

A Peculiar Movement of the Pen:  
Joseph Carstairs and His System<sup>1</sup>

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## Introduction

In 1918, at the outset of his Dada manifesto, the Romanian-born poet Tristan Tzara (1893-1963) declared himself exasperated by the compulsory education he had received, specifically the instructional tradition of learning his “abc’s.”<sup>2</sup> Education in its modern form has been a matter of conformity, or put more exactly, the achievement of uniformity in all things, not least in the kind of handwriting the subject is permitted to perform. A long European tradition refers to primary instruction in terms of an “ABC”; for example, there is the famed Swiss educator Johann Heinrich Pestalozzi’s (1746-1827) *ABC der Anschauung* (1803) where *Anschauung* refers to intuition or sensations but whose title is often translated as the *ABC of Drawing*.<sup>3</sup> It is also possible, however, to attribute the precedence marked by Tzara—that is, starting with lower-case “abc”’s—to the order of letters established by what is commonly agreed to be the first manual about the italic hand—the ancestor to handwriting still in use today<sup>4</sup>—by a writing master to be published in Europe, Lodovico degli Arrighi’s (1475?–1527?) *First Writing Manual of the Chancery Hand* (1524 to 1525).<sup>5</sup> Although many

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<sup>2</sup> For a brief but comprehensive account of this tradition, see Nino Nanobashvili, “The Epistemology of the ABC Method: Learning to Draw in Early Modern Italy,” in *Drawing Education Worldwide! Continuities, Transfers, Mixtures*, ed. Nino Nanobashvili and Tobias Teutenberg (Heidelberg: Heidelberg University Publishing, 2019), 35-52. As for the first drawing manual: it has been traditionally attributed to the Venetian artist Odoardo Fialetti and has received a full discussion in Ann Bermingham, *Learning to Draw: Studies in the Cultural History of a Polite and Useful Art* (New Haven: Yale University Press, 2000), 40-3

<sup>3</sup> See, for example, the reference made to Pestalozzi’s text in David W. Baker, “J. Liberty Tadd, Who Are You?” *Studies in Art Education* 26 (Winter 1985): 80. Zeynep Çelik Alexander provides a wide-ranging account of the term *Anschauung* as a grounding for Pestalozzi. Drawing on an early 20<sup>th</sup>-century dictionary compiled by the Austrian philosopher Rudolf Eisler (1873-1926), Alexander proposes *Anschauung* as a term referring to a state that is “unmediated,” free of “concepts and logical conclusions,” and able to help the subject acquire an understanding of a “concretely given object in its spatial-temporal determinateness.” In relation to the latter, Alexander underlines that *Anschauung* became the “central term of Pestalozzi’s pedagogy” as taken “from a brand of Protestant theology that preferred object lesson to the authority of the Scripture.” *Anschauung* is not confined to Pestalozzi’s orbit. Alexander points out that “Humboldtian education reforms repeatedly referred to *Anschauung* at the turn of the 19<sup>th</sup> century and during the restructuring attempts that followed. The educational laws of 1837, for example, required several hours of geometry as *Anschauunglehre* in fifth and sixth years.” Zeynep Çelik Alexander, *Kinaesthetic Knowing: Aesthetics, Epistemology, Modern Design* (Chicago: University of Chicago Press, 2017), 217n.25, 151, 221n63.

<sup>4</sup> “It is from the italic that our handwriting descends,” says Jonathan Goldberg at the outset of an influential study; later on he affirms that it is to Arrighi that we owe the inaugural “writing of the italic hand.” Jonathan Goldberg, *Writing Matter: From the Hands of the English Renaissance* (Palo Alto: Stanford University Press, 1990), 2, 70. See, however, Tamara Thornton’s account of the emergence of manuscript over and above the claims of cursive as a privileged form of handwriting in the 20<sup>th</sup>-century US in the interwar period. Tamara Thornton, *Handwriting in America: A Cultural History* (New Haven: Yale University Press, 1996), 170-75.

<sup>5</sup> Ludovico degli Arrighi, *La operina di Ludovico Vicentino, da imparare di scriuere littera cancellarescha* (Roma, 1523). The scholar Robert Williams explains that he dwells on “Ludovico Vicentino Arrighi’s *La operina*” because it is “the first printed and illustrated European writing manual.” As such, Arrighi’s manual “is the prototype of many of the printed writing manuals that were to follow in the next 400 years,” setting some hard and fast rules, such as the “teaching of miniscule letters first,” and the grouping together of letters by

denunciations typical of the historical avant-garde are included in Tzara's document, it is notable that his inaugural move castigates a sameness in education—and indeed, it is intended to suggest he has made himself deliberately illiterate. And one of the fundamentals in that kind of compulsory education's rise had been traditions of handwriting development. Tzara's salvo also shows us how much traction had been attained by the move toward the provision of education for all as generated by instructional practices transmitted over long years of development.<sup>6</sup> The 17th and 18th centuries were particularly important: I refer here to the well-known impact made on education by the writings of John Locke (1632-1704) and later Jean-Jacques Rousseau (1713-78) not forgetting the play-oriented and child-centric classroom innovated by Pestalozzi. Pestalozzi sowed the seeds for an approach to education where handwriting—in its continuous cursive form, as identified by the German media theorist Friedrich Kittler—was valorized, and where drawing was introduced at the same time.<sup>7</sup> Of special importance here is Locke, due to the depth of his belief in the power of education to shape and form a young subject's mind through the power of habit. Of human beings, Locke proclaimed that “Nine Parts of Ten are what they are, Good or Evil, useful or

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“shared similarities” in preference to alphabetic order. However, Goldberg includes the suggestion that “Arrighi falsified the date of his manual in order that his might appear as the first book to teach the italic hand.” See Goldberg, *Writing Matter*, 70-71.

<sup>6</sup> The demand that primary education should be instituted as a right instead of a privilege had been gathering momentum for decades: access to all levels of education expanded throughout the 19<sup>th</sup> century, especially across the industrializing global North in the century's last three decades. The best known of these reforms were well underway by 1870. Many were named after the politicians who drafted or helped draft the various pieces of legislation. In 1870, the Elementary Education Act or Foster Act was passed in Britain—Liberal Party Member of Parliament William Forster (1818-86) largely wrote it—but its enactment was hidebound by continuing complicated negotiations with established religious-backed education. In contrast, the various sets of legislation whose first instantiation was the first set of the Ferry Laws in 1881—part of the transformative reforms of Third Republic France—were driven by Jules Ferry's (1832-93) vehement anti-clericalism and the mission of *laïcisme*. The equally consequential Falk Laws were passed in Imperial Germany in 1872. See, however, the urgent attempts, starting in the 1790s, to alleviate social distress in Prussia and Bavaria by creating new schools according to plans instituted by Heinrich Braun and Friedrich Eberhard von Rochow, in Karl A. Schleunes, *Schooling and Society: the Politics of Education in Prussia and Bavaria, 1750-1900* (Oxford: Oxford University Press, 1989), 19-49; and Alexander, *Kinaesthetic Knowing*, 151-52. The physician, Liberal politician, and civil servant, James Kay-Shuttleworth (1804-77) is given credit for inaugurating compulsory education in Victorian Britain. Along with Edward Carleton Tufnell (1806-56), Kay-Shuttleworth established the country's first normal school (1839-40). following his encounter with the workhouse system—the nadir of Victorian public policy. Kay-Shuttleworth, as a member of the Congregationalist denomination, reminds us that the traditions of Non-Conformism in Britain delayed the imposition of a national curriculum. See R.J.W. Selleck, *James Kay-Shuttleworth: Journey of an Outsider* (Newbury Park: Woburn Press, 1994).

<sup>7</sup> See Kittler's reading of E.T.A. Hoffmann's (1776-1822) story “The Golden Pot” (1814; 1819), in Friedrich A. Kittler, *Discourse Networks 1800-1900*, trans. Michael Metteer, with Chris Cullens (Palo Alto: Stanford University Press, 1990), 77-96. It is ultimately to Pestalozzi, according to Clive Ashwin, that we owe the endorsement of drawing as a skill whose links to fine art remained intact but greatly augmented. More vocational aims now reinforced the importance of drawing. Clive Ashwin, *Drawing and Education in German-Speaking Europe, 1800-1900* (Ann Arbor: UMI Research Press, 1981), 25-30.

not, by their Education.”<sup>8</sup> And in respect to Locke’s philosophy as such, its most renowned aspect is the prescription against inherent ideas—what John Baltes has called “dispositionalism.”<sup>9</sup> Enduringly famous is Locke’s formulation that the human mind is a blank slate, a *tabula rasa*, open to whatever characters are inscribed upon it.<sup>10</sup>

This truncated history of incremental change leads us to the initial plate of one of the English writing master Joseph Carstairs’s (1783-1844) inaugural publications, called *Tachygraphy, or the Flying Pen* (1815; Fig. 1).<sup>11</sup> Carstairs’s many publications range from the voluminous to the distilled.<sup>12</sup> But whether the spine is thick or thin, each of his texts is devoted to the role of the arm in transmitting a hand, one that is descended ultimately from Arrighi’s italic: the emphatically continuous English round hand, business hand, or, most saliently for Carstairs, “running hand.”<sup>13</sup> The celebration of this hand had much to do with its vaunted flow. The text of Carstairs whose instructions I will be concentrating on most is the *Tachygraphy* pamphlet. Its opening plate ordains that the hand writes the lowercase letter *a*, and then swoops to the bottom of the page and back up. [Note: the first character was supposed to be the oval, marked “1” in Carstairs’s writing system of 1839 [?] The movement seems unconnected to the imprinting of letterforms onto the learner’s mind. It can be described as placing an outlandish degree of stress on an unusual sweeping, perpendicular movement. Only after the arm has been engaged in this repetitive gesture does Carstairs then

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<sup>8</sup> John Locke, *Some Thoughts concerning Education* (1693), ed. John W. and Jean S. Yolton (Oxford: Clarendon Press, 1989), 83.

<sup>9</sup> John Baltes, *The Empire of Habit: John Locke, Discipline, and the Origins of Liberalism* (Rochester, NY: University of Rochester Press, 2016), 107.

<sup>10</sup> It has not escaped notice that Locke’s model of the human mind is based on a surface receptive to writing. See the brief discussion of this point in Tamara Thornton, *Handwriting in America: A Cultural History* (New Haven: Yale University Press, 1996), 3-4. A further comment might be added here about dispositionalism—in that the infant’s mind is not disposed toward moral behavior. Education, then, as the process through which that *tabula rasa* is imprinted occupies towering importance in Locke’s philosophy. Most significant here is his belief that good—by which he means moral—habits have to be instilled early on. In addition, Locke insists on the importance of “writing a good Hand” as being “of great Advantage in all Conditions of Life.” John Locke, *Some Thoughts Concerning Education*, eds. John W. and Jean S. Yolton (Oxford: Clarendon Press [1693], 1989), 217.

<sup>11</sup> Joseph Carstairs, *Tachygraphy, or the Flying Pen* (Second Edition, London: Sherwood, Neely, and Jones, 1815), 57.

<sup>12</sup> His most popular publication seems to have been one which offered excerpts from a series of lectures on his system; it went through multiple editions from 1814 onward. Joseph Carstairs, *A New System of Teaching the Art of Writing, comprehending Essays on the Subject, extracted from the Lectures delivered at Different Periods by the Author* (London: William Molineux, 1814).

<sup>13</sup> According to W. Anderson Smith, writing eight decades after Carstairs, it was the 18th century in Britain during which the “round hand” had been perfected. He refers to George Bickham’s “a ‘Universal Penman,’ to which the leading masters of the day contributed.” Smith notes that there “were seventeen altogether; their examples clearly show that the flowing hand had achieved pre-eminence. It had “entirely taken possession of the field to the complete exclusion of the more fanciful and less business-like styles.” W. Anderson Smith, *“According to Cocker” : The Progress of Penmanship from the Earliest Times* (London: Alexander Gardner, 1887), 15.

suggest that the learner proceed to work on further letter forms. Carstairs emphasizes to the learner that he wants above all an investment in emphatic movement; scholars of later forms of 19th-century education would refer to this kind of action as kinaesthetic.<sup>14</sup> We find then, in *Tachygraphy's* opening plate a remarkable starting point, one that reminds us of Tamara Thornton's salient observation that we "should not study handwriting as a phenomenon that reflects changing conceptions of the self but as one of the places where the self happens."<sup>15</sup> *Tachygraphy's* opening plate is, moreover, abstract in effect, and one whose immediate usefulness for a working copyist seems initially hard to surmise. (After all, what good would it be to a working copyist to pull his arm fully down the sheet each time he made a single letter?) Carstairs's system was, however, widely disseminated—versions of the Carstairean system were published in five European countries before the fourth decade of the 19th century was out.<sup>16</sup> It turns out that this emphasis on the arm has been taken to have laid the groundwork for one of the most celebrated hands to emerge in the history of handwriting: the complicated script promising moral "uplift" that was developed in the United States by Platt Rogers Spencer (1800-64) starting in 1854.<sup>17</sup>

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<sup>14</sup> According to Alexander, over the course of the long 19th century, a confidence in "the epistemological legitimacy of experience" took hold "across the West" but gained particular purchase in "German-speaking lands." The "experience" that was valued was "imagined to be structured by the body's movements in response to stimuli—even when the response might be in potentia." She goes on to state that "I will therefore use a phrase of my own invention, 'kinaesthetic knowing,' to refer to the ratiocination associated with kinesis, the movements of the body." Alexander describes such an "alternative epistemological principle" as the "central protagonist" of her study, one disseminated through different forms of pedagogy. Zeynep Çelik Alexander, *Kinaesthetic Knowing: Aesthetics, Epistemology, Modern Design* (Chicago: University of Chicago Press, 2017), 11.

<sup>15</sup> Thornton, *Handwriting in America*, xiii.

<sup>16</sup> See, for example, W. H. Nädelin, *Methodische Anleitung zum Schön- und Schnellschreiben nach Carstairs'schen Grundsätzen für Elementarschulen: wie für lateinische und Real-Anstalten bearbeitet* (Stuttgart: E. Schweizerbart, 1839). I note that a French version of the system is composed entirely of pages printed from engravings. I remark also that the first plate of one French version differs from Carstairs's first one (which indicates the all-important long sweep of the hand as propelled to the bottom of the page). It contains instead a series of illustrations showing how to prepare a quill pen, bookended by illustrations of the hand bound to the quill by a "ligature." M. Treméry, *Manuel de Calligraphie: Méthode Complète de Carstairs dite Américaine, ou l'Art d'Écrire* (Paris: Roret, 1829). In light of these departures from the original, see Carstairs's vitriolic criticism of Treméry—as well as, later on, one James Lowal decried as non-existent by Carstairs—for stiff-looking letters appearing on plates engraved by a needle instead of a burin and Treméry's inclusion of "severe" as a word to be copied, given the difficulty of executing the hairlines necessary to writing the letter "s." Above all, Treméry's infractions imperil the importance of the arm's movement. ("La plupart des mots de la planche semblent égratignés avec une épingle. Ils paraissent d'ailleurs extrêmement roides ... Pag. 22, on ne saurait l'excuser d'avoir choisi le mot *sévère*, parce que, en exécutant la lettre *s*, il est extrêmement difficile de remonter le délié. ... N'a-t-on pas prétendu déjà que mon système ne consistait que dans le mouvement lateral du bras? N'a-t-on pas dit aussi que je proscrivais la flexion des doigts?") Joseph Carstairs, *Examen Critique des Différents Méthodes d'écriture qui ont été publiées en France depuis quelques mois, d'après Carstairs, sous le noms de MM. Chandelet, James Lowal, Treméry, etc.* (Paris: Théophile Barrois Père et Benjamin Duprat, 1828), 7, 9). I note that this book also contains a French translation of the full listing of the opinions and assessments of Carstairs's system, Carstairs, *Examen Critique*, 17-40.

<sup>17</sup> Thornton, *Handwriting in America*, 50. By mid-century Spencer was using that durable replacement for the quill, the steel-nib pen. Many consequences flowed from an end to the quill and the launch of the era of the

This discussion is an attempt to understand what kind of contemporary imperatives may have driven Carstairs when he ordained two related movements: a writing hand that never departed from the sheet, and the arresting agency given to the arm, entailing an apparently useless sweeping motion. What will emerge over the course of this discussion is the extent to which Carstairs's well-known innovation—that is, the privileging of the arm's movement—carried transformative consequences for the convention of another trait characteristic of trained handwriting in the 18th and 19th centuries, the flourish. In all this it's important to bear in mind that we are discussing a figure whose aims and mission predate the turn toward a belief that kinaesthetic movement underpins the transmission of pedagogy—and yet we are not entirely removed from the world of physiologically attuned education that Tzara disdained.

## I. Review of Carstairs's manuals

To pursue these questions I turn first to a selective review of Carstairs's work, with special emphasis on four ideas: speed, continuous marking, geometry, and penhold. I look first at *Tachygraphy, or The Flying Pen*, published in 1815, and then at his most popular book, *Lectures on the Art of Writing*, published the year before.<sup>18</sup>

Writing manuals throughout the centuries have been characterized by punctiliously worded pages of instructions governing penhold. As Julie Park has pointed out over the course of an important essay, the pen is emphasized in every instance: the one “who writes was not a writer, but a penman.”<sup>19</sup> If we look to what Jonathan Goldberg has to say about the manuals circulating in Renaissance England—as well as in other contexts within Europe of

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steel-nib pen; for example, it made obsolete the need for writing masters to be masters of the knife. For a further account of Spencer, see Anne Trubek, *The History and Uncertain Future of Handwriting* (London: Bloomsbury, 2016), 71-8.

<sup>18</sup> A fuller listing of Carstairs's works includes the following, Carstairs, *A New System of Teaching the Art of Writing, Comprehending Essays on the Subject* (London: William Molineux, 1814); Carstairs, *Tachygraphy, or, The Flying Pen: Being an Entirely New Plan, of Acquiring Improvement in Business-Hand Writing by a Particular Movement of the Pen* (London: Sherwood, Neely, and Jones, 1815), Carstairs, *Lectures on the Art of Writing: Comprehending a Variety of Observations on the Impediments which Retard the Progress of the Learner: including a Brief History of the Art and also the Materials that have been in Use from the Earliest Ages to the Present* (London: 1814 et seqq.).

<sup>19</sup> Julie Park, “Feather, Flourish, and Flow: Handwriting's Organic Technology,” in Miriam Jacobsen and Julie Park eds. *Organic Supplements: Bodies and Things of the Natural World, 1570-1790* (Charlottesville: University of Virginia Press, 2020), 32. Underlining this point but also opening it up to a further dimension, is Thornton's statement that the “relation between handwriting and writer is a relatively modern notion, ironically, the era in which print first achieved a kind of crucial cultural mass.” Thornton, *Handwriting in America*, xiii.

the early modern period—we find him underlining the extent to which typically strict instructions court a suggestion of violence.<sup>20</sup> The most obvious evidence of this is the degree of attention devoted to knife skills: organic matter had to be pierced before the pen could be wielded—and in 1814, the steel nib had not yet eliminated the task of cutting into a calamus (the hollow portion of the shaft of a feather).<sup>21</sup>

My noting of the knife’s literal power to strike brings us to this question: what methodology underlies my account? Goldberg’s interpretation of handwriting is decided by the deconstructive philosophy of Jacques Derrida. This has the effect of compelling Goldberg to discern and point out that modes of coercion were operative in these handwriting manuals, and they were all in the service of making a subject compliant with the strictures of the Elizabethan period. The violence then, to which Goldberg’s account is attuned is represented not just by obvious cuts made by a knife to a pen. He writes about a time when the “entire educational apparatus is an apparatus of the state.”<sup>22</sup> My discussion does take any direct cues from Derrida, but its historical awareness remains keyed to the question of how the institution of education forcibly shapes the human subject. Less overt than the knife but just as significant in its transmission of force is the attention I want to grant to the investment made to denaturalize the hand in order to retrain it—to have it adopt the exact configuration of the fingers prescribed by Carstairs.

But my declaration immediately brings us to another problem. The archaeologist Lambros Malafouris has cautioned against an ultimately Cartesian manner of thinking that Malafouris has dubbed “internalism” or “cognitivism,” one that enforces what Bruno Latour has called “the tyranny of the dichotomy between humans and nonhumans.”<sup>23</sup> Most salient here is Malafouris’s point that although we have a culturally deep level of familiarity with the moment “when a hand grasps a stone and makes it a tool,” this familiarity only goes so far. Malafouris regrets that this moment remains “*terra incognita*” for philosophy.<sup>24</sup> It may seem that my account—riddled as it is with a concern for how the hand grasps the pen in order to have it execute letterforms—should follow up on the potential of a non-anthropocentric

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<sup>20</sup> Goldberg, *Writing Matter*, 59-107.

<sup>21</sup> See Seymour Howard, “The Steel Pen and the Modern Line of Beauty,” *Technology and Culture* 26 (Oct. 1985): 785-90.

<sup>22</sup> Goldberg, *Writing Matter*, 37.

<sup>23</sup> Lambros Malafouris, *How Things Shape the Mind: A Theory of Material Engagement* (Cambridge, MA: The MIT Press, 2013), 251n3. Bruno Latour, “Pragmatagonies,” *American Behavioral Scientist* 37 (6): 795, quoted in Malafouris, *How Things Shape the Mind*, 15.

<sup>24</sup> Scholars have been unable to discern “just what this grasping implies for humans” once the “linear evolutionary narrative” is left behind. Malafouris, *How Things Shape the Mind*, 14.



approach. Because of his interest in the character of tool and “just what” the act of “grasping implies for humans,” I take Malafouris’s interest in “material engagement” as exemplary here of a non-anthropocentric approach to Carstairs. I do not follow up on Malafouris’s invitation to treat the pen as “an enactive cognitive” prosthetic, in order to replace a way of thinking that would treat the pen as a derivative of a controlling mind, with the letterforms it inks out representing “external” and “residual cognitive traces.”<sup>25</sup> That is because I believe that this approach could possibly impair the historicity of my discussion by obliging me not only to venture into the potential of neural research but to take that research on board as providing data testifying to an irrepressibly positive account: one where we would applaud the neuroplasticity of pen holding as ignited by much “deliberate practice and skill acquisition.”<sup>26</sup> Any approach that reads “creativity backward” is outdated, according to Malafouris; however, I am not in favor of reading creativity forward.<sup>27</sup> As we have already learned, teachers of handwriting in the long 19<sup>th</sup> century were ever more compelled to launch initiatives which tethered the subject in place—the gravitational center of the relationship may not have been necessarily spread along connections distributing positive, “tacit thinking.”<sup>28</sup> The hand was bound—sometimes quite literally—to arduous configurations of fingers, thumbs, wrists, and as we have seen, in a novel development on the part of Carstairs, the arm and shoulder.

Without following up on the entirety of Goldberg’s Derridean approach, what I do try to do is heed two aspects of Goldberg’s scholarship. First, I take my cues from his implicit insistence that there has never been a question of an atavistic grip; the grip has always shaped by whatever is held in order to make a mark. This insight offers, I hope, a response to Malafouris’s avowal that intentional states are never statically contained ““in the head,”” but are in fact “spread out throughout the world.” The second aspect is Goldberg’s attention to century-specific developments. Goldberg’s thesis is that the centralized organization that

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<sup>25</sup> Malafouris is here referring to the traditional linear account of technological developments in prehistorical tool technology, where stones were knapped into ax heads of steadily increasing sophistication; the Acheulean ax head represented a particularly arresting leap, given its elaboration of a “bifacially shaped” tool. Here I adopt the terms of Malafouris’s argument about the ax that constitutes the “Acheulean problem” to the pen. The connection between the making of an ax head (through knapping) and the writing of letter forms on paper is that both are examples of the use of a tool. Malafouris regrets and is disappointed by a traditional account of the tool because it reflects a “unidirectional causal and intentional transaction between the active mind and the passive stone” according to which a tidy sequence is followed. The premise is that “an intentional state in the mind of the knapper causes an external movement into the outside world.” The knapper’s thoughts are consigned to function as prior representational states ready to enact changes upon the stone. Malafouris, *How Things Shape the Mind*, 162, 160, 172, 175.

<sup>26</sup> Malafouris, *How Things Shape the Mind*, 163.

<sup>27</sup> Malafouris, *How Things Shape the Mind*, 235.

<sup>28</sup> Malafouris, *How Things Shape the Mind*, 174.

historically held Britain together allowed the italic hand to spread far and wide and contributed to the production of a single subject in a way that had not proved possible in the city states of the Italian peninsula in which italic had first arisen. That centralized state of government still obtained in Carstairs's England, and in fact, as we will see, social developments over these decades contributed to an enhanced condition of homogeneity on the island. While the time has not yet come to delve into what exactly these developments consisted of, we will see that they provided the indispensable terms for constituting the public that Carstairs was addressing and formulating his response to over the decades from the late Regency period to the beginning of the Victorian one.

When it comes to the matter of penhold, Carstairs does not stray from a strict tone. The learner has to absorb the lesson that holding the pen in an upright position—and on a horizontal surface—is of inaugural significance. After all, writing by hand, as Park puts it, always occurs “as a direct consequence of the body's actions, even in its state of sitting.”<sup>29</sup> The hand is on a regulated course not in search of a letter, we might say, but on one strictly linear journey. According to Carstairs, once the slit of the pen is no longer kept even with “the down strokes” those lines will lack the requisite uniformity of thickness. As a result, the learner should not indulge the temptation to lean “entirely on the end of the little finger” because providing that finger with a grounding role would encourage the pen to assume an angle imperceptibly closer to the horizontal surface. Losing even a smidgen of its verticality would open the door to the calamity of writing without uniformity. As Park has pointed out, any leaning of the body left toward the desk produces a lapse in “evenness” in the writing produced. Meanwhile, as the hand “‘stretches’ away from the eye,” the hand being written starts to “slope downward at the end of the line,” because it is not longer, in Carstairs's terms, oriented toward the shoulder.<sup>30</sup> The privileged fulcrum point is established by an orientation of the vertically upright pen as set to the shoulder. Accordingly then, the “third and fourth fingers” should be tucked “under the hand so as to run on the surface of the nails.”<sup>31</sup> In a more elaborate form of these instructions, Carstairs seems to summon the violence that Goldberg describes: he recommends that a ligature be used to tie together the pertinent fingers (see Fig. 9).<sup>32</sup> This device would rob the little finger of a stabilizing role: it would prevent the little finger from providing the foothold, so to speak, for the movement of the

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<sup>29</sup> Park, “Feather, Flourish, and Flow,” 41, 40, 43.

<sup>30</sup> Park, “Feather, Flourish, and Flow,” 41, 40, 43.

<sup>31</sup> Carstairs, *Tachygraphy*, 11.

<sup>32</sup> Carstairs, *System of Penmanship*, 11.

hand. At the same time, however, the text strikes a liberatory note when Carstairs then stresses the significance of a “free” and “light” action through the “*movement*” (in italics) of the arm.<sup>33</sup>

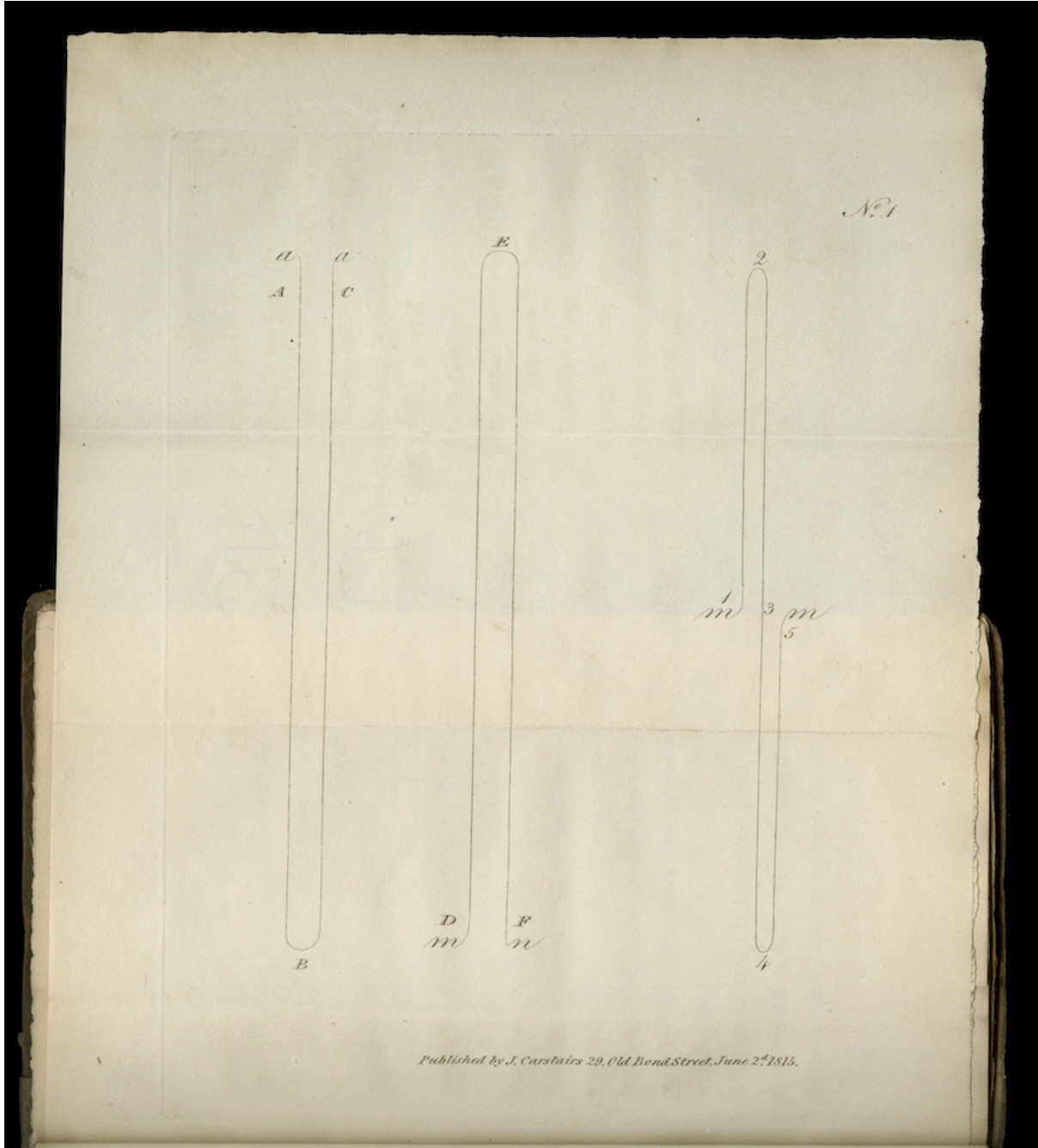


Fig. 1. Carstairs, *Tachygraphy*, Plate 1.

<sup>33</sup> Having counselled the “Learner” to pay attention to the “*movement*,” Carstairs then issues instructions to maintain “the third and fourth fingers under the hand so as to run on the surface of the nails and this will be found to assist the movement more than by leaning entirely on the end of the little finger from the smoothness of the nails.” Carstairs, *Tachygraphy*, 10, 11.

### *The first plate*

Rather than award precedence to any individual letters, Carstairs emphasizes to the reader that he wants above all a training in an abstract movement. He begins with the “a,” not the “n,” which is the traditional starting point for the novice penman.<sup>34</sup> But what he is primarily after at this initial point in the proceedings is a motion that empowers the arm. The learner is told that “without lifting the arm from the paper,” he should “move the whole arm in a back direction by means of the flexile movements of the elbow and shoulder joints until the hand comes nearly down to the bottom of the page.” Although the instructions warn the learner against making an actual mark, this airborne movement is marked in the engraving we are given as the first illustration, the opening plate of *Tachygraphy* (Fig. 1).



Figs. 2, 3. Carstairs, *Tachygraphy*, Plates 2 and 3.

### *The following exercises*

The learner then executes the same vertical-line exercise with every letter of the alphabet (demonstrated in Fig. 2). Eventually the student is supposed to fill entire pages, and then do the same thing with two letters at a time (Fig. 3). The following pages describe how

<sup>34</sup> As Robert Williams has pointed out, it had long been a practice in writing manuals to begin with the letter “n,” because, according to Williams, writing masters “found ‘n’ the ideal letter to describe the height-width proportion of small letters as well as their slope, and the inside width of an ‘n’ was universally judged to be the optical ideal for letter spacing.” Robert Williams, “Without a Borrowed Hand: The Beginnings of American Penmanship,”

[https://static1.squarespace.com/static/5d803c2f9951a30338c602eb/t/5d880c91cd2e0118a86b66e2/1569197209829/01\\_Without\\_a\\_Borrowed\\_Hand\\_by\\_Robert\\_Williams.pdf](https://static1.squarespace.com/static/5d803c2f9951a30338c602eb/t/5d880c91cd2e0118a86b66e2/1569197209829/01_Without_a_Borrowed_Hand_by_Robert_Williams.pdf) Accessed April 8th, 2023

to continue this exercise with four letters at a time, then five, and so on, culminating in pages of repeated letters.

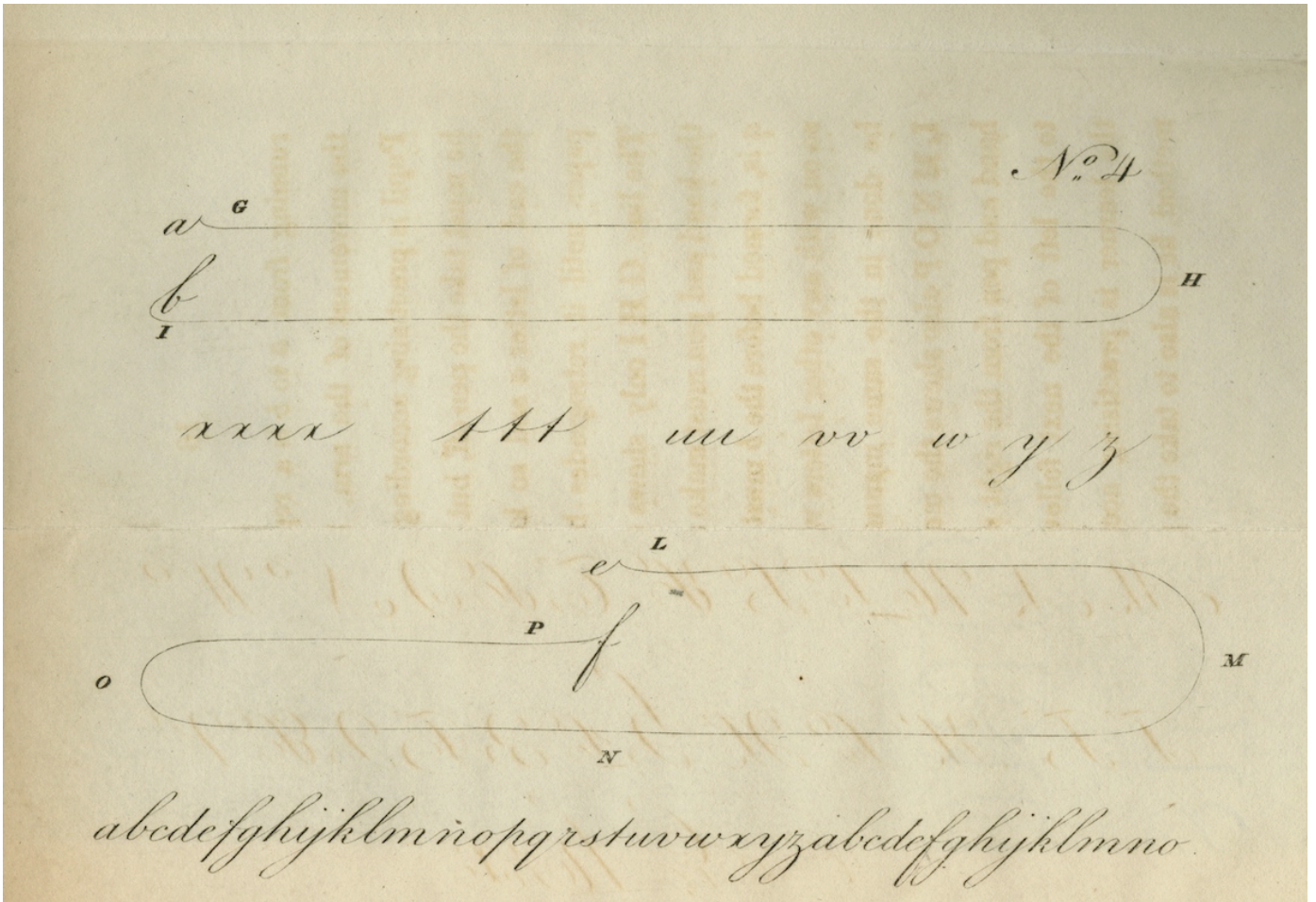


Fig. 4. Carstairs, *Tachygraphy*, Plate 4, detail.

Carstairs then requires a side-to-side movement. He adjusts the terms of reference so that the hand can be thrown to the right and left; at the same time, he remains adamant that the movement has to be generated from the shoulder and elbow (Fig. 4).<sup>35</sup>

<sup>35</sup> "In Plate 4, three Examples are given to show also how to throw the arm from one side to the other." Carstairs, *Tachygraphy*, 15.

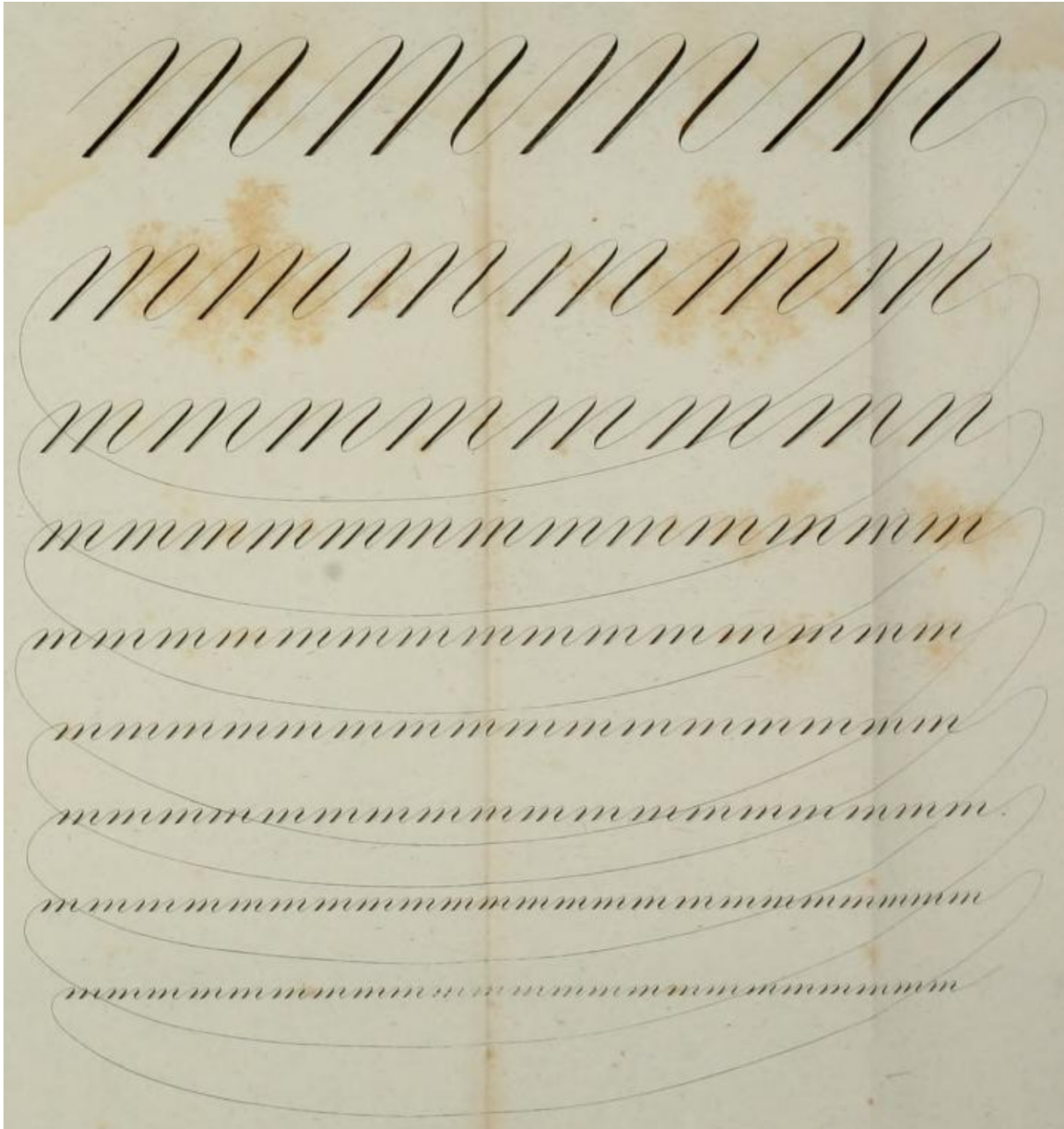


Fig. 5. Carstairs, *Tachygraphy*, Plate C [sic: Plate 5]

Next the learner is supposed to repeat a single letter across one line and then move down to the next line, executed in a smaller version. Here this is exemplified by the letter “m” repeated numerous times (Fig. 5). What look like extremely large loops, of the sort that might ornament a lowercase “g” connect each line of “m”s with the one below it—so that the hand descends down the page without ever leaving its surface.

I turn now to a second title, *Lectures on the Art of Writing*. This was Carstairs's best-selling book (Fig. 6).<sup>36</sup>

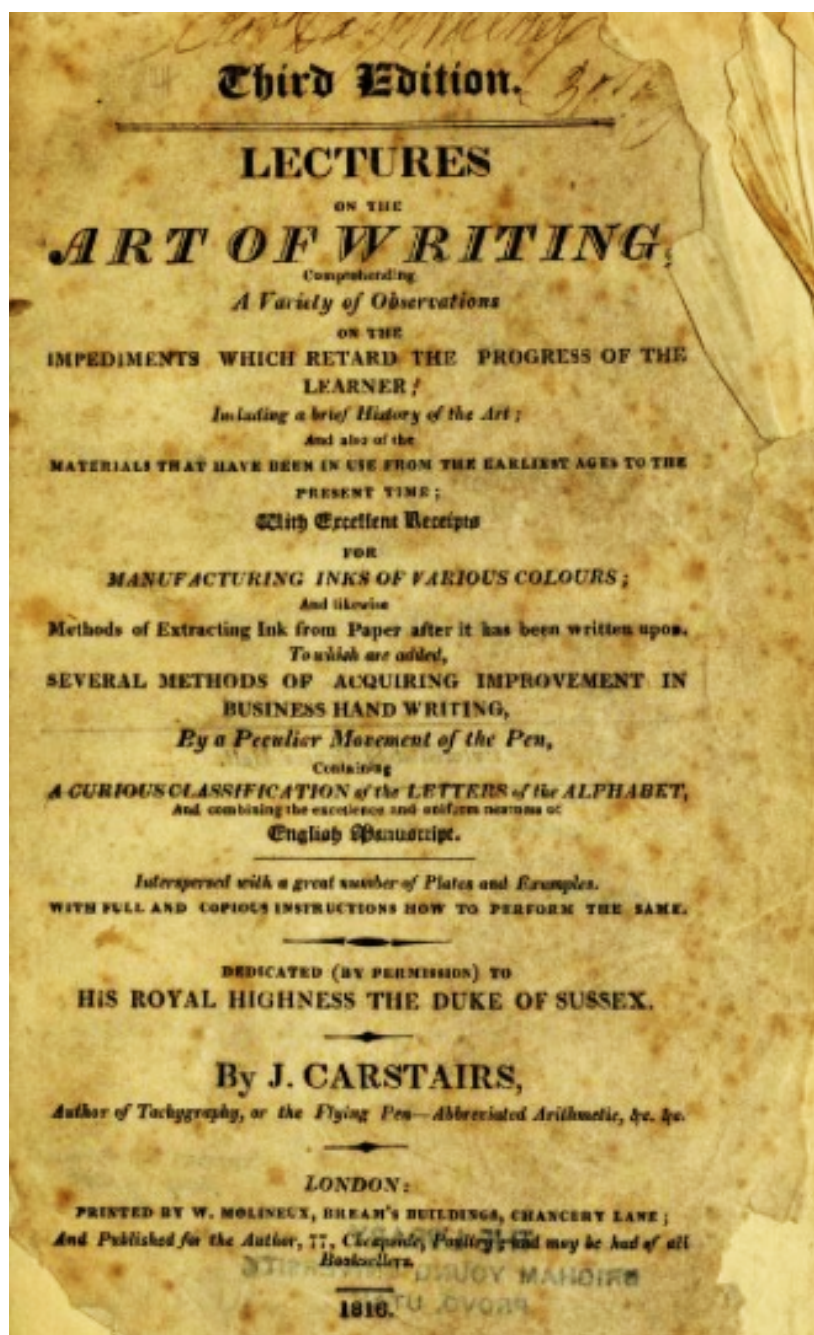


Fig. 6. Joseph Carstairs, *Lectures on the Art of Writing*, third edition, 1816 [1<sup>st</sup> edition 1814].

<sup>36</sup> The evidence for this opinion is the WorldCat citations of the editions. Carstairs, *Lectures on the Art of Writing* (1814, 1815 [second edition], 1816 [third edition], 1820, 1821, 1822 [fifth edition], 1825, 1828, 1836, 1837). Presumably some of these are reprints and not editions.

Early on in this publication Carstairs asks students to chain together letters along the same unrealistic vertical lines (Fig. 7). These letters do not in any straightforward way conform to how we might expect them to be shaped individually. Testifying to the extent to which Carstairs insists that the hand adopt a perpendicular movement, the “s”s (which we see in the left-hand column, chained together into a surprising ornamental pattern) proceed *down* the page.



Fig. 7. Carstairs, *Lectures on the Art of Writing* third edition, 1816 [1<sup>st</sup> edition 1814] plate following p. 82

The second column gives us the same exercise, but executed with the letter “m.” To make a vertical row of “s”s, the hand does not have to leave the page, but in order to make the “m”s connect, Carstairs has to invent linking loops that make this column look like a row of “s”s interrupted by “m”s.

Nine “h”s then appear, and their plunge toward the bottom of the page requires the hand to make ten loops in order to transport the pen downward—the very last “h” is given



one extra, small, loop, marking the extent to which *downward looping* is the constitutive action.<sup>37</sup>

Surprisingly, Carstairs states that the reward offered by this exercise is speed: what the hand is imbibing all the while is “*dispatch*.” These exercises, which seem so far from ordinary writing, utilizes the downward movement as a way to generate “dispatch” in ordinary writing.

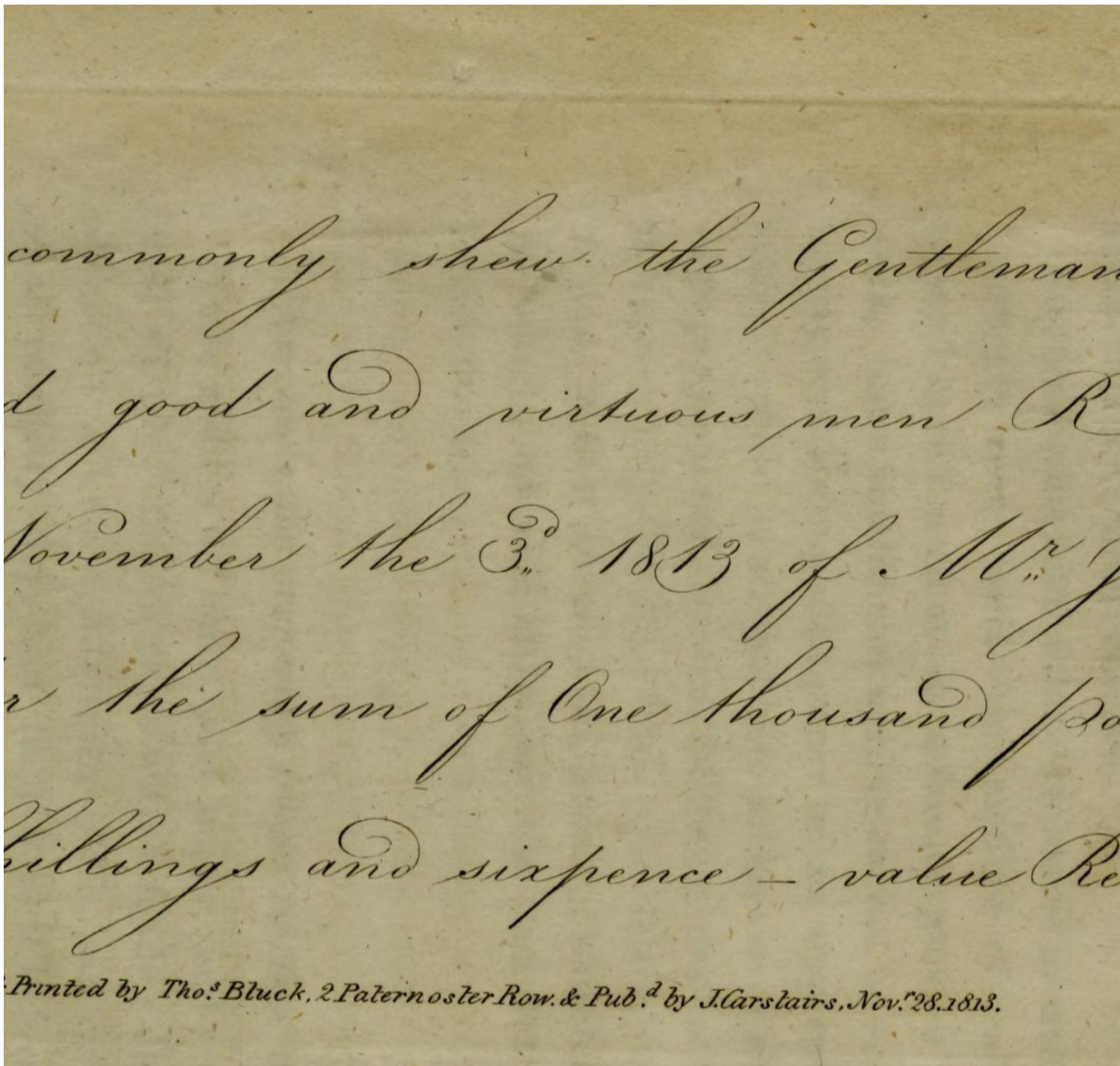


Fig. 8. Carstairs, *Lectures on the Art of Writing* (1816 edition), Plate 7, following p. 106

<sup>37</sup> This second exercise’s fourth downward column is devoted to ten short lines. Three “m”s in a row are written across and then allowed to balloon outwards in another narrow loop which brings the hand to raise itself just marginally above the “m” before descending to the next row downward; here the loop must take care to sweep just under the second “m” in the first row so that it knits together each row of the three “m”s by means of a loop more horizontal than any we have seen.

Such was Carstairs's demand for continuity that he replaced a conventional method of making a lowercase "x" with instructions that obliged to learner to adopt a highly specific series of motions. Consider the word "sixpence" in Fig. 8. It would appear the "x" was made by moving the pen in a long wave-shaped form, lifting it, and then returning to the intermediary part of the "x" in order to cross the letter. Carstairs's version of an "x" could, he promised, be "made easily without lifting the pen in the letter itself."<sup>38</sup> After enjoining the learner to study the letter closely from the model he has provided, the instructions are given as follows:

[T]he first part of the "x" resembles very nearly the first part of a small "m," rather turned to the left at the bottom, the second part is like a small "i", a little turned at the top towards the right. The pupil should commence with the first part of the "x", as if he intended to form the first part of an "m," observing to turn upwards on the stroke he came down with; then turn down again on the stroke he went down with, forming the second part, something like the shape of an "i", as mentioned above without taking off the pen.<sup>39</sup>

It's not an easy exercise to understand, or (I think) to practice, but it ensures that the pen does not need to leave the paper in order to cross the "x."

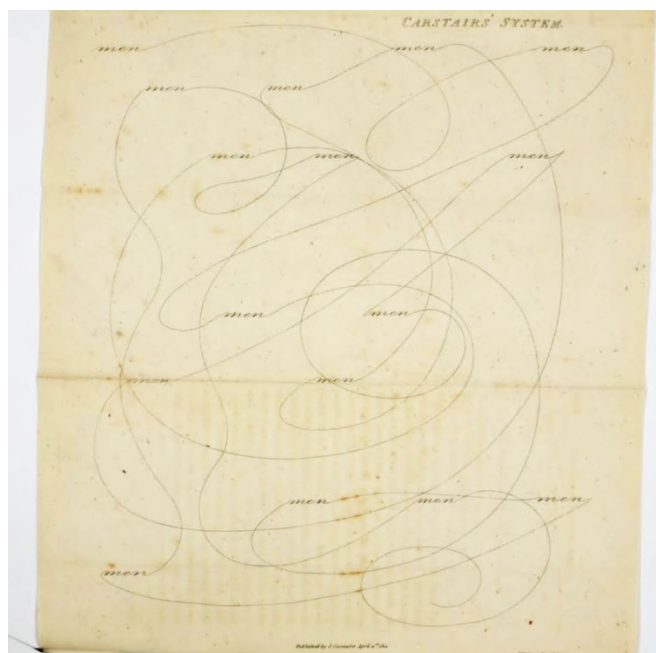


Fig. 9. Carstairs, *Lectures on the Art of Writing* (fifth edition 1822 [1814]), plate before p. 159

<sup>38</sup> Carstairs, *Tachygraphy*, 27.

<sup>39</sup> Carstairs, *Tachygraphy*, 27.

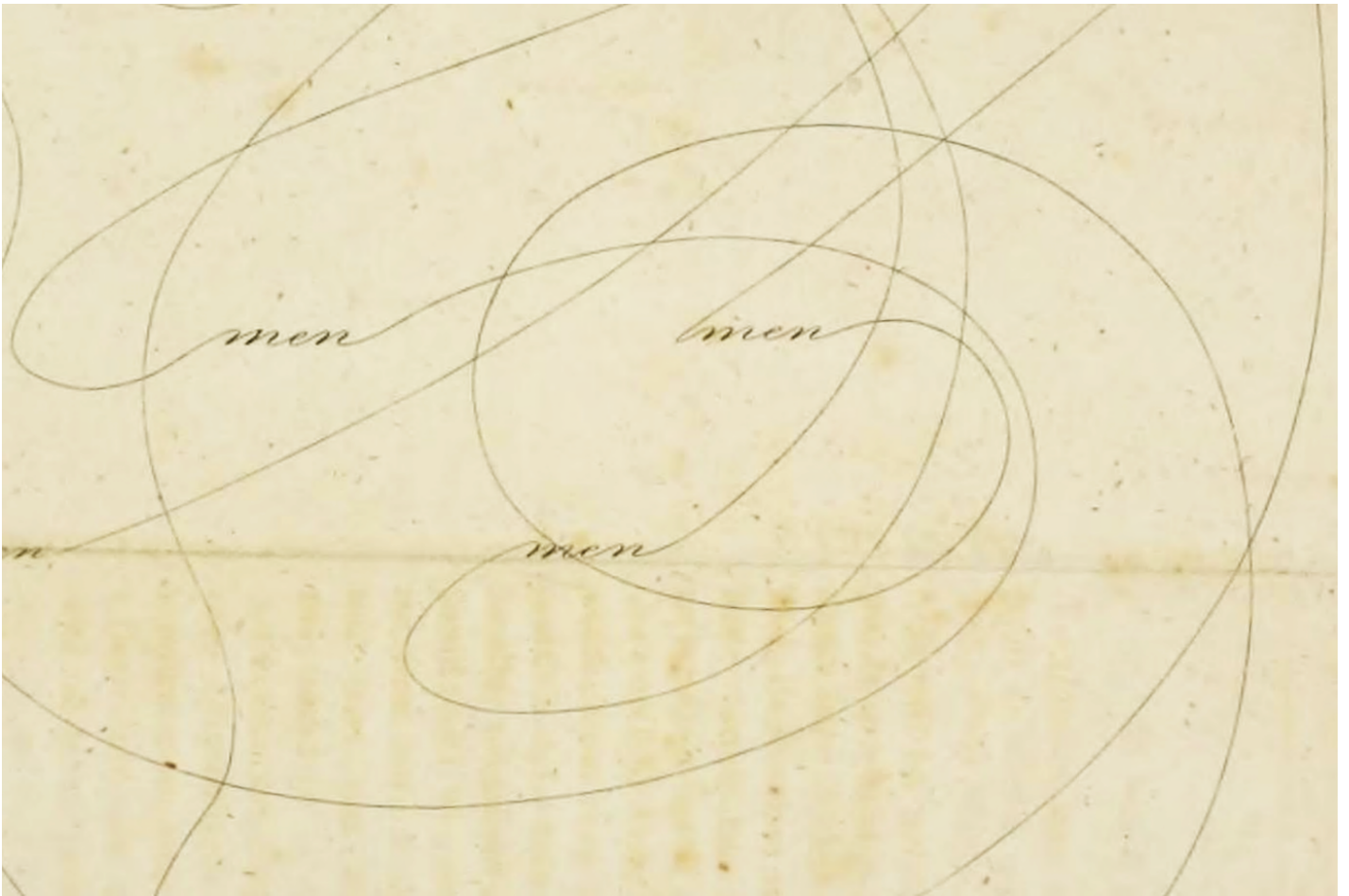


Fig. 9, detail.

There are many other exercises described in the Carstairean system. I will not go into all of them here, but they have in common the requirement that the hand remains on the page, even in cases when the arm's motion is fully free (Fig. 9). The arm is supposed to be given ample leeway to move, and Carstairs even says that the letters “are to be thrown” by the perpendicular movement of the arm.

## II. Historical contexts

It may seem that we should look for guidance at this point from Kittler's hypotheses about the “discourse network” of 1800, generated by late 18<sup>th</sup>-century developments—most of all in Europe's German-speaking lands—instigated by Pestalozzian pedagogy. Pestalozzi brought curricular structure to the “century of the child”; his innovations and those of the

associated educators mentioned by Kittler—especially, for my purposes, the authors of penmanship manuals—were a crucial part of the acceleration of interest in infancy and childhood. The running hand, as Kittler perceives it, emblemizes a continuity attainable by the bourgeois subject on account of new educational practices that were keyed to direct parental involvement. By 1800, an unprecedented valorization of the nuclear, heteronormative family was emerging. This interconnection became pronounced to such an extent that, over the course of the long 19<sup>th</sup> century (to briefly summarize Kittler’s arguments), subject formation through early education intertwined with family structure would eventually lead to Sigmund Freud’s (1856-1939) ferocious concentration on—and indeed pathologizing of—just this structure. On the horizon was Freud’s conceptualization of the Oedipus Complex (1899).<sup>40</sup> The running hand asserted itself as new ways of binding parental roles with education gained momentum. In Kittler’s account, the hand of the kind that occupies the core of Carstairs’s endeavors promised an irresistibly attractive continuity of line. That continuity, satisfyingly delivered by a tactile, graphically registered process, seemed to offer cohesion of form right from the initial moment a line of ink began to unfurl across the page.<sup>41</sup> Diary-keeping and daily note-taking—included-in ways of committing of one’s thoughts to paper—flourished like never before as writer after writer delighted in the instant efficacy of line appearing as black and continuous on white paper. And, in the process, the novel and lyric poem developed their classic 19<sup>th</sup>-century forms.

Kittler’s account of the “discourse network 1800” brings us to the expanding “educational bureaucracy” of the late 18<sup>th</sup> and early 19<sup>th</sup> centuries; in it, handwriting is indeed recognized not as a phenomenon that “reflects changing conceptions of the self but as one of the places where the self happens.”<sup>42</sup> But this account contains four considerations that prevent our mining it for interpretative potential in respect to Carstairs. First, I might run the risk of taking the varied development of education in the 19<sup>th</sup> century to coincide with a Kittlerian version of educational advances in German-speaking lands. Even in the case of Pestalozzi, the *modus operandi* of his innovations do not have to be taken as coeval with a new kind of parental awareness; for example, they have been aligned with the history of

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<sup>40</sup> “In contrast to the new reading methods (all but written into the bodies of mothers), writing instruction remains even in the titles of relevant treatises a domain of fathers and teachers.” Kittler, *Discourse Networks*, 84.

<sup>41</sup> Kittler, *Discourse Networks*, 84.

<sup>42</sup> See footnote 15.

religion in Europe.<sup>43</sup> Second, a strictly enforced gender binary is identified in Kittler's account as the origin point for education's transnational, overarching categories. The "alphabetizing" function of the "new mothers" is confined exclusively to reading—the "new reading methods" were "all but written into the bodies of mothers"<sup>44</sup>—while the "domain of fathers and teachers" is taken to retain sole control over "writing instruction." As Geoffrey Winthrop-Young has put it, Kittler's "discourse network 1800" is characterized by a gendering of "language acquisition and textual function" that reaches a point of "extreme segregation"; it also leave us unable to account for the "social background" of late 18<sup>th</sup> and 19<sup>th</sup>-century writers, especially those women who were "writing like men."<sup>45</sup> Kittler's account thus has the transmission of reading and writing occurring along firmly implanted gender binaries and he imposes these structures as though they were naturalized fact unto the growth of education, where the "alphabetizing" function of the "new mothers" directly generates the expanding "educational bureaucracy" of the late 18<sup>th</sup> century and early 19<sup>th</sup> centuries. Third, the strict adherence to gender binaries in Kittler's account was driven by a wish to subsume all pedagogical development under the bourgeois nuclear family's 19<sup>th</sup>-century ascent. Tightening coils draw each opposite-sex parent closer to the infant's psychological and cognitive development: Kittler situates the heteronormative family at the center of an irradiation of power. According to Kittler, "whoever wrote in block capitals would not be an individual," because the "great metaphysical unities invented in the age of Goethe—the developmental process of *Bildung*, autobiography, world history—could be seen as the flow of the continuous and the organic simply because they were supported by flowing, cursive handwriting."<sup>46</sup> Keyed as it is to an entirety of effect, statements like this one may also be interpreted as indicating the influence exerted on Kittler's work by the middle period of Michel Foucault's work, a phase taken to have been marred by its insistence on totalizing strategies.<sup>47</sup>

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<sup>43</sup> I take this opportunity to underline again Alexander's historicizing of *Anschaung* to the extent that it became central to Pestalozzi's pedagogy. Alexander notes that it was taken from a variation within Protestant theology that preferred the "object lesson" to the authority of the Scripture. Alexander, *Kinaesthetic Knowing*, 18.

<sup>44</sup> See footnote 35.

<sup>45</sup> Geoffrey Winthrop-Young and Annie van der Oever, "Rethinking the Materiality of Technical Media: Friedrich Kittler, *Enfant Terrible* with a Rejuvenating Effect on Parental Discipline—A Dialogue" in [...]

<sup>46</sup> Kittler, *Discourse Networks*, 83.

<sup>47</sup> See, for example, Poovey's criticism of those "literary critics" who, "influenced by the middle phase of Foucault's work, seem to believe that a totalized field of power dominates modern society." As a author who has erred Poovey mentions D.A. Miller, *The Novel and the Police* (Berkeley and Los Angeles: University of California Press, 1984). Eve Kosofsky Sedgwick has also criticized Miller's study on the same grounds. Mary Poovey, *Making a Social Body: British Cultural Formation 1830-1864* (Chicago: University of Chicago Press, 1995), 26, 189n. 3. Eve Kosofsky Sedgwick, *Touching Feeling: Affect, Pedagogy, Performativity* (Durham, NC: Duke University Press, 2003), 129-33; 135-142.

But before we can take our leave of the narrational strength Kittler's account offers, one last consideration awaits attention. As Kittler tells it, the performance of the running hand is an especially satisfying instance of "self-initiated activity." This process is able to render convincing the promise of the running hand's origin point in an "inmost soul."<sup>48</sup> The effect of wholeness on offer from the running hand would become emblematic in the case of the letter "m," which is exactly the letter at the heart of some of Carstairs's most regimented pages. But a narrative based on the rise of a constructed interiority as figured by the running hand leads to historical moments where letters are seen as signifying expressive vulnerability, which is not a useful point of reference for Carstairs.<sup>49</sup> As influential as Kittler's early texts have been for drawing attention to the historical importance of handwriting, they do not provide material to help us with lines that work by severe uniformity and abstraction. The early 19<sup>th</sup>-century "progress of alphabetization" that leads to the assembling of a "self-initiated activity" based on the ascent of the nuclear family finds no ready parallel in the world occupied by Carstairs's system.

The starting point for a different interpretation is provided by noting that Carstairs's subject position was delimited by the historical specificity of Britain in the 19<sup>th</sup> century's opening decades. He proudly describes "Great Britain" as unrivalled for "trade and commerce,"<sup>50</sup> part of a marketing move in *Tachygraphy* to attract three kinds of public. Second in line are "Gentlemen"; first come "Clerks engaged in real business," looking for the means to acquire a fair "Business-hand" so as to be able "write in a Ledger or Account Book." In third place, Carstairs addresses those "Teachers" who wish to instil in their "pupils" an "easy style of writing suitable for the Counting-House."<sup>51</sup> The second kind of public addressed by *Tachygraphy* is composed of representatives of the kind of parent/teacher dyad at the center of Kittler's account: elite heteronormative fathers seeking to improve the handwriting of their offspring.

Note the distinction drawn between education and commerce—in 1814, Carstairs made an overture to representatives from both areas. This alerts us to the fact that Carstairs was responding to overarching changes that presented him with two kinds of potential

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<sup>48</sup> Kittler, *Discourse Networks*, 90, 81, 87.

<sup>49</sup> It is not a stretch to look to the mid 20<sup>th</sup>-century French avant-garde artist Jean Dubuffet's (1901-86) valorization of a trembling hand as open to expression by the letter "m" in particular, with its triple opportunity to reflect the hand's hesitations. See Kent Mitchell Minturn, *Contre-histoire: The Postwar Art and Writings of Jean Dubuffet* [...]. See also Kittler, *Discourse Networks*, 83.

<sup>50</sup> Carstairs, *Tachygraphy*, 3.

<sup>51</sup> Carstairs, *Tachygraphy*, 8-9.

readers, and which would eventually render those categories separate. He was writing in a period when, according to Mary Poovey, the very concept of education itself was gradually coming under the sway of the social; the social, that is, robbed of a causal connection to the domains of economics and politics.

This invocation of Poovey offers the opportunity to specify the methodology used in these pages as particular to the opening decades of the British 19<sup>th</sup> century. To help her understand this period, Poovey reaches for the concept of “historical epistemology”—the “production of what counts as knowledge at any given moment.”<sup>52</sup> As Poovey tells it, the shift in the epistemological field got underway in late 18<sup>th</sup> century Britain when an unprecedented commitment to amassing statistics through census-gathering and the like arose. These functioned as among the number of “representational technologies” but were particularly powerful ones. Quantitative measures generated an awareness of a “population”—population gained representational strength throughout the 19<sup>th</sup> century until the perception eventually arose of an “undifferentiated whole” to which different kinds of “groups” saw themselves as belonging.<sup>53</sup>

But why did an obsessive need to survey arise in the late 18<sup>th</sup> century? With economic depression emerging on the domestic front and revolution fomenting in France and already accomplished in the United States by 1776, distinct populations, especially those that made up the beleaguered “laboring poor,” needed to be identified and isolated as the best means to cement the claims of “those specific rationalities” which had traditionally guaranteed “British social relations.”<sup>54</sup> At stake, according to Poovey, was the maintenance of belief in Britain’s

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<sup>52</sup> It was a changing epistemological field—composed of categories like “domains, genre, discourses, disciplines and specific rationalities” that granted “salience” to the “positionality or identity of groups of individuals” that came to light at any given time. Poovey, *Making a Social Body*, 2-3. Poovey also directs our attention to a longer discussion of historical epistemology; see Lorraine Daston, “Historical Epistemology,” in James Chandler, Arnold I. Davidson, and Harry Harootunian, eds, *Questions of Evidence: Proof, Practice, and Persuasion across the Disciplines* (Chicago: University of Chicago Press, 1991), 282-89.

<sup>53</sup> Poovey is concerned with the emergence of a “mass culture” which, as a product of late capitalism, “appears as an aggregate of individuals and a series of domains that seem more alike than different: individuals seem alike because they are all apparently animated by the same desire, the desire to consume products that take the form of commodities; domains, such as the aesthetic or the theological, seem alike because they all resemble the economic domain of commodity production.” She goes on to invoke the foundational work undertaken by the Frankfurt School point out that, as “Adorno and Horkheimer have argued, mass culture is organized by a ‘culture industry,’ a series of institutions that discipline desire and subordinate difference to homogeneity through technologies that reach (nearly) everyone.” Mass culture is, then, purely a phenomenon of representation. The preceding appearance of a “social body” was mobilized in particular by the development of the sanitary movement where the image emerged of Britain as—thanks to the uncovering of more and more distressing conditions, especially in major cities, by reformers—as a “giant” suffering body in need of a physician’s care. Poovey, *Making a Social Body*, 4, 3, 37.

<sup>54</sup> Mary Poovey, *Making a Social Body: British Cultural Formation 1830-1864* (Chicago: University of Chicago Press, 1995), 8.

longstanding status quo. Those that held property exerted political power.<sup>55</sup> Thus, governmental forces mobilized themselves on the quantification front. A paradox to which Poovey frequently returns is the extent to which the identification and isolation of the poor nevertheless functioned in the service of ultimately ensuring a formulation of the social body as a metaphor that provided the sense of an “increasingly undifferentiated whole.”<sup>56</sup> There was, on the one hand, a tabulating of distinct populations, especially minority populations, who were being statistically quantified as if in readiness for the moment that they could be ideologically blamed for national woes. On the other hand, this surveying of populations and increasing need to quantify spurred the movement through which education became separated from political and economic domains. Poovey describes this as a gradual “disaggregation of the social.”<sup>57</sup>

Carstairs then, was forging his system as two distinct processes were underway in Britain. They were time-consuming in their realization: they had not—according to Poovey’s reckoning—been achieved by the year of *Tachygraphy*’s initial publication. Carstairs’s system, I believe, embodies the emerging, tangled distinction between the commercial and the educational. To achieve speed, the arm is opened through “*movement*”; at the same time, but that movement is not specified. In fact, the point was that the movement should be left free, at “full liberty.”<sup>58</sup> But the minute motions of the hand are exactly described and quantified. Further, the letter forms are not described at first. The relatively neglected letterforms indicate the sequestering of one dimension to education (its “abc”s). But they are framed and enabled by the unprecedented agency awarded by the arm. This remarkable move is what is emblemized on the opening plate of *Tachygraphy* (fig. 1). That first plate records the arm’s airborne movement, even though the text says not a mark should be made. It is only when Carstairs has to attend to the workings of the hand that a more familiarly exacting tone is assumed—and intensified. Carstairs is exercised by how—as he perceives it—insufficient had been the precision of previous instruction in respect to the hand’s movements. Palpable in this new imposition on the hand of greater demands for exactness is the quickening contemporary pace of quantification that would enable the aggregation of the social. There is an intensification and tabulation of the existing order of things—and the existing order of things are what Park has described as the longstanding “protocols of penmanship.” These

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<sup>55</sup> Among its landmarks was the definition of the term “pauper” as a person trapped in poverty; a condition of dire moral straits rather than a situation with an economic cause. Poovey, *Making a Social Body*, 11.

<sup>56</sup> Poovey, *Making a Social Body*, 4.

<sup>57</sup> Poovey, *Making a Social Body*, 9.

<sup>58</sup> Carstairs, *Tachygraphy*, 11.



“protocols” demanded a thorough coordination between posture and “motions of the body and those of the writing tool.” The point was to generate a trust in what Park, using a term from modern usage, refers to as the “muscle memory” of handwriting.

It is remarkable that the period which Poovey describes as witnessing the start of momentous shifts in British society whereby education would be eventually claimed by, moved to, and demarcated under the rubric of the social, includes the year 1814, exactly the moment when Carstairs introduced what he proclaimed as an entirely new system of handwriting where speed was imagined as imparted in its primary form from the shoulder. The twin publics to which *Tachygraphy* was addressed—education and commerce—were emerging categories whose solidity was not yet fixed. But British governmental initiatives continued to subordinate personal and community experience to the production of quantifying operations, eventually decisively dividing the two spheres and producing the domain of the social which would eventually be imagined as a “giant” body.<sup>59</sup>

### *The flourish*

At this point we can pinpoint these observations in respect to the flourish, a feature that Park has importantly identified as one of the most arresting features in the history of handwriting, and a trait whose development was well underway prior to the emergence of nationwide quantifications in the Britain of the late 18<sup>th</sup> century. The strongest opprobrium in Carstairs’s texts is saved for previous parsimony around the “movement of the whole arm,” whose action is “rarely used, except” in the cases of “striking capitals or flourishes!”<sup>60</sup> He is exercised here by the fact that, as he sees it, the arm has never before been awarded its full potential given that its energy was saved only for the flourish. In his account the arm should not be reserved for flourishes and striking; it should be rendered available to a novice penman.

The curving lines that sometimes appear in Carstairs’s plates are not conventional flourishes. They are either geometric diagrams of the arm’s movement (and not drawn lines at all—see figs. 1 and 4), or they are expedients used in exercises to keep the pen on the paper (as in Figs. 5, 7, and 9). We do not see flourishes in Carstairs’s texts even though we see long lines: what we are being constantly provided with are diagrams of gestures. The flourish pulls the eye away from the letter or letters, it takes extra time to record, time that

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<sup>59</sup> Poovey, *Making a Social Body*, 52.

<sup>60</sup> Emphasis in the original. Carstairs, *Carstairs’ National System of Penmanship* (London: J. Carstairs, 1843), viii-ix.

cannot be accounted for under the strict devotion to dispatch that governs his system. As such, the flourish is anathema to the increasingly massive efforts of instrumentalized quantification then gaining momentum across Britain.<sup>61</sup> It registers the impress of individuality in which Carstairs is not interested.

The flourish is then, according to the epistemological shifts in Britain as described by Poovey, something that belongs to the 18<sup>th</sup> century, prior to the emergence of the metaphor of a social body which had to be underwritten by “an increasingly bureaucratized model of social reform.”<sup>62</sup> In a complete turnabout from previous manuals, Carstairs gave a new priority to the arm not as the exclusive preserve of a virtuoso penman embarking on a flourish but as a source of “dispatch” through muscle power now awarded to a subject about to embark upon a career in commerce. As the hand inscribes individual letters en route, all the while the learner “must endeavour to move the *arm* as quick as possible, always aiming at quickness of movement in the pursuit of freedom.” The outlandish degree of enthusiasm shown by Carstairs in 1814 for the arm is inscribed in a text whose main overture is to readers drawn from a population of those involved in commerce.

The role of dispatch as epitomized in Carstairs’s re-configuring of an “x” can now be revisited with these historical conditions in mind (see Fig. 8).<sup>63</sup> In the case of the “x,” the learner has, according to Carstairs, to make the hand double back on itself while bringing to bear remembered techniques about how to make parts of *other* letters, namely the “m” and the “i.” And this has to happen before Carstairs’s version of the letter “x” can be committed to paper. This can be seen as limiting the opportunities for extended reflection generated by the constructed interiority that Kittler proposes as the major contribution the running hand made to the formation of the subject. A reader of *Tachygraphy* is given immediate access to capabilities that had once been saved for the flourish, the embellishment on an already accomplished hand.

### *The appeal to anatomy*

As the Victorian era approached, systems of regulation, measurement, and calibration underway in Britain by the time *Tachygraphy* was published would continue unabated. Poovey makes the point that by the 1830s—thus including those years during which Carstairs continued to promote and circulate his system—statistical societies had been set up across

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<sup>61</sup> Poovey, *Making a Social Body*, 53.

<sup>62</sup> Poovey, *Making a Social Body*, 53.

<sup>63</sup> Carstairs, *Tachygraphy*, 15.

Britain. As we look ahead in Carstairs's career to his *National System of Penmanship* from 1838, we find that the list of readers begins with educators. There is no let-up in the approbation given to the arm but here we find a text aimed at a readership within education—now staking itself out more fully in the domain given to the social.

A sweeping action from the shoulder as previously made available to commerce is now seemingly opened up to education. It might therefore appear that we can now locate Carstairs as firmly within the emergent domain of the social in which education now belonged. But, as I will now argue, this reading does not account for Carstairs's later texts. The hand, as we have seen, was forbidden at all costs to leave the page. The letter "x" became the object of a memory performance of considerable difficulty just in order to ensure the control of the hand as ever governed by the sheet. Three facts are salient here. First, the expanding reach of measurement and calibration—in the search of the unification of a social body as a necessarily cohesive image of Britain—did not proceed entirely smoothly. As measurements and quantifications were being applied all the more zealously, the body itself in its somatic sense, became more palpably assertive.<sup>64</sup> Second, in the absence of university-derived disciplines—psychology, anthropology, the social sciences—that would later be appealed to in order to provide sources of authority to support efforts at calibration and measurement, the study of anatomy was frequently called upon to provide the closest thing to an external authority as could be appealed to in the opening decades of the 19<sup>th</sup> century. Third, we need to bear in mind that the changes in the understanding of the social—as now occupying an increasingly disaggregated domain—were underwritten by epistemological changes that had already begun to unfold in the 18<sup>th</sup> century under the impact of Locke's sensationalist philosophy.<sup>65</sup>

In his later texts Carstairs becomes more involved with the precise movements of the hand. I noted that his greatest opprobrium was directed at predecessors who had given no thought to the gauging of motions that would lead to the perfectly held hand. It turns out that

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<sup>64</sup> The evidence for this mostly derives from the recommendations of the sanitary movement, which was spearheaded by "reform-minded men" who mobilized the image of the social body despite its "shortcomings." Those shortcomings included the fact that the greater was the degree of effort made to heal and cure, the more distress was revealed. Reformers such as Thomas Southwood Smith (1788-1861) discovered that the "matter of which the body was composed" was in a state of "constant flux." Poovey, *Making a Social Body*, 41.

<sup>65</sup> Bacon's 16<sup>th</sup>-century empiricism and Locke's 17<sup>th</sup>-century sensationalism had initially caused a fundamental challenge to the nature of Aristotelian deduction. According to Poovey, those challenges were gradually accommodated over the course of centuries and contributed to the emergence of a new, modern kind of abstraction that operated according to a complex interplay of "material reality, ideas, institutions" and "technologies." Poovey, *Making a Social Body*, 9-10.

we can identify the source of this disapproval: these predecessors had never thought to appeal to anatomy in the detailed, minute, and categorical way Carstairs did—even going so far as to devise a way to keep the student’s fourth and fifth fingers in place with a ligature (Figs. 10 and 11).

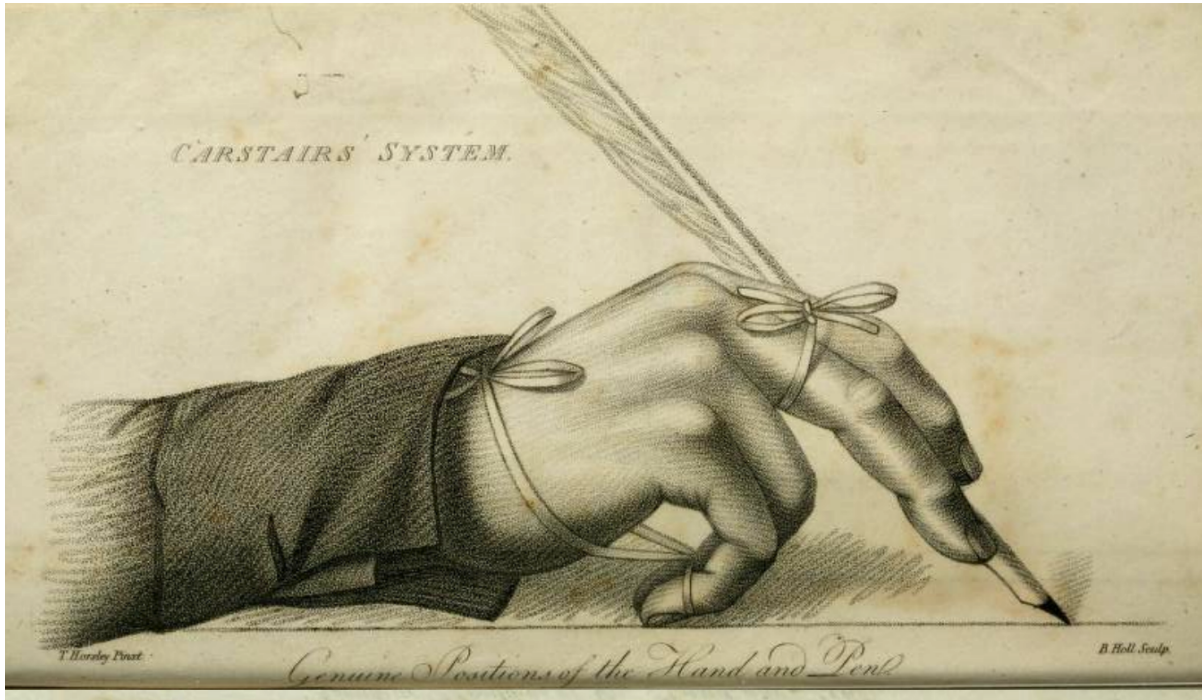


Fig. 9. Carstairs, *Lectures on the Art of Writing* (fifth edition 1822 [1814]), plate before p. 161

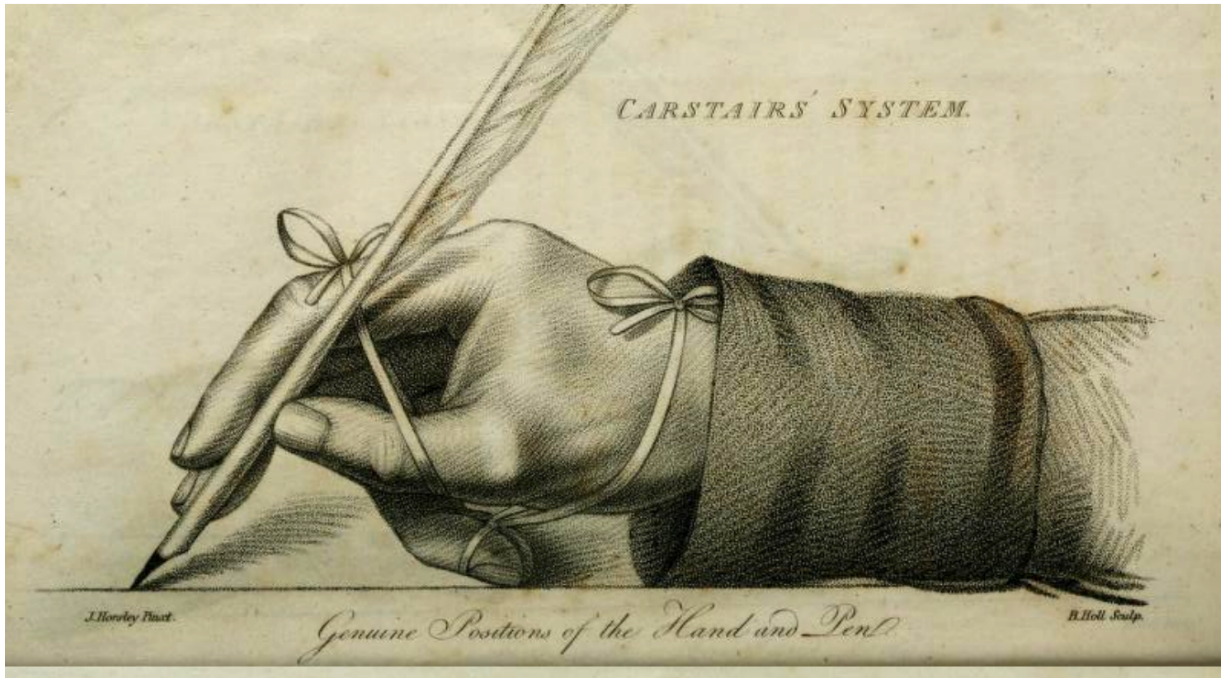


Fig. 10. Carstairs, *Lectures on the Art of Writing* (fifth edition 1822 [1814]), plate before p. 161

In fact, his unprecedented policing of the hand—even when considered in the light of the previous violence perpetrated by handwriting manuals, according to Goldberg—and the concomitant appeal to anatomy as authority only became more marked as later editions of his systems appeared. This surprising exercise is justified by an appeal to anatomy. Carstairs even asked students to suspend their arm in a kind of scales (a talantograph) to teach it to move lightly above the page (Fig. 11).

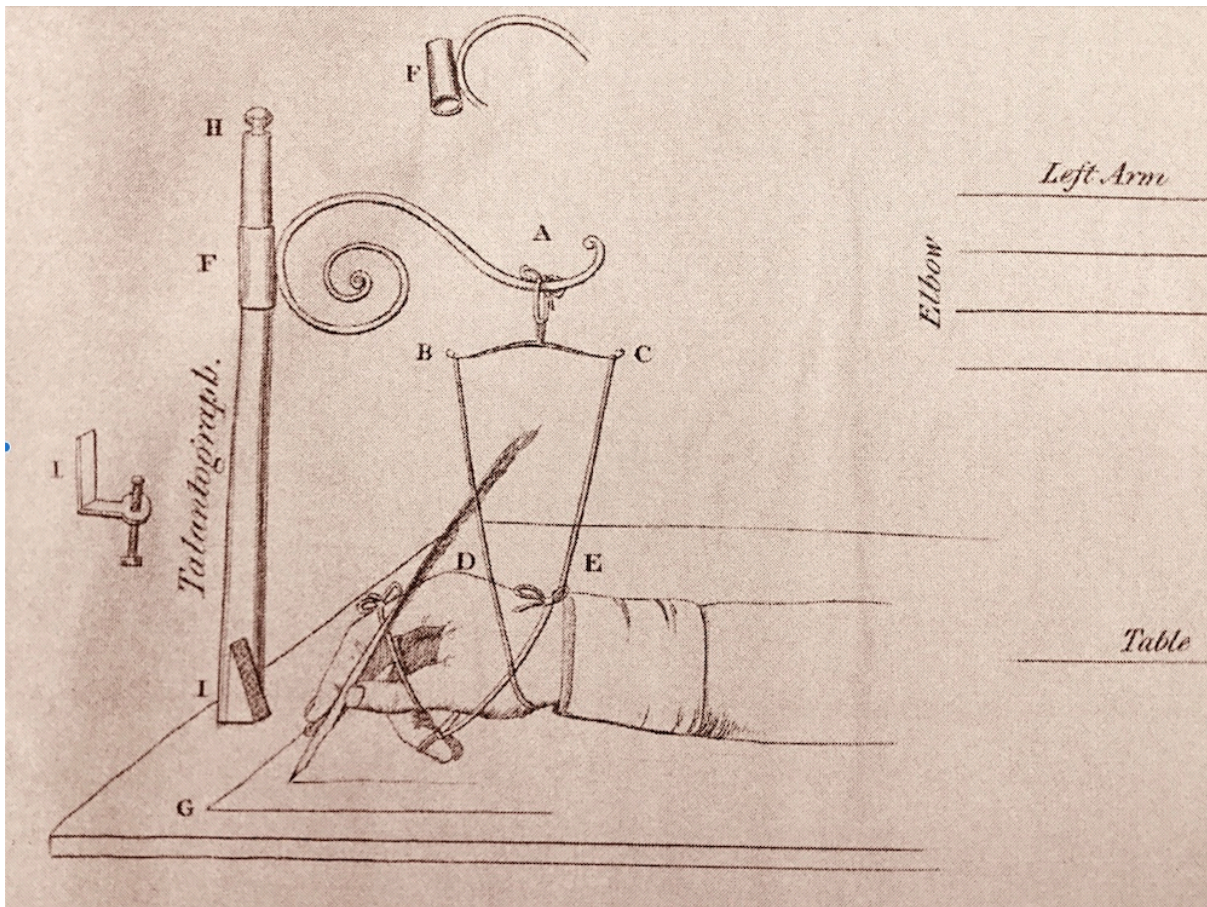


Fig. 11. Carstairs, *National System of Penmanship* (eight edition 1843), plate before p. 29

I believe that these stringent exercises parallel the increasing anxiety then abroad in Britain for ever more categorical ways to quantify populations, even as those very populations revealed themselves as ever more inconveniently, palpably present through states of impoverishment and sickness. Writing at the same time that this quantification in the service of uniformity was proceeding, we find Carstairs bemoaning the fact that there had been no previous initiative to identify how many movements there are in the art of writing, leaving the novice penman seeking to acquire perfect uniformity in the running hand with only the vaguest idea of how to “command” the arm and hand.<sup>66</sup> Carstairs’s complaints sharpen into focus when we remember that they were made at exactly the same time that quantification in the service of uniformity was proceeding.

<sup>66</sup> Carstairs, *Tachygraphy*, 48.

In pages like these Carstairs seems anxious to locate and hold on to some form of authority. His appeal to the study of anatomy also reminds us that Goldberg's thesis is that the italic hand spread across Elizabethan Britain in a way that had not proved possible in the city states of the Italian peninsula in which italic had first arisen.<sup>67</sup> Although strictly monarchical power no longer obtained in Carstairs's England, centralized government still did.

*Locke, education, and habit*

Goldberg was writing about handwriting in a period prior to the full emergence of the sensationalism of Locke and the inductive method of Francis Bacon (1561-1626). Among the epistemological changes that had emerged and which had to be acknowledged and accommodated was Locke's claims for empiricism and arguments against dispositionalism. Observation became a newly valorized endeavour under a shift that, to quote Poovey, required "a particular kind of abstract reasoning" to be rewritten in accord with claims derived from observations of "concrete instances" in the "phenomenal world."<sup>68</sup> By the Victorian period, these challenges had been further altered by the 18th-century growth of bureaucracy and statistical measurement. Poovey calls this condition "modern abstraction"; it involved calculation and measurement as well as reification and commodification. Carstairs was adamant about bringing together, in one tight sequence, the progression of moves by which the hand can be mobilized, incorporating an exact penhold. Carstairs's method, then, thus complies, I believe, with the characteristics of "modern abstraction" — modes of abstraction are still operative in order to best organize "what counts as truth," but recourse can no longer be made to an abstraction that is generalized from start to finish. Abstraction has to be tied to particular observations of precise phenomena in order that evidence-based instantiations could supply an updated foundation for new kinds of conformity.

It is possible therefore, to see in the Carstairs system the emergence of modern abstraction as a form of reasoning now underwritten by a requirement for proofs and instantiation-based evidence that had been the result of the Baconian and Lockean transformations of the 17th and 18th centuries. It is this kind of minute attention to particulars that is behind Carstairs's exact and exacting attention to fingers. His requirement for a ligature was something that he derived from his own researches and daily observations of

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<sup>67</sup> Goldberg, *Writing Matter*, 1-2.

<sup>68</sup> Poovey, *Making a Social Body*, 9.

“learners.” The accommodation of empiricism and the rejection of dispositionalism indicates the degree to which the influence of Locke had worked its way into the disaggregation of the social. In fact, this adherence to empirical observation delivered the devices and gadgets—the ligature, the ties, the chains that Carstairs devised.

Recall however, that, according to Locke, the subject’s awareness of morality had to be instilled by the constant subtle promotion of moral behavior during childhood—as through a “gentle Application of the hand”—during which the child is reminded so many times of optimal ways to comport the self that they become habitual.<sup>69</sup> Locke is adamant that education has to happen during childhood—appropriately humane and civic-minded forms of moral behavior have to be made customary to the subject before an adult character is formed. It would seem that no such reservations about childhood as a privileged and unique phase of character formation are entertained by Carstairs. He promises that the free and perpendicular motion of the arm can be so forcefully absorbed by the mind that it is “enough” to “overthrow” previous habits.

What, then, can be said about this failure to privilege childhood, given that Carstairs is part of an episteme that accommodated the impact of Lockean sensationalism? Scholars have argued that we differentiate between his sensationalist philosophy and the moral imperatives of his educational system.<sup>70</sup> I propose instead that we turn again to Carstairs’s ferocious emphasis on new formations of certain letters such as lowercase “x”. We have seen how, in respect to the complex learning apparatus that had to be remembered in respect to the “x”, that for the kind of subject that Carstairs is attempting to form there is no room for a dimension of constructed interiority as Kittler proposes.<sup>71</sup> I now suggest that the mandated task of obliging the learner to memorize those bits of other letters in order to construct the “x” also works to exclude a possibility of remaining open to the moral codes that are essential to the Lockean system. Empiricism does make its mark on the Carstairean system, as evidenced by the appearance of the ligature. But, if there was no room in this system for a constructed interiority à la Kittler, then, by the same token, the system structures learning,

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<sup>69</sup> Locke, *Some Thoughts*, 83.

<sup>70</sup> See for example, the distinction made by John W. and Jean S. Yolton between Locke’s “metaphysical system” and his “work on education.” John Locke, *Some Thoughts Concerning Education* (Oxford: Clarendon Press, [1693] 1989), 14.

<sup>71</sup> The plea that the learner retain in mind—while making the “x”—the formation of *other* letters conforms to what Thornton has described as a feature of later Victorian-era handwriting manuals: the “reduction” of the alphabet into “constituent handwriting ‘elements’” that bloomed into complex memory tests for learners; a requirement that “bits of letters—ovals, inverse curves, and so on” had to be held in mind. Thornton, *Handwriting in America*, 47.



preventing the mind from holding onto anything other than those “bits of letters” that had to be mobilized in the moment in order to make an “x” with dispatch. The subject that was being formed, then, was fitted for the category of commerce as considered under the domain of the economy (thought of as ideally free from government direction), even as, all the while official efforts were ongoing to ensure that education was breaking off into a separate category assimilable to the domain of the social. The ligatures controlling the hand signal the perception that the body, as emblemized by the hand rather than the arm, is in need of control: it is becoming increasingly assertive via sheer somaticism.

Carstairs cannot afford to imagine childhood as the unique repository of the kind of maturation through habit formation as insisted upon by Locke. He must believe in behavioral change as possible beyond childhood even if it has to be imposed through binding and memory exercises. His instructions are so onerous as to crowd out any dimension for other kinds of habit formation, explaining Carstairs’s attempts to make a subject that must be thought of as remaining within the category of commerce.<sup>72</sup> This explanation also addresses Carstairs’s attraction to the arm as the available, enfranchised part of the body. His system does not allow him to impose on the arm the quantifying measures brought fervently to bear on the hand and on individual letters. Under this dispensation, the arm must be kept free as the resistive force that offers to keep the promise that the subject formed by commerce can still be accessed even when education becomes part of the domain of the social.

### *Concluding thoughts*

Tzara’s opprobrium was aimed, at least in part, at the way in which, by the end of the 19th century, the operations behind the formation of a line or letter had come to be carried out in an overly schooled way. As Thornton, Zeynep Celik Alexander, and Clive Ashwin have pointed out, innovations in pedagogy issued particularly from roots in, on the one hand, the

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<sup>72</sup> Relevant here to note is how the wealth of documents—“daybooks, ledgers, waste books, invoices, bills of lading, receipts and all manner of business correspondence”—that the workings of the market generated due to the “growth of credit as a system” were all handwritten. This goes along with Thornton’s emphasis that it is “unwise” to align “script with the private sphere and print with the public.” For example, “it was not unusual for private mercantile correspondence to circulate among the merchant class as a whole and to end up in public print. Then too, there were other handwritten forms—the bill of exchange for example—that were surely artifacts of the public sphere. The error occurs in focusing on print solely as it symbolizes the public sphere and then defining the meaning of handwriting by default. What is overlooked is the positive association of script with the self. Where such association was socially or culturally desirable, handwriting became the ‘logical’ medium of writing, regardless of its technological limitations, where the communication was of a private or public nature.” Later she remarks that print was seen to present the “visual counterpart” of “unsettling blankness,” perturbing its users with its “opacity.” Tamara Plakins Thornton, *Handwriting in America: A Cultural History* (New Haven: Yale University Press, 1996), 12, 31. Smith, “*According to Cocker*,” 18.

United States, and, on the other hand, the German-speaking lands made their way across the North Atlantic; the “training of the body” was seen as “the way to get results and not just narrowly academic ones.”<sup>73</sup> Malleable bodies in motion, taught in large groups, were said to acquire skills best. Consciousness got in the way of what became the “essentially physiological process” of education, much characterized by drill-like instruction under which pupils were considered to be “bundles of neuromuscular connection.”<sup>74</sup> Obedient subjects were promised because their basal physiology, so to speak, had been captured by methods of education that prized the power of “muscle memory.” Tzara was criticizing then, the persistent value accorded to a certain kind of uniformity in the push toward the achievement of literacy, one that I am emphasizing here in relation to handwriting, all the while bearing in mind the degree to which we can distinguish handwriting from (and compare it to) drawing. Uniformity has long been a standard requirement of any particular hand; in fact, the uniformity of the hand had to be insisted upon at all costs.

Perusal of Carstairs’s texts leaves one with the unavoidable opinion that the cumbersome way in which the instructions are delivered, especially in respect to a letter with a previous history of formation, seems far from lucid. I hasten to add however, that this may be just my impression: trans-European success quickly followed upon the publication of Carstairs’s system. Versions of the Carstairean system were published in five European countries before the third decade of the 19th century was out.<sup>75</sup> Clearly there was a large audience keen to learn a system in which the hand never leaves the page. Carstairs’s fame seems to lie in the strength of his recommendation that the arm make a series of active movements, with the wrist never at rest, but hovering above the sheet, exactly two fingernails touching the page: a determinative movement that is, however, perfectly matched to the increasingly hand- and finger-oriented protocols of a regimented cursive hand.

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<sup>73</sup>Thornton, *Handwriting in America: A Cultural History* (New Haven CT: Yale University Press, 1996), 144. In 1892, William James counselled teachers that education “is for behavior, and habits are the stuff of which behavior consists.” James, *Talks to Teachers on Psychology* (New York: Henry Holt, 1925 [1899]), 58.

<sup>74</sup>Thornton, *Handwriting in America*, 144.

<sup>75</sup> It is notable that the French versions of the system do not include text; they are composed of pages printed from engravings. Notably too, the first plate differs from Carstairs’s beloved first plate indicating the long sweep of the hand as propelled to the bottom of the page. It contains instead a series of illustrations showing how to prepare a quill pen, bookended by illustrations of the hand bound to the quill by a “ligature.” M. Trémery, *Manuel de Calligraphie: Méthode Complète de Carstairs dite Américaine, ou l’Art d’Écrire* (Paris: Roret, 1829). Insert details of the various languages into which the system was translated: from World Cat.

