# On the Historiography of Curriculum: The Legend of Petrus Ramus DRAFT

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#### **Abstract**

This paper explores the historiography of curriculum through the legend of Petrus Ramus (1515-1572). The entire edifice of curriculum history is built upon Ong's *Ramus, Method, and the Decay of Dialogue*, completed as a doctoral thesis in 1955 and published in 1958. To this moment for curriculum historians, Ong's thesis stands as the key interpretation of Ramus, with secondary source precariously built upon secondary source. But what if Ong was wrong? Ong's interpretation is built on the initial work of his mentor, Marshall McLuhan. From the revisionism of McLuhan and Ong, we turned supposition into fact, which is to say that Ramus and the birth of curriculum from the womb of method is the stuff of legend, not history.

The objective of this paper is to again revise the historiography of curriculum through the case of Petrus Ramus (1515-1572). We argue that Ong's *Ramus, Method, and the Decay of Dialogue*, completed as a doctoral thesis in 1955 and published in 1958, is a tenuous source on which to continue to build curriculum history. Secondary source is precariously built upon secondary source. But what if Ong was wrong? From the revisionism or now conventional paradigm and wisdom of McLuhan and Ong, we turned supposition into fact, which is to say that Ramus and the birth of curriculum from the womb of method is the stuff of legend, not history. The primary methods used for this paper are history and historiography, drawing into conversation an array of sixteenth century and earlier primary sources with select secondary sources completed from the 1950s through the present. Our conclusions are substantiated on evidence within the primary sources. The significance of this research includes: 1) toppling the conventional paradigm of the historiography of curriculum; 2) extending the origins of curriculum 1,600 years into the past; and 3) realigning curriculum history with the histories of science, technology, and theology.

The history of curriculum is indeed strange. Historians and theorists mourn the birth of curriculum as much as the death. In this scenario of revisionism, curriculum was born in the hands of Ramists in 1576 and died in the hands of Reconceptualists in 1976. On the death, Huebner declared in 1976 that "the curriculum field" "for all practical purposes is not just moribund, it is dead" (p. 65). In this paper, rather than quarrel over the death and implicated suspects, we take issue with the birth of curriculum.

## Renaissance, Revival, Revolution, Reconceptualization (Resurrection)

Themes of rebirth, renaissance, revival, revolution, revision, and reconceptualization have proven essential to conventional curriculum mythistory. Breaks with the past conceived in the fifteenth and sixteenth centuries—renaissance, revival, revolution—were essential to a reconceptualization of curriculum studies. For reconceptualists in the 1970s, the "curriculum revolution" of the 1960s reinforces the sense of a break with the past. It seemed trivial, however, that the birth of curriculum studies was affixed to 1918, coinciding with Bobbitt's publication of *The Curriculum* (Huebner, 1976; Pinar, Reynolds, Slattery, & Taubman, 1995, p. 6). Ong's

narrative of Ramus and the "printing revolution" deepened a past from which the reconceptualists could break. Rather than a premature death after a 50 year lifespan, one could now claim death after a ripe old age of 400 years of curriculum: Born: 1576. Died: 1976.

Despite more than a century of claims of a "curriculum revolution," marked by the "Gilded Age," "Progressive Era," 1960s, and 2000s, there is no history of curriculum. Despite claims to a "reconceptualization of curriculum studies" marked by the 1970s and death of curriculum (Pinar, 1978), there is no history of curriculum; there are only curriculum histories (e.g., Baker, 2009a; Burlbaw & Field, 2005; Davis, 1976; Doll & Broussard, 2002; Franklin, 1977, 1999, 2008; Goodson, 1988, 1993; Hamilton, 1989, 1990a; Hendry, 2011; Kliebard, 1992; Kridel, 1989; Popkewitz, 1987; Quinn, 2001; Schubert with Schubert, 1980; Schubert et al., 2002). For the most part, those who made, remade, revolutionized, revived, and reconceptualized curriculum have been left to author their own histories. For example, key architects of reconceptualization continue to write their histories in somewhat of whig fashion (i.e., progress history, presenting earlier periods in a way that strengthens one's present position) (Pinar, 1978, 1988, 2014). Basically, historians of education *and* curriculum historians have been content with these specialist histories (c.f., Hlebowitsh, 2005; Tanner & Tanner, 1979; Wraga, 1998, 1999, 2002; Wright, 2005).

This is not to say that historians of education have entirely ignored or overlooked curriculum. Most synoptic histories of education include a section or chapter on curriculum. For instance, Graves' three volumes of A History of Education provide sketches of curriculum over time. In the second volume, Graves (1910) clarifies that the "tremendous widening of the intellectual, aesthetic, and social horizon is generally known as the Renaissance" and "revival of learning" (p. 107). The "curriculum of the humanistic education contained a wide range of elements," he writes, "intellectual, aesthetic, moral, and physical" (p. 134). But it was not long before it "lapsed into a formalism almost as barren as that of the schoolmen" themselves (p. 136). Similarly monumental is *The History of Education*, wherein Cubberley (1920, pp. 263-286) sketches curriculum and, on the surface, states a reasonable conclusion: the "revival of learning" resulted in a "modification of the mediaeval curriculum" (p. 279). In Curriculum-Making: Past and Present, which is often cited as the first specialized curriculum history, Rugg (1926) also offers a reasonable conclusion: "curriculum has lagged behind the current civilization," with the pace of modern life outside the schools being relentless (p. 3). Brubacher's (1947) A History of the Problems of Education concurs with this focus on progress and gives less a treatment to "the rise" than "decline of the humanistic curriculum" (pp. 256, 259). The "revolution of powerdriven industry combined with naturalistic democratic forces" in the eighteenth and nineteenth centuries, Brubacher concludes, "to alter the whole face of work in the curriculum" (p. 278).

If not the first case study in curriculum history, Ong's (1958) *Ramus, Method, and the Decay of Dialogue* is certainly the most influential. Ong's interpretation of Ramus revised more favorable analyses of the French historian Compayré (1879, pp. 127-134) and Americans Williams (1892, pp. 68-74) and Graves (1912). Williams's view was that Pierre de la Ramée, anglicized as Petrus Ramus, became an

eloquent professor in the College of France; pugnacious reformer in the realms of science and in the university of which he was an ornament; "the greatest French philosopher of the 16th century;" as pedagogue, the author of Latin, Greek and French grammars, of a system of logic, and of treatises on arithmetic, geometry, and algebra which were used as textbooks for a century... this universal genius perished in the massacre of St.

Bartholomew 1572, a victim "in striking whom, says Compayré [1879, p. 27], "his enemies aimed not at the Protestant; they slew rather the enemy of scholastics, the adversary of the old methods, the indefatigable denouncer of the abuses of the University." (pp. 68-69) (Figure 1)

Compayré (1879) counted him as a "martyr for liberty of the conscience" (p. 127). According to Graves, Ramus "added little to the curriculum," but he "separated the wheat from the chaff" (p. 113). Ramus's contemporary captured the received view: "by God's favor, we were given Peter Ramus, a man deserving to be remembered for all time.... Everyone devoted to the cause of learning ought to honor the memory of this man by speaking of him with gratitude" (Wurstisen, 1579, quoted in Ong, 1974, pp. 607-608). "Ramism" continued apace after his tragic death in 1572. Among a new generation of revisionist historians, Ong moved to correct the hagiography:

Ramism is in many ways an inexplicable phenomenon, and thus an invaluable one, for to interpret it we are forced to establish new alinements in the history of thought and sensibility and to revise some of our ideas from the inside.... A study of Ramism, therefore, makes it possible to discern the nature of subconscious drives which have been obscured elsewhere and which often call for radical revision in our ways of viewing intellectual history. (pp. xvii, 8)



Figure 1. Ramus's murder in Paris on 26 August 1572 during St. Bartholomew's Day massacre (Illustration from Figuier, 1868, pp. 126-127). Copyright expired.

Ramus signified his own break from the past in his Master thesis, a story that in itself became legendary. As one chronicler put it:

Ramus early developed the strongest inclination for learning. Soon he broke with scholastic Aristotelianism, pushing his opposition to revolutionary extremes. Without discretion or restraint, he attacked the great idol, and when scarcely 21 he presented a thesis, the subject of which was the audacious proposition that <<all that Aristotle has said is false>>. (Stones, 1928, p. 449)

## Ong would have none of it:

Ramus' stagey anti-Aristotelianism has always attracted lovers of partisan histrionics, and they have made the so-called thesis something that it was not. Waddington [Ramus's biographer], for instance, and those who follow him still picture Ramus as defending this thesis valiantly from morn to noon, from noon to dewy eve, against the assembled arts faculty, and as finally forcing them, at the point of one of their own brittle syllogisms, to grant him his degree. This is nonsense, of course. (p. 36)

Yet Ong accepted the portrayal of the Renaissance as a break from the past along with portrayals of Ramus's influence in this break and "post-Ramist developments" (p. 318). But for the record, Ong argues, "pedagogical exigency, rather than intellectual integrity, is thus seen to be the real focus of Ramism." "It is only after the pedagogical build-up of the Middle Ages that the crucial question for philosophy becomes not, Is it true? but Is it teachable" (p. 23)? As the title and subtitle suggest, *Ramus, Method, and the Decay of Dialogue: From the Art of Discourse to the Art of Reason* focuses on effects of this influence in a context of effects of the Renaissance and "printing revolution," "communication revolution," or "media revolution" (Albion, 1933; Behringer, 2006; Eisenstein, 1979, 1983, 2002).

Changes that Ramus and Ramism effected, Ong argues, "are most readily discernible in the relationship between Ramism and the invention of letterpress printing" (p. 307). Through this relationship Ong concludes, we can discern how "the Ramist reworking of dialectic and rhetoric furthered the elimination of sound and voice from [hu]man's understanding of the intellectual world and helped create within the human spirit itself the silences of a ["nonrhetorical" and] spatialized universe" (p. 318). Ong relies quite heavily on a thesis that "large-scale reproduction or transmission" of diagrams and texts— "geometrical design as well as a controlled spatial display of words"— have revolutionary consequences for human thought. "The printing press, the first assembly line, had assembled not tools, but a pattern of words, a pattern for things in the mind," Ong continues. "In a parallel maneuver Ramus organizes in an observational field not the external world but the 'contents' of consciousness." All "was changed, or promised to be changed, with printing," Ong reasons (p. 79).

This link between Ramus and printing had its bases in Ong's work with McLuhan and the two continued for the balance of their careers to reiterate this link. For example, McLuhan insisted as late as 1975 that "it is obvious that Ramus exercised his extraordinary appeal by being close to the new patterns of sensibility that people experienced in their contact with typography." "Typographic man" "shot into prominence with printing" (p. 175). Since the 1940s and 1950s, reliance on the revisionism of McLuhan and Ong has given historians a sense of convention and comfort about Ramus and curriculum.

In *Orality and Literacy: The Technologizing of the Word*, Ong (1982) recharges the original thesis and revisionism. Like-minded historians acquired a new secondary source in curriculum history from which to draw. In his review for example, Tuman (1983) noted that Ramus "appears again in *Orality and Literacy* as a villain... Ramus' pedagogic reforms attempted to remake classical, rhetorical education in line with the needs of an emerging secular society founded in part on the technology of printing. Ramus' method, according to Ong, was to segment the whole curriculum by 'cold-blooded definitions and divisions,... until every last particle of the subject had been dissected and disposed of (p. 134)" (p. 773). Repeating the

thesis, Tuman reports that Ramus's "educational 'reforms' represent the triumph of the modern and the literate over the ancient and the oral" (p. 773).

## **Ramus and Curriculum History**

Ramus and Ong made their way into the legends of curriculum history through Hamilton's extension of the past back to the seventeenth and sixteenth centuries. By and large, prior to Hamilton's work in the 1980s, curriculum historians had little to nothing to say about pre-nineteenth history. Generalizations of historians of education, such as Cubberley and Brubacher, passed few empirical tests for a new generation of historians, including new revisionists. As Hamilton and Gibbons (1980) exclaimed, the first problem was a superimposition of the term "curriculum" on a pre-nineteenth century past or a substitution of etymology for history: "To write, anachronistically, of the 'curriculum' of a medieval university is to evoke images of educational life that are, at best, misleading. Moreover, such distortions can have a disruptive effect" (p. 1). In the mid 1980s Hamilton was prompted by a colleague "to take a look at Walter Ong's [1958] book... Keith's suggestion was that my work on Calvin(ism) could be fruitfully merged with Ong's work on Ramism" (1987a, p. 2). "Indeed, as late as 1987, I discovered the earliest use of curriculum known to myself in a 1576 representation of knowledge prepared by one of Ramus' protestant (?Calvinist) disciples, Thomas Fregius" (1987a, p. 4) (Figure 2). "I took my title— The Pedagogical Juggernaut," Hamilton continues, "from a phrase used by Ong to characterize the wave of educational reform mounted by Ramus' followers" (p. 4).

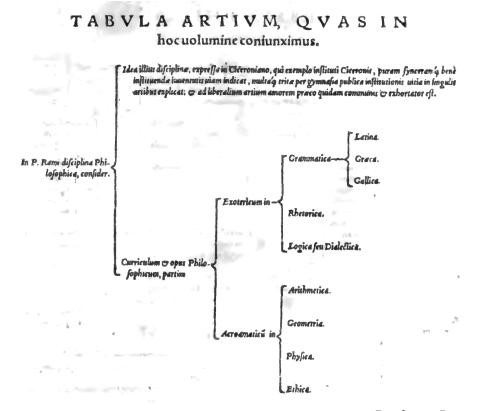


Figure 2. "Practical Table of the Assembled Book" or table of contents for *Professio Regia* (Fregium, 1576). Copyright expired.

It appeared that Hamilton had found answers to nagging questions of the history of curriculum: How "had curriculum come into being? What, if anything, had it replaced? How did the seventeenth-century usage match up to the term's subsequent history" (1987b, p. 2). "The separation of 'curriculum' from the much older term 'Vitae curriculum' brought, therefore, a new sense of 'order' into schooling," Hamilton exclaimed. "It conveyed a sense of 'order as structure' (cf. the social *order*) as well as a sense of '*order* as sequence' (cf. the order of events)" (p. 2). Hamilton (1987b) elaborated, noting that in the late sixteenth century, "the pedagogical juggernaut— the idea of a curriculum— has already begun to roll through the states and schools of north west Europe.... Looking back, it seems to me that Ramus' juggernaut was nothing less than the proto-typical teacher-proof curriculum" (pp. 24, 27). A few years later, in *Towards a* Theory of Schooling, Hamilton (1989) states his finding more authoritatively. The "representation" prepared by one of Ramus's "disciples" becomes matter of factually the "earliest known appearance of the term 'curriculum' in a version of Peter Ramus' *Professio* Regia, published posthumously by Thomas Fregius of Basle in 1576" (p. 44). Hamilton (1990b), who otherwise is painstakingly documenting the history of curriculum, gets caught up in revisionism and claims to knowledge. Ramus is now "the high priest of method" (p. 4). For all it does otherwise, Hamilton notes, Ong's analysis, "fails to note the emergence of curriculum" (p. 5). The trouble is, he cautions, *Professio Regia* is "a compilation of Ramist 'arts' produced by a protestant printer/publisher of Basel, Thomas Fregius (but usually attributed directly to Peter Ramus)" (p. 6). A la Ong, in the next decade Hamilton (1999) continued to elaborate and reinforce interpretations:

Stated simply, Ong built his argument around an historical rupture the invention of moveable-type printing. Ramus' work, that is, arose from the convergence of moveable type printing with humanist writings about communication, learning and teaching. Moveable-type printing made it possible to replace the verbal layout of an argument with the functionally-equivalent layout, mise en page or spacialized disposition of the printed page. At the risk of oversimplification, soundless textbooks replaced, Ong felt, the articulate teacher. (2003, p. 4; see also Hamilton, 2009; Hamilton & Zufiaurre, 2014, pp. 38-40)

By this time it was too late to consider the caveat that the term "curriculum" in *Professio Regia* is neither the earliest use nor does it refer to nineteenth century connotations of "the course of study." Nor is it Ramus's. "Curriculum" in *Professio Regia* refers to the ancient sense of *curriculum vitae*. As is typically the case in historiography, things emerge much earlier and in different ways than historians initially claim. Curriculum, in the "modern" sense "first" defined as "course of studies" in *A Technological Dictionary* in 1846 and as "course of study" in the first edition of the *Oxford English Dictionary* in 1893, appears and emerges about 1600-1700 years earlier than Hamilton's claims on Ong and Ramus (Lee & Petrina, in press).

Curriculum historians such as Quinn (2001), Doll and Broussard (2002), and Triche and McKnight (2004) established cases on Hamilton's. "Method," Quinn (2001) states, "according to Hamilton (1990[a]), becomes the catchword of humanist educators from the early 1500s on—the shortcut to reason, of reason, and faith's relinquishing of the infinite, eternal, invisible journey. Method, moreover, is the womb from which curriculum is born" (p. 141). "Ramus is the 'father' of curriculum," she observes, "only in the sense that the first use of the word

'curriculum' educationally applied is attributed to him" (p. 173). Quinn and Davis (2002) then go on to reassert that Hamilton (1990a) documented the first use of "curriculum" "in an educational context from the work of the sixteenth-century thinker Peter Ramus who sought to map out the totality of human knowledge" (p. 236). And again, "curriculum is method's child, and as life's journey is now reduced, regulated, and predetermined" (p. 236). Doll and Broussard (2002) similarly report that "Hamilton has pointed out (1989, 1990) that the term curriculum, used in an educational (not chariot-racing) sense, first appeared in Peter Ramus's 'map of knowledge' (1576) and shortly thereafter in the records of the Universities of Leiden (1582) and Glasgow (1633)" (pp. 28-29). It is true, they assert, that "the term curriculum appears nowhere in educational literature prior to Thomas Fregius's publication of Ramus's mapping of the structure of knowledge in 1576" (p. 29). In "The Quest for Method: The Legacy of Peter Ramus," perhaps better subtitled 'The Legend of Peter Ramus,' Triche and McKnight (2004) borrow on the conventional interpretation:

Hamilton observes that the term curriculum did not become common as a way of referring to a generalized or universally recurring course of study until the midseventeenth century at the University of Glasgow. He links curriculum's educational use to its appearance in a map of the liberal arts by the Ramist arts master, Thomas Freigius, found in his 1576 publication on Peter Ramus's *Professio Regia* (see figure 1 [Figure 2 above]. (p. 51)

Ramus, they say, "refined Renaissance composition pedagogy into what Ong [1958, p. 264] has identified as an 'assembly-line' logic that anticipates the development of thinking machines" (p. 52). In an analysis of "sexuality and the discursive figuration of the child" and homoeroticism, Pinar (2006) relies extensively on Ong (1958, 1961a) and accounts with fidelity how Ramus "often punished his pupils in 'savage outbursts of temper'... not only whipping but also kicking them until they were 'half dead'" (pp. 21-22). The upshot is, as Ong (1961a, p. 36) quotes Ramus's student, "during the violence he never swore."

To make matters worse, curriculum historians built on Ong's (1982) new claim that Ramus "produced the paradigms of the textbook genre" (p. 131). For example, Kalantzis and Cope (1993) assert that "Ramus 'invented' the modern textbook, one of the most distinctive icons of the traditional curriculum of a classical canon" (p. 42). "The Ramus texts were very modern things, in other words," they reported, "even though their subject matter referred way back into the past. Moreover, the formalising of knowledge into a text required a peculiar economy. A very specific logic was applied to the way information was arranged, a logic that proceeded, to use Ong's words, 'by cold-blooded definitions and divisions'" (p. 42). "Nearly five hundred years later," McCoy (2005) acknowledges Ong (1982) and complains, "Ramist influence in the highly lucrative textbook industry in the United States is indisputable, despite moves toward more dialogic modes of education. Indeed, advances in graphic technology may have merely exacerbated rather than mitigated Ramist tendencies" (p. 608). Doll (2008) echoes and claims that Ramus "gave to the western world its first textbooks" and that his "method was indeed to 'textbookize' knowledge" (p. 6). And so it went in curriculum history through the 1990s and across the millennium, with secondary source precariously built on secondary source. In a sense, the entire foundation or edifice of curriculum history is derivative of Ong, who is derivative of Ramus, who is derivative of Gutenberg?

# What if Ong was Wrong?

Just as Ramus claimed that everything Aristotle said was wrong, what if nearly everything McLuhan and Ong said about Ramus was wrong? Indeed, nearly everything we thought we knew about Ramus and curriculum *is* wrong, which amounts to an exaggerated, inflated misreading of the historical record. We managed to turn supposition into fact, which is to say Ramus and the birth of curriculum from the womb of method is the stuff of legend, not history.

In addition, the historical reduction of Ramus to an early modern technocrat defies evidence inasmuch as continuity with the past rather than historical change and novelty characterizes Ramus's work. In the work of McLuhan, Ong and nearly all historians of curriculum to follow, Ramus is a crafty dialectician, technician, or technocrat. According to McLuhan, "Ramus taught a utilitarian logic for which he made the same claims as pragmatists do for 'scientific method'" (1944, p. 28) and "welded Ockham's theories into a tool of applied theological controversy" (1947, p. 367). Ong (1951) expanded the thesis, noting that Ramus "developed the same sort of jargon as 'technocracy' or other modern plans to reduce all life to scientific formula— methodos, systema, syntagma, analysis, technologia, technometria" (p. 266). Much of McLuhan and Ong rests on their interpretation of Ramus's adoption of technologia in a few places to describe certain forms of knowledge. Ong (1958) suggests that Ramus emphasizes "technology' or technologia, originally a systematic treatment of grammar in Cicero." "Ramus will extend 'technology' to other curriculum subjects," he says, "and understand it as the art of arranging the contents of the curriculum properly" (p. 197). This hinges on what technologia meant in Cicero's and Ramus's use. Here, McLuhan and Ong superimpose a mid-twentieth century interpretation of technology on the sixteenth century.

Simply put, says Ong (1958), Ramus's method amounts to "dry-as-dust 'technology' and systematization" (p. 8). "Ramism specialized in dichotomies, in 'distribution' and 'collocation' (dispositio rather than judgment or judicium), in 'systems' (a philosophical 'system' was a new notion generated in the Renaissance), and in other diagrammatic concepts" (pp. 8-9). In the "Ramist concept of method," Ong (1961b) continues, words admitting "neat diagrammatic or semidiagrammatic presentation are those which are methodized properly, whereas those which resist such presentation are not effectively methodized. In principle, every subject properly treated by a Ramist admitted of being diagrammed on bracketed dichotomized outlines of the sort which editors such as Freige or Samuel Sabeticius use to present Ramus' works" (p. 168). "Ramus (1515–72) produced the paradigms of the textbook genre," Ong (1982) repeats, "textbooks for virtually all arts subjects (dialectic or logic, rhetoric, grammar, arithmetic, etc.) that proceeded by cold-blooded definitions and divisions leading to still further definitions and more divisions, until every last particle of the subject had been dissected and disposed of" (p. 132).

Historians swallowed, hook, line, and sinker, Ramus's judgment that his work was a break from the past, a historical division between modern, medieval, and ancient times. They swallowed the moderns' claim to victory of having pierced, via enlightenment, through the shadow cast by the ancient texts. On the other hand, we inflated the powers of Ramus and the Ramists to superhuman and near supernatural realms, beyond all historical recognition. Like Zelig, Ramus is the early modern chameleon of curriculum history, adaptable to any circumstance or fashion of historiography. Ramus and Ramism appear everywhere and do nearly everything wrong to make history.

With exaggerations brought under scrutiny, McLuhan's and Ong's thesis hinges on whether: a) Freige's (1576) *diagrammata* or *schemata* are Ramus's or found in Ramus's works; b) the *diagrammata*, *schemata* and *tabulae* are unique to Freige and Ramus or the mid to late sixteenth century; and c) Ramus exploited printing in groundbreaking, novel ways and whether the "printing revolution" was as revolutionary as claimed.

McLuhan (1944, p. 28) argues that Ramus was defined by "dialectical dichotomies" and method. For Ong (1958, p. 8), Ramus is defined by "neat diagrammatic or semidiagrammatic presentation." However, the *diagrammata* in *Professio Regia* are *not* Ramus's; rather, Freige diagrammed Ramus's works like contemporaries who diagrammed various other works. The type of *diagrammata* found in Freige's representation of Ramus's works were common and quite likely formed the newfound collaboration between scholars and typesetters in the late fifteenth and sixteenth centuries. Valentin Erythraeus's *Diagrammata*, published in 1555, provides an effective counter to McLuhan and Ong's claim. Other books by Erythraeus provide similar *diagrammata*. The process of rendering knowledge memorable in diagrammatic or schematic form is exemplary in Ramon Lull's work of the late thirteenth century. Lull is perhaps best known for his *Arbor Scientiae* or "tree of knowledge," written in 1295.

Kalantzis and Cope's (1993, p. 42) claim that "Ramus 'invented' the modern textbook" and Doll's (2008, p. 6) claims that Ramus "gave to the western world its first textbooks" hinge on McLuhan and Ong and on the process of rendering knowledge pedagogical through commentary, criticism or *scholia*. Recall that Ong stressed that Ramus's interests were captured in the question "Is it teachable" rather than "Is it true?" Manuscript, codex and printed book innovations may have changed the form of texts over time but textbooks are recognizable at nearly all points of ancient history. For example, Aelius Donatus's textbooks date from the midfourth century and some historians found their use through the sixteenth century. "Donatus" or donati became shorthand for textbooks. Donatus's *Ars Minor*, an elementary rhetoric textbook, was typeset in various formats and printed in the fifteenth and sixteenth centuries (Mead, 1939). His Latin grammar textbook was printed as *Methodus Grammatica* in 1522.

McLuhan and Ong rely on a 500 year narrative of the printing revolution— of the effects of the printing press on just about everything, including curriculum, consciousness, and the mind— and turned Ramus into a case in point. In Ramus is Gutenberg and agency at the source of curriculum. "One can list without end additional effects," Ong (1982) phrased it, "more or less direct, which print had on the poetic economy or the 'mentality' of the West. Print eventually removed the ancient art of (orally based) rhetoric from the center of academic education. It encouraged and made possible on a large scale the quantification of knowledge, both through the use of mathematical analysis and through the use of diagrams and charts" (p. 127). As Johns (2002) suggested on Eisenstein's (2002) claims to the "printing revolution:" "We soon find that the claim to uniformity [of print across time] is easily exaggerated, for example, as is the degree of discontinuity with manuscript production" (p. 120). In addition to effects, McLuhan and Ong had especially exaggerated the break with about two thousand years of manuscript production. Johns (2004) wrote that in the hands of McLuhan (1962, pp. 144-183), "Ramus was the first man in history to 'surf' on a wave of information launched by new media" (p. ix). Johns had somehow tried to rescue McLuhan and Ong from the slippery slope of history to legend. What McLuhan meant to convey, Johns speculates and exaggerates, "was that Ramus was the first author to see the potential for cultural transformation— a true media revolution— in the new technology of the printing press" (pp. ix-x). To buy this intuition one has to buy the

complementary claim that *Ramus, Method, and the Decay of Dialogue* documents the beginning while *The Gutenberg Galaxy* documents the end of the revolution.

Walsham and Crick (2004)

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The problem, or more specifically the historical challenge, is attending to the 1,600 years between Cicero and Ramus or between Cicero's adoption of τεχνολογία and *curriculum* and Ramus's (or Fregius's) adoption of τεχνολογία and *curriculum*. Even if Ramus merely copied Cicero, giving ancients immediate presence, this does not describe or explain what happened in the ages or days between. On the one hand, historians made a 1,600 years *salto mortale*, the fatal leap, from ancient to early modern. On the other, the historical trail of τεχνολογία and *curriculum* between the ancients and early moderns ran dry. We just do not know what happened to τεχνολογία and *curriculum*, although there are some secondary sources that are helpful (Petrina, 2002; Petrina & Rusnak, 2010). For the most part, the primary sources still hold the answers.

Regarding one trail of sources that has dried, Mitcham and Schatzberg (2009) note that "the Latin transliteration *technologia* was unknown in classical or medieval Latin literature (Cicero used the term once, but only in Greek). There is, then, no continuous history of usage linking the classical Greek τεχνολογία with the current meanings of "technology." Yet the term did reappear in Latin during the Reformation with connotations close to those of its classical roots, in the work of the 16th century French Protestant rhetorician Peter Ramus" (p. 35). Tulley (2008) puts this into starker terms: "Cicero's singular reference to "technologian" is quickly forgotten. For sixteen hundred years, the neologism *technologian* disappears from use" (p. 94). Hamilton (1989) sums up the second, dry trail: "Calvinist fondness for the figurative use of 'vitae curriculum'— a phrase that dates back to Cicero (died 43 BC)— was extended to embrace the new ordered and sequential features of sixteenth-century schooling" (p. 49).

Ong (1958) was among the first to make the *salto mortale*, first from Cicero to Ramus and second from *technologia* to *curriculum*, and the rest is history. For now, we have to proceed slowly, acknowledging that nearly everything we thought we knew about 'Ramus and curriculum' and 'Ramus and technology' is wrong. In effect, nearly everything we thought we knew about the history of the interrelationships between curriculum and technology is wrong. We have to proceed with the challenge of writing histories of curriculum from primary sources, with due caution and skepticism given to secondary sources. The option advised here is neither one of reverting to reverent honor of the memory of Ramus by "speaking of him with gratitude" nor taking yet another revisionist kick at the can. The option, for now, is to write a history of curriculum from antiquity though the seventeenth century without *saltos mortale* and without Ramus (e.g., Lee & Petrina, in press).

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### **Endnotes**

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<sup>&</sup>lt;sup>1</sup> We define legend as "a story with a sub stratum of fact on which imagination has for a long time been at work" (Delisser, 1912, quoted in Lomas, 1994, p. 70). Historiography is defined as the cultivation and maintenance of the ways history is told or silenced and the way the past is made visible or hidden. Both history and historiography attend to choices made or selections of "the raw material traces and evidence of 'what happened' (or what was thought or written or created) and the writing [or telling] of a narrative and argument about the past" (Williams, 2010, p. 305).