, through a touch of the keys, into place almost as quickly as one speaks."²¹ And when Samuel Morse patented his electric cable telegraph in 1840, he introduced a communications technology whose speed of light far outpaced all forms of manual communication. "The average speed, which can be sustained for hours by hand, is about 20–25 words per minute."²² Consequently, not long thereafter "a whole generation of telegraph operators had appeared who could understand code much faster than they could write it down. Stenographers found themselves in a similar fix. They could take their notations as quickly as a man could speak, and yet they couldn't transcribe faster than at a snail's pace."²³

What therefore became part of the wish list were writing instruments that could coincide with the operating speed of nervous pathways. Since aphasia researchers had figured out the number of milliseconds it takes for a letter to travel from the eye to the hand muscles via the brain's read-



Schematic diagram of the language subsite in the brain. A denotes the center for sound images, B, the center for visual images.

ing and writing centers, the equation of cerebral circuits with telegraphic dispatches had become a physiological standard.²⁴ When “the average latency, that is, the time between the stimulus and the pushing of the button takes about 250 milliseconds,” and when, furthermore, “the typing of a given output resembles a flying projectile” because “it only needs a starting signal” and “then goes all by itself”²⁵—then, the typewriter as a mass-produced article was bound to roll automatically off the production lines of a gun manufacturer.

Unconfirmed rumors have suggested that Sholes sold the Remington company a patent that he had stolen from the poor Tyrolean Peter Mitterhofer during his studies at the Royal and Imperial Polytechnical Institute in Vienna.²⁶ But plagiarism, or, in modern terms, the transfer of technology, is of little importance in the face of circumstances. Rumor has it that, in reference to Mitterhofer’s request for money, Emperor Franz Joseph allegedly remarked to his cabinet that the invention of superior war strategies would be more appropriate than that of useless typewriters. Remington & Son were above such pseudo-alternatives: they transferred “the standardization of the component parts of weapons, which had been widely practiced since the Napoleonic Wars,” to those of civil writing instruments.²⁷ (Weapons manufacturers such as Mauser, Manufacture d’Armes de Paris, and the German Weapons and Ammunitions Factory [DWF] were to follow suit.)

The technologies of typewriting and sound recording are by-products of the American Civil War. Edison, who was a young telegrapher during the war, developed his phonograph in an attempt to improve the processing speed of the Morse telegraph beyond human limitations. Remington



Anton Giulio Bragaglia and Arturo Bragaglia, *Dattilografa*, 1911.

began the serial production of Sholes’s typewriter models in September 1874 simply because “after the Civil War boom things had been on the slow side,” and they had “more capacity than they were using.”²⁸

The typewriter became a discursive machine-gun. A technology whose basic action not coincidentally consists of strikes and triggers proceeds in automated and discrete steps, as does ammunition transport in a revolver and a machine-gun, or celluloid transport in a film projector. “The pen was once mightier than the sword,” Otto Burghagen, the first monographer of the typewriter, writes in 1898, “but where the typewriter rules,” he continues, “Krupp’s cannons must remain silent!”²⁹ Burghagen is contradicted, however, by his own deliberations on “the significant *savings of time*, which endear the machine to the merchant. With its help one can complete office work in a third of the time it would take with the pen, for with each strike of a key the machine produces a complete letter, while the pen has to undergo about five strokes in order to produce a letter. . . . In the time it takes the pen to put a dot on the “i” or to make the “u” sign, the machine produces two complete letters. The striking of the keys follows in succession with great speed, especially when one writes with all fingers; then, one can count five to ten keyboard hits per second!”³⁰ This is the epic song of a firepower whose German record as of August 1985 stands at “773 letters per minute for thirty minutes of high-speed typing.”³¹

Jean Cocteau, who produced a corresponding work for each of the late-nineteenth-century media—*La voix humaine* for the acoustics of the

telephone, the script for *Orphée* for mirrors, doppelgängers, cinematic effects, and "for car radios, secret codes, and short-wave signals"³²—in the typewriter into the titular hero of a play in 1941. The reason was there in American idiom: for three acts, a detective chases an unknown woman who has been tormenting her community with anonymous, typewritten letters, going by the title "the typewriter."³³ For three acts, he "imagines the culprit at work at her typewriter, aiming and operating her machine gun."³⁴ Typewriters are simply "fast," not just "like jazz" (as Cendrars put it) but also like rapid-fire weapons. In her confession, Cocteau's anonymous letter-writer puts it this way: "I wanted to attack the whole city. All the hypocritical happiness, the hypocritical piety, the hypocritical luxury, the whole lying, egotistical, avaricious, untouchable bourgeoisie. I wanted to stir that muck, attack and reveal it. It was like a hoax! Without accounting for myself, I chose the dirtiest and cheapest of all weapons, the typewriter."³⁵

About which the playwright, in his preface of 1941, only remarked that he had "portrayed the terrible feudal province" of France "prior to the debacle."³⁶ As innocuous as they were, typewriters could still provide cover for the work of Guderian's submachine guns and tank divisions. And indeed: whereas the Army High Command supplied its war photographers with "Arriflex hand-held cameras, Askania Z-tripod cameras, [and] special-assignment vehicles" and its recording specialists with "armored vehicles and tanks for radio broadcasts" and with magnetophones, "war reporters were equipped solely with typewriters, and specifically, most often with commercially available traveling typewriters."³⁷ Modesty of literature under conditions of high technology.

That is precisely how Remington began production. The Model I hardly sold, even though or precisely because one no less than Mark Twain purchased a Remington in 1874. He sent his novel *Tom Sawyer*, the first typescript in literary history, to his publisher, and sent a paradoxical letter of support to the typewriter manufacturer:

GENTLEMEN: PLEASE DO NOT USE MY NAME IN ANY WAY,
PLEASE DO NOT EVEN DIVULGE THE FACT THAT I OWN A
MACHINE, I HAVE ENTIRELY STOPPED USING THE TYPE-
WRITER, FOR THE REASON THAT I NEVER COULD WRITE A
LETTER WITH IT TO ANYBODY WITHOUT RECEIVING A
REQUEST BY RETURN MAIL THAT I WOULD NOT ONLY DESCRIBE
THE MACHINE BUT STATE WHAT PROGRESS I HAD MADE IN THE
USE OF IT, ETC., ETC. I DON'T LIKE TO WRITE

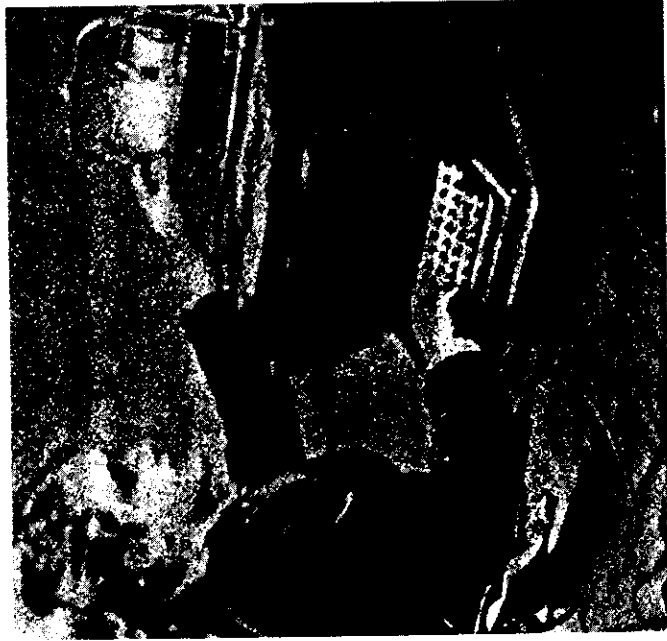
LETTERS, AND SO I DON'T WANT PEOPLE TO KNOW THAT
I OWN THIS CURIOSITY BREEDING LITTLE JOKER.

YOURS TRULY,
SAM'L L. CLEMENS.³⁸

The Model II of 1878, which allowed the switch from lower to upper case for a price of \$125, initially did not fare much better. But after a slow start of 146 sales per year there came a rise that approximated a global snowball effect.³⁹ For in 1881, the marketing strategists of Wyckoff, Seamans, and Benedict made a discovery: they recognized the fascination their unmarketable machine held for the battalions of unemployed women. When Lillian Sholes, as "presumably" the "first type-writer" in history,⁴⁰ sat and posed in front of her father's prototype in 1872, female typists came into existence for purposes of demonstration, but as a profession and career, the stenotypist had yet to come. That was changed by the central branch of the Young Women's Christian Association in New York City, which trained eight young women in 1881 to become typists and immediately received hundreds of inquiries (at \$10 a week) from the corporate world.⁴¹ A feedback loop was created connecting recruitment, training, supply, demand, new recruitment, and so on—first in the United States, and shortly thereafter through Christian women's associations in Europe.⁴²

Thus evolved the exponential function of female secretaries and the bell curve of male secretaries. Ironically enough, the clerks, office helpers, and poet-apprentices of the nineteenth century, who were exclusively male, had invested so much pride in their laboriously trained handwriting as to overlook Remington's innovation for seven years. The continuous and coherent flow of ink, that material substrate of all middle-class individuals and indivisibilities, made them blind to a historical chance. Writing as keystrokes, spacing, and the automatics of discrete block letters bypassed a whole system of education. Hence sexual innovation followed technological innovation almost immediately. Without resistance men cleared the field "where competition is as fierce as nowhere else."⁴³ Women reversed the handicap of their education, turning it into a "so-called emancipation"⁴⁴ that, all proletarian fascination notwithstanding, wears the white collar of the employee of discourse.

In 1853, Hessian school regulations described knowledge of writing and arithmetic as useful for girls but not indispensable.⁴⁵ And women "without any talent for arithmetic, with terrible handwriting, with a



Sholes's daughter at the Remington, 1872.

highly deficient knowledge of orthography and mathematics" promptly started "in droves" to "work on the typewriter"—so says a woman who in 1902 described the job of a *female clerk* "as building a church tower in the air because one had forgotten the foundations."⁴⁶

But in the age of information, foundations no longer count. The fact that "the female clerk could all-too-easily degrade into a mere typewriter"⁴⁷ made her an asset. From the working class, the middle class, and the bourgeoisie, out of ambition, economic hardship, or the pure desire for emancipation⁴⁸ emerged millions of secretaries. It was precisely their marginal position in the power system of script that forced women to develop their manual dexterity, which surpassed the prideful handwriting aesthetics of male secretaries in the media system. Two German economists noted it in 1895:

Today, the *typist* has evolved into a kind of type: she is generally very high in demand and is the ruling queen in this domain not only in America but in Germany as well. It may come as a surprise to find a practical use for what has become a veritable plague across the country, namely, piano lessons for young girls: the re-

sultant dexterity is very useful for the operation of the typewriter. Rapid typing on it can be achieved only through the dexterous use of *all fingers*. If this profession is not yet as lucrative in Germany as it is in America, it is due to the infiltration of elements who perform the job of typist mechanically, without any additional skills.⁴⁹

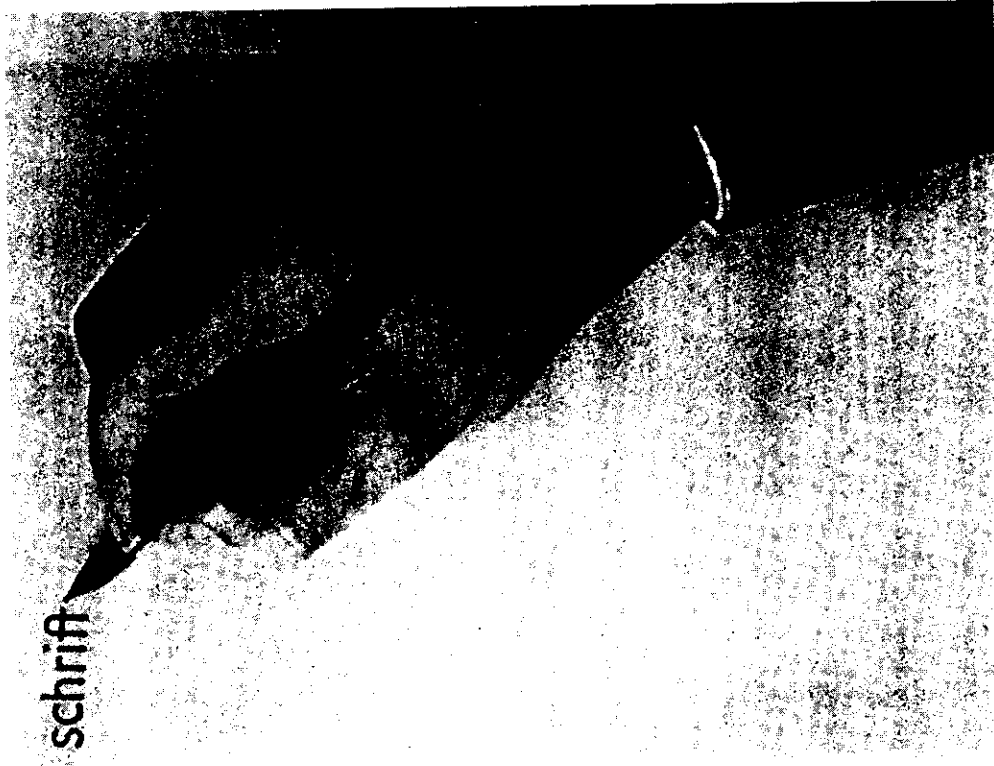
Edison's mechanical storage of sound made obsolete the piano keyboard as the central storage device for music's scriptive logic; women were no longer asked to endow lyrical letters with a singable, *ersatz* sensuality; the national plague of their dexterity could finally find a practical use on typewriter keyboards (derived from the piano). And since power after the print monopoly's collapse was diverted to cable and radio, to the recording of traces and electrical engineering, outdated security protocols were dropped as well: women were allowed to reign over text processing all by themselves. Since then, "discourse has been secondary" and desexualized.⁵⁰

A certain Spinner, treasurer of the United States and a friend of Philo Remington, gave an example of this change. The attrition of males during the Civil War forced him to hire 300 women and to make the statement, "that I authorized the hiring of women for positions in government satisfies me more than all the other achievements in my life."⁵¹

One country after another opened the mail and wireless services as well as the railroad to typists. Technological media needed technological (or hysterical) media. In the German Reich, this was initially understood only by Undersecretary of the Interior and Major General von Budder, chief of the railroad division within the Great General Staff, who dictated flawless orders to his secretaries every day and who committed subordinate agencies to "an increased appropriation of typewriters."⁵² But the German dream of men as civil servants and women as mothers weighed heavily: what had to be created for girls involved in typing, telegraphing, and telephoning was a special, temporary, civil-servant status that was immediately revoked upon marriage.⁵³ Understood that way, communications technology amounted to "the disintegration of the old family structure"⁵⁴ and "denied" its female machine operators "a return to any role in the family."⁵⁵

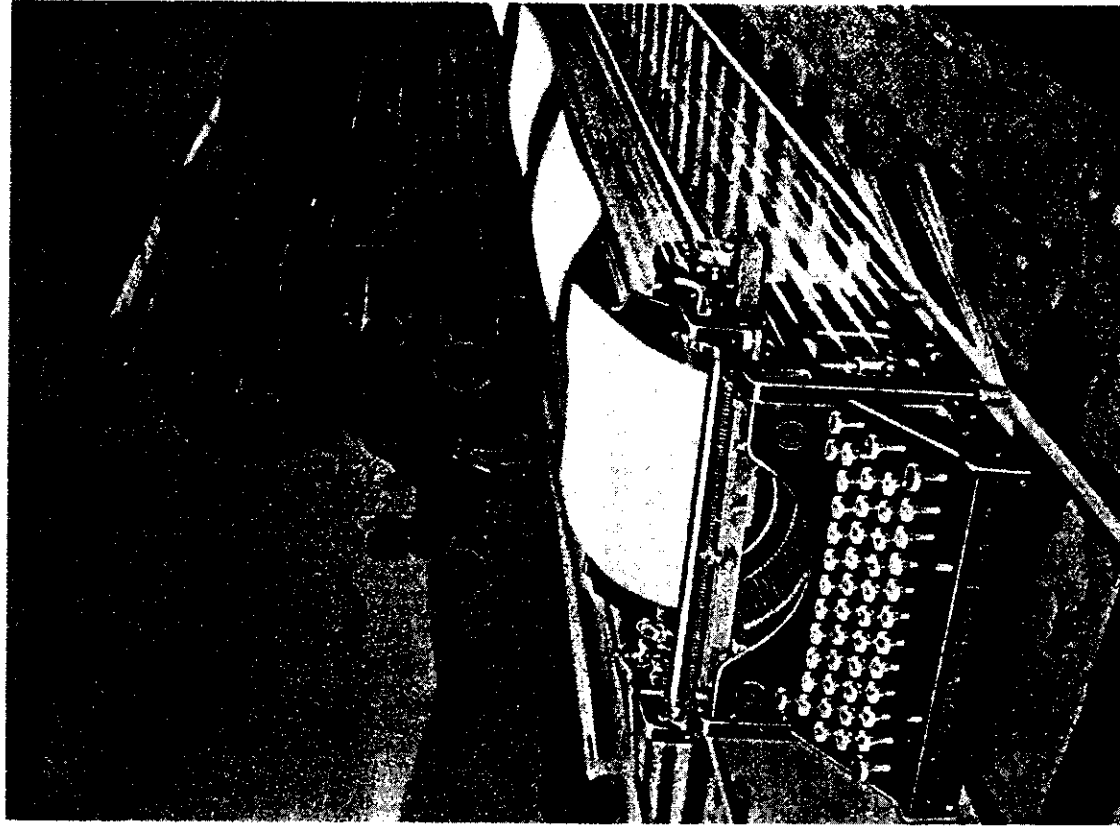
Global forms of disintegration put an end to the German dream. In 1917, when the Army High Command built up its arsenal to prepare for the Ludendorff offensive and screened the civil-service corps for battle readiness, in a letter Hindenburg established the "principle" that, regardless of sex, "whosoever does not work, shall not eat." One year later, the *Zeitschrift für weibliche Handeldsgehilfen* (Journal for female clerks) re-

schrift



Jan Tschichold writing, 1948. "... to substitute the innervation of guiding fingers for the continuous movement of the hand" (Benjamin).

ported full compliance. "The offices of all manufacturers central to the war effort have been occupied with female workers; they have conquered even the orderly rooms of the army administration; shift work was always understaffed, and there was a constant demand for them. They were absorbed in large quantities by the occupied territories; domestic administrative agencies of all kinds hired them in large numbers, let alone com-



Olivetti M 20. Poster by Piramo, Italy, 1920.

panies in the private sector central to the war effort."⁵⁶ "A state—it is," Heidegger observed in 1935. But only in order to doubt whether this "being" consists in the "fact that the police arrest a suspect, or so-and-so-many typewriters are clattering in a government building, taking down the words of ministers and state secretaries."⁵⁷

Only his winter semester in Stalingrad revealed to the thinker—much to the surprise of his listeners—the relationship among Being, Man, and typewriter.

MARTIN HEIDEGGER ON THE HAND AND THE
TYPEWRITER (1942-43)

Man himself acts [*handelt*] through the hand [*Hand*]; for the hand is, together with the word, the essential distinction of man. Only a being which, like man, "has" the word (*ἔχει*, *λόγος*), can and must "have" "the hand." Through the hand occur both prayer and murder, greeting and thanks, oath and signal, and also the "work" of the hand, the "hand-work," and the tool. The handshake seals the covenant. The hand brings about the "work" of destruction. The hand exists as hand only where there is disclosure and concealment. No animal has a hand, and a hand never originates from a paw or a claw or talon. Even the hand of one in desperation (it least of all) is never a talon, with which a person clutches wildly. The hand sprang forth only out of the word and together with the word. Man does not "have" hands, but the hand holds the essence of man, because the word as the essential realm of the hand is the ground of the essence of man. The word as what is inscribed and what appears to the regard is the written word, i.e., script. And the word as script is handwriting.

It is not accidental that modern man writes "with" the typewriter and "dictates" [*diktiert*] (the same word as "poetize" [*dichten*]) "into" a machine. This "history" of the kinds of writing is one of the main reasons for the increasing destruction of the word. The latter no longer comes and goes by means of the writing hand, the properly acting hand, but by means of the mechanical forces it releases. The typewriter tears writing from the essential realm of the hand, i.e., the realm of the word. The word itself turns into something "typed." Where typewriting, on the contrary, is only a transcription and serves to preserve the writing, or turns into print something already written, there it has a proper, though limited, significance. In the time

of the first dominance of the typewriter, a letter written on this machine still stood for a breach of good manners. Today, a handwritten letter is an antiquated and undesired thing; it disturbs speed reading. Mechanical writing deprives the hand of its rank in the realm of the written word and degrades the word to a means of communication. In addition, mechanical writing provides this "advantage," that it conceals the handwriting and thereby the character. The typewriter makes everyone look the same. . . .

Therefore, when writing was withdrawn from the origin of its essence, i.e., from the hand, and was transferred to the machine, a transformation occurred in the relation of Being to man. It is of little importance for this transformation how many people actually use the typewriter and whether there are some who shun it. It is no accident that the invention of the printing press coincides with the inception of the modern period. The word-signs become type, and the writing stroke disappears. The type is "set," the set becomes "pressed." This mechanism of setting and pressing and "printing" is the preliminary form of the typewriter. In the typewriter we find the irruption of the mechanism in the realm of the word. The typewriter leads again to the typesetting machine. The press becomes the rotary press. In rotation, the triumph of the machine comes to the fore. Indeed, at first, book printing and then machine type offer advantages and conveniences, and these then unwittingly steer preferences and needs to this kind of written communication. The typewriter veils the essence of writing and of the script. It withdraws from man the essential rank of the hand, without man's experiencing this withdrawal appropriately and recognizing that it has transformed the relation of Being to his essence.

The typewriter is a signless cloud, i.e., a withdrawing concealment in the midst of its very obtrusiveness, and through it the relation of Being to man is transformed. It is in fact signless, not showing itself as to its essence; perhaps that is why most of you, as is proven to me by your reaction, though well intended, have not grasped what I have been trying to say.

I have not been presenting a disquisition on the typewriter itself, regarding which it could justifiably be asked what in the world that has to do with Parmenides. My theme was the modern relation (transformed by the typewriter) of the hand to writing, i.e., to the word, i.e., to the unconcealedness of Being. A meditation on unconcealedness and on Being does not merely have something to do with the didactic poem of Parmenides, it has everything to do with it. In the typewriter the machine appears, i.e., technology appears, in an almost quotidian and hence unnoticed and hence signless relation to writing, i.e., to the word, i.e., to the distinguishing essence of man. A more penetrating consideration would have to recognize here that

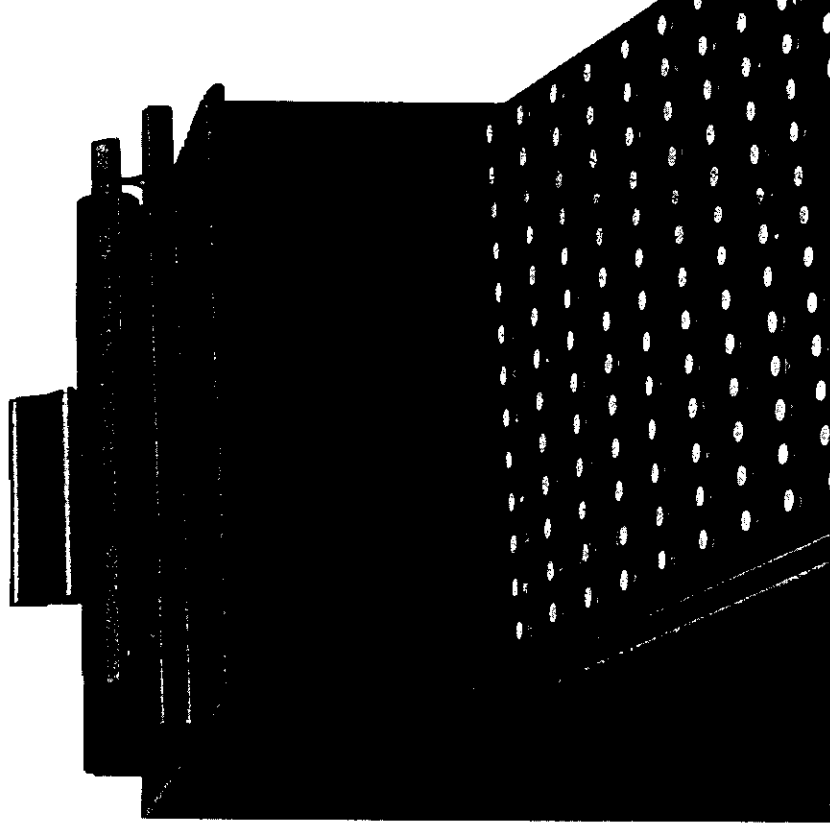
the typewriter is not really a machine in the strict sense of machine technology, but is an “intermediate” thing, between a tool and a machine, a mechanism. Its production, however, is conditioned by machine technology.

This “machine,” operated in the closest vicinity to the word, is in use; it imposes its own use. Even if we do not actually operate this machine, it demands that we regard it if only to renounce and avoid it. This situation is constantly repeated everywhere, in all relations of modern man to technology. Technology is entrenched in our history.⁵⁸

“Our writing tools are also working on our thoughts,” Nietzsche wrote.⁵⁹ “Technology is entrenched in our history,” Heidegger said. But the one wrote the sentence about the typewriter on a typewriter, the other described (in a magnificent old German hand) typewriters per se. That is why it was Nietzsche who initiated the transvaluation of all values with his philosophically scandalous sentence about media technology. In 1882, human beings, their thoughts, and their authorship respectively were replaced by two sexes, the text, and blind writing equipment. As the first mechanized philosopher, Nietzsche was also the last. Typescript, according to Klapheck’s painting, was called *The Will to Power*.

Nietzsche suffered from extreme myopia, anisocoria, and migraines (to say nothing of his rumored progressive paralysis). An eye doctor in Frankfurt attested that Nietzsche’s “right eye could only perceive misshapen and distorted images” as well as “letters that were virtually beyond recognition,” whereas the left, “despite its myopia,” was in 1877 still capable of “registering normal images.” Nietzsche’s headaches therefore appeared to be “a secondary symptom,”⁶⁰ and his attempts to philosophize with a hammer the natural consequence of “an increased stimulation of the site in the prefrontal wall of the third ventricle responsible for aggression.”⁶¹ Thinkers of the founding age of media naturally did not only turn from philosophy to physiology in theory; their central nervous system always preceded them.

Nietzsche himself successively described his condition as quarter blindness, half-blindness, three-quarter blindness (it was for others to suggest mental derangement, the next step in this mathematical sequence).⁶² Reading letters (or musical notes) distorted beyond recognition became painful after twenty minutes, as did writing. Otherwise, Nietzsche would not have attributed his “telegram style,”⁶³ which he developed



Konrad Klapheck, *The Will to Power*, 1959. (Reproduced courtesy of the artist)

while writing the suggestively titled *The Wanderer and His Shadow*, to his eye pain. To direct the blindness of this shadow, he had been planning to purchase a typewriter as early as 1879, the so-called “year of blindness.”⁶⁴ It happened in 1881. Nietzsche got “in touch with its inventor, a Dane from Copenhagen.”⁶⁵ “My dear Sister, I know Hansen’s machine quite well, Mr. Hansen has written to me twice and sent me samples, drawings, and assessments of professors from Copenhagen about it. *This* is the one I want (not the American one, which is too heavy).”⁶⁶

Since our writing tools also work on our thoughts, Nietzsche’s choice followed strict, technical data. En route between Engadine and the Riviera, he decided first for a traveling typewriter and second as the cripple that he was. At a time when “only very few owned a typewriter, when

there were no sales representatives [in Germany] and machines were available only under the table,"⁶⁷ a single man demonstrated a knowledge of engineering. (With the result that American historians of the typewriter elide Nietzsche and Hansen.)⁶⁸

Hans Rasmus Johann Malling Hansen (1835–90), pastor and head of the royal Døystummeinstitut in Copenhagen,⁶⁹ developed his *skrivekugle* / writing ball / *sphère écrivante* out of the observation that his deaf-mute patients' sign language was faster than handwriting. The machine "did not take into account the needs of business"⁷⁰ but rather was meant to compensate for physiological deficiencies and to increase writing speed (which prompted the Nordic Telegraphy Co. to use "a number of writing balls for the transfer of incoming telegrams").⁷¹ Fifty-four concentrically arranged key rods (no levers as yet) imprinted capital letters, numbers, and signs with a color ribbon onto a relatively small sheet of paper that was fastened cylindrically. According to Burghagen, this semispheric arrangement of the keys had the advantage of allowing "the blind, for whom this writing ball was primarily designed, to learn writing on it in a surprisingly short time. On the surface of a sphere each position is completely identifiable by its relative location. . . . It is therefore possible to be guided solely by one's sense of touch, which would be much more difficult in the case of flat keyboards."⁷² That is precisely how it could have been stated in the assessments of professors from Copenhagen for a half-blind ex-professor.

In 1865 Malling Hansen received his patent, in 1867 he started serial production of his typewriter, in 1872 the Germans (and Nietzsche?) learned of it from the *Leipziger Illustrirte Zeitung*.⁷³ Finally, in 1882 the Copenhagen printing company of C. Ferslew combined typing balls and women—as a medium to offset the nuisance that "their female typesetters were significantly more preoccupied with the decoding of handwritten texts than with the actual setting of text."⁷⁴ McLuhan's law that the typewriter causes "an entirely new attitude to the written and printed word" because it "fuses composition and publication"⁷⁵ was realized for the first time. (Today, when handwritten publisher's manuscripts are rarities, "the entire printing industry, via the Linotype, depend[s] upon the typewriter.")⁷⁶

In the same year and for the same reasons, Nietzsche decided to buy. For 375 Reichsmarks (shipping not included)⁷⁷ even a half-blind writer chased by publishers was able to produce "documents as beautiful and standardized as print."⁷⁸ "After a week" of typewriting practice, Nietzsche wrote, "the eyes no longer have to do their work":⁷⁹ *écriture au-*

tomatique had been invented, the shadow of the wanderer incarnated. In March 1882, the *Berliner Tageblatt* reported:

The well-known philosopher and writer [sic] Friedrich Nietzsche, whose failing eyesight made it necessary for him to renounce his professorship in Basel three years ago, currently lives in Genoa and—excepting the progression of his affliction to the point of complete blindness—feels better than ever. With the help of a typewriter he has resumed his writing activities, and we can hence expect a book along the lines of his last ones. It is widely known that his new work stands in marked contrast to his first, significant writings.⁸⁰

Indeed: Nietzsche, as proud of the publication of his mechanization as any philosopher,⁸¹ changed from arguments to aphorisms, from thoughts to puns, from rhetoric to telegram style. That is precisely what is meant by the sentence that our writing tools are also working on our thoughts. Malling Hansen's writing ball, with its operating difficulties, made Nietzsche into a laconic. "The well-known philosopher and writer" shed his first attribute in order to merge with his second. If scholarship and thinking, especially toward the end of the nineteenth century, were allowed or made possible only after extensive reading, then it was blindness and blindness alone that "delivered" them from "the book."⁸²

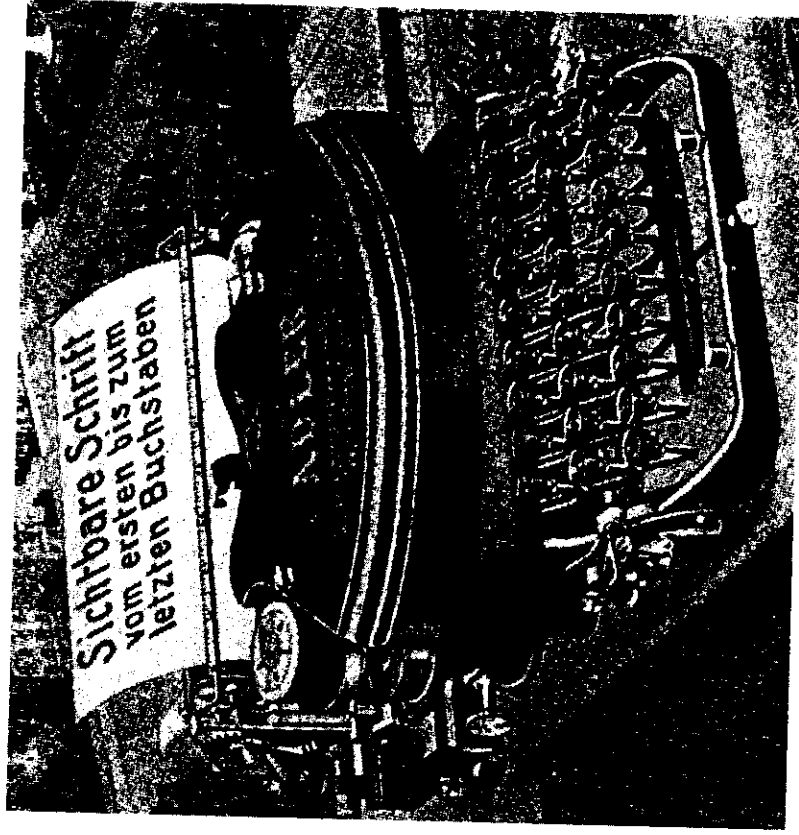
Good news from Nietzsche that coincided with all the early typewriter models. None of the models prior to Underwood's great innovation of 1897 allowed immediate visual control over the output. In order to read the typed text, one had to lift shutters on the Remington model, whereas with Malling Hansen's—notwithstanding other claims⁸³—the semicircular arrangement of the keys itself prevented a view of the paper. But even Underwood's innovation did not change the fact that typewriting can and must remain a blind activity. In the precise engineering lingo of Angelo Beyerlen, the royal stenographer of Württemberg and the first typewriter dealer of the Reich: "In writing by hand, the eye must constantly watch the written line and only that. It must attend to the creation of each sign, must measure, direct, and, in short, guide the hand through each movement." A media-technological basis of classical authorship that typewriting simply liquidates: "By contrast, after one briefly presses down on a key, the typewriter creates in the proper position on the paper a complete letter, which is not only untouched by the writer's hand but also located in a place entirely apart from where the hands work." With Underwood's models, too, "the spot where the next sign to be written occurs" is "precisely what . . . cannot be seen."⁸⁴ After a fraction of a second, the act of writing stops being an act of reading that is produced by the grace



Malling Hansen, Writing Ball, 1867, a model of Nietzsche's typewriter. "Our writing tools are also working on our thoughts" (letter to Peter Gast). (Reproduced courtesy of the Stiftung Weimarer Klassik, Goethe-Schiller-Archiv)

of a human subject. With the help of blind machines, people, whether blind or not, acquire a historically new proficiency: *écriture automatique*.

Loosely translating Beyerlen's dictum that "for writing, visibility is as unnecessary today as it has always been,"⁸⁵ an American experimental psychologist (who in 1904 measured the "Acquisition of Skill in Type-Writing" and who obliged his subjects to keep typed test diaries) recorded documentary sentences like those of André Breton:



Self-advertisement of the medium—a typewriter with visible type.

24th day. Hands and finger are clearly becoming more flexible and adept. The change now going on, aside from growing flexibility, is in learning to locate keys without waiting to see them. In other words, it is location by position.

25th day. Location (muscular, etc.), letter and word associations are now in progress of automatization.

38th day. To-day I found myself not infrequently striking letters before I was conscious of seeing them. They seem to have been perfecting themselves just below the level of consciousness.⁸⁶

"A Funny Story About the Blind, etc." (Beyerlen's essay title) was also the story of the mechanized philosopher. Nietzsche's reasons for pursuing a typewriter were very different from those of his few colleagues who wrote for entertainment purposes, such as Twain, Lindau, Amytor, Hart, Nansen, and so on.⁸⁷ They all counted on increased speed and tex-

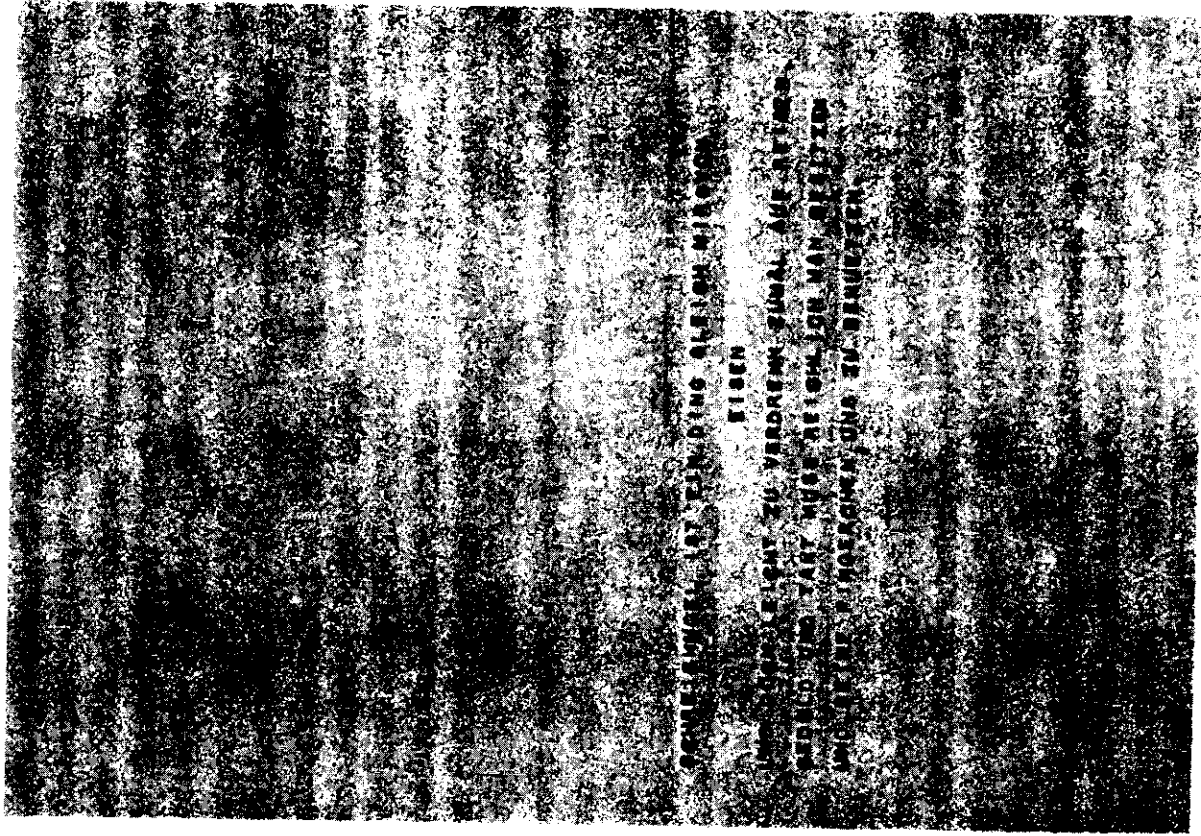
tual mass production; the half-blind, by contrast, turned from philosophy to literature, from rereading to a pure, blind, and intransitive act of writing. That is why his Malling Hansen typed the motto of all modern, high-brow literature: "Finally, when my eyes prevent me from *learning* anything—and I have almost reached that point! I will still be able to craft verse."⁸⁸

1889 is generally considered the year zero of typewriter literature, that barely researched mass of documents, the year in which Conan Doyle first published *A Case of Identity*. Back then, Sherlock Holmes managed to prove his claim that the typed love letters (including the signature) received by one of London's first and ostensibly myopic typists were the work of her criminal stepfather engaging in marriage fraud. A machine-produced trick of anonymization that prompted Holmes, seventeen years prior to the professionals in the police, to write a monograph entitled *On the Typewriter and Its Relation to Crime*.⁸⁹

Our esteem for Doyle notwithstanding, it is nonetheless an optical-philological pleasure to show that typewriting literature began in 1882—with a poem by Friedrich Nietzsche that could well be titled *On the Typewriter and Its Relation to Writing*.

In these typed, that is, literally forged or crafted, verses, three moments of writing coincide: the equipment, the thing, and the agent. An author, however, does not appear because he remains on the fringes of the verse: as the addressed reader, who would "utilize" the "delicate"⁹⁰ writing ball known as Nietzsche in all its ambiguity. Our writing tool not only works on our thoughts, it "is a thing like me." Mechanized and automatic writing refutes the phallogentrism of classical pens. The fate of the philosopher utilized by his fine fingers was not authorship but feminization. Thus Nietzsche took his place next to the young Christian women of Remington and the typesetters of Malling Hansen in Copenhagen.

But that happiness was not to last long. The human writing ball spent two winter months in Genoa to test and repair its new and easily malfunctioning favorite toy, to utilize and compose upon it. Then the spring on the Riviera, with its downpours, put an end to it. "The damned writing," Nietzsche wrote, self-referentially as always, "the typewriter has been *unusable* since my last card; for the weather is dreary and cloudy, that is, humid: then each time the ribbon is also *wet* and *sticky*, so that every key gets stuck, and the writing cannot be seen *at all*. If you think about it!"⁹¹



A facsimile of Nietzsche's Malling Hansen poem, February–March 1882. The text reads, "THE WRITING BALL IS A THING LIKE ME: MADE OF / IRON / YET EASILY TWISTED ON JOURNEYS. / PATIENCE AND TACT ARE REQUIRED IN ABUNDANCE, / AS WELL AS FINE FINGERS, TO USE US." (Reproduced courtesy of the Stiftung Weimarer Klassik, Goethe-Schiller-Archiv)