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In the Shadow of Petrucci: Why Attaingnant and His Methods Are Lost in History

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In the Shadow of Petrucci: Why Attaingnant and His Methods Are Lost in History

The music printing of Ottaviano Petrucci has been largely regarded by historians to be the most elegant and advanced form of music publishing in the Renaissance, while printers such as Pierre Attaingnant are only given an obligatory nod. While Petrucci’s triple impression method produced cleaner and more connected staves, a significant number of problems resulted, including pitch accuracy and cost efficiency. Attaingnant’s single impression method solved most of these difficulties, while only sacrificing a small amount of visual aesthetic. Despite these advancements, Petrucci managed to dominate the music publishing industry in Venice during his lifetime while Attaingnant achieved success to a lesser degree. How did Petrucci manage to gain a twenty-year legal monopoly in Venice, and how did he stay in tune with his clients’ needs and music demands? The single impression method of Attaingnant outlasted the triple impression method of Petrucci because his technology was more efficient and accurate, but Petrucci was more successful during his time because of his business skills.

Petrucci has often been recognized as the father of music printing, and not without ample reason. However, he was not the first to publish music with a printing press. His first volume appeared in 1501, but several other forms of music publishing led up to this first great work.¹ Liturgical chant had already been printed from type for several decades, wood-block carvings and metal cuts were

occasionally in use, and some books had printed staves with the notes written in by hand.  

Some scholars assert that Petrucci “perfected” the method of music printing, but this also is a bit of an overstatement. Petrucci did not add to or change anything with regard to the actual mechanics of music publishing, yet something in his methodology enabled him to produce undoubtedly the most elegant sheet music available during his time, and for years to come. Unfortunately, today we know very little about the materials, technology, and methods used by Petrucci and his counterparts because none of the actual machinery survives. Most of what we know comes from the printed books themselves, from illustrations of presses and printing shops, or from descriptions. However, from these few sources, we can discover several key facts regarding Petrucci’s paper, type, staves, and ink.

Paper was a major expense of the industry, comprising anywhere from thirty to fifty percent of the total cost of a book. Petrucci’s preferred paper was in landscape format, and was probably measured at 347 x 482 mm, although these numbers are difficult to prove since almost all surviving copies have been trimmed for binding, as is evident from the state of the watermarks. As Petrucci’s career developed, he began using paper of a less consistent quality. Books printed around

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6 Ibid., 110-111.
1510 have paper of variable color, thickness, and quality of finish. It would seem that in 1501 he set out with high standards, but that they began to diminish by the time he left Venice. Another possible explanation might be that as his career developed and the demand for his publications increased, Petrucci couldn't afford to spend as much time scouting out the perfect paper. The fact that he spent a preparation period of three years between gaining his monopoly and publishing his first edition of *Odhecaton A* suggests that he saw his initial works as a springboard for his career, and once he amassed a successful customer base he was not as concerned with paper perfection. One final explanation might be that quality paper simply became less available in Petrucci's later career, either from a lack of supply and demand in the economy or a shortage of materials for paper suppliers. While the creation of paper was certainly a difficult and expensive endeavor, this last explanation seems unlikely since the cost of paper declined during the sixteenth century and one would expect to see an increase if it became harder to obtain.

Perhaps the most valuable information we learn from Petrucci's paper is that he probably had more than one actual press. In certain manuscripts, two or more different kind of papers will run tandem through a series of books. Most likely, this was a result of two typesetters, or *compositors*, working on two presses with the same supply of paper. When one supply of paper ran out, they moved on to the next.

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7 Ibid., 112-113.
8 Ibid., 110.
9 Ibid., 114.
Petrucci’s type was special in a few aspects, but for the most part conformed to the normal practice of the period. One of the defining aspects of Petrucci’s type was his use of a metal known as fused marcasite of antimony.\textsuperscript{10} The characteristics of this metal allowed him to create very fine elements even from his earliest works,\textsuperscript{11} such as \textit{Harmonice Musices Odhecaton A}, in which elements such as flats, clefs, mensuration signs, double bar lines, and ledger lines appear quite thin.\textsuperscript{12}

The actual notes possess great elegance in many of their features: the diamond heads, the elongated stems, and the style of flags. Perhaps the most complex and outstanding detail which Petrucci used to beautify the notes was his use of kerning. A kerned character is one in which the symbol to be printed projects beyond the body of the type. One of the essential elements of the beauty of a font is the different spacing between different letters. Two consecutive letters “w,” such as in “glowworm,” will appear too far apart if they are spaced in the same manner as two letters “m,” such as in “hammer.” The same principle applies to noteheads—especially those with flags—and the evidence suggests that Petrucci dealt with this by mounting his notes on small bodies, with the tails kerned.\textsuperscript{13} In this manner, the flagged notes do not appear widely or awkwardly spaced in relation to the notes with no flag or stem (see Figure 1).

\textsuperscript{10} Ibid., 117.
\textsuperscript{11} Ibid.
Petrucci’s ink does not appear to be exceptional in any way, which probably means he used the normal ink recipes of the time. The ink in most of his editions is still black and glossy, and the few exceptions in which the ink is greyer are probably a result of a faulty impression, not poor ink. Faulty impressions could be caused for a number of reasons, including sizing the paper poorly or not being careful to cover the whole *forme* (the body of type securing in a chase) with ink.\textsuperscript{14}

Basically nothing is known of Petrucci’s actual printing press because none of his technology survives today. While descriptions do exist of general printing presses of the period, they are not clear enough to reconstruct a historic press. Because Petrucci’s printed books reveal little about the actual press and more about

\textsuperscript{14} Ibid., 139.
the materials themselves, it is nearly impossible to know what physical technology Petrucci used and what, if anything, made his unique.\(^{15}\)

Exactly how Petrucci used his press has actually been a point of contention. Of course, the single element which makes Petrucci’s style so outstanding is the fact that he used multiple impressions, but whether he used two or three impressions is somewhat up for debate. Most evidence shows that, at least for the earliest editions, Petrucci used three impressions: one for the staves, one for the music, and one for the text.\(^{16}\)

While the type-setting of staves and text would have been relatively simple, the setting of the music notes would have presented some unique challenges. First, the bodies of the notes would have been different sizes, and second, their vertical spacing in relation to one another would have varied depending on where they were to be placed on the staff. The solution was to use very small pieces, known as *spacing sorts*, to place the symbol at the correct pitch and hold it in place.\(^{17}\)

The last component which influenced Petrucci’s product, although it might be obvious, is the craftsmen themselves. Petrucci probably never employed more than seven employees working on two presses: this number is relatively small compared to other print shops.\(^{18}\) Compositors basically behaved like scribes, and they often made changes—whether deliberate or accidental—to the music and text, including

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\(^{15}\) Ibid., 141.
\(^{16}\) Ibid., 160-161.
\(^{17}\) Ibid., 167-168.
\(^{18}\) Ibid., 179
changes in layout, different fonts, different spelling habits, and different approaches to spacing.\textsuperscript{19}

Up to this point, great emphasis has been placed on the “elegance” of Petrucci’s prints. While the visual appeal of his music is certainly striking, his materials were fairly ordinary for the time. Like any other printer, Petrucci was limited by what his technology and compositors could provide him, and the triple-impression method certainly had its difficulties. First, multiple impressions simply took more time, and the high cost of production limited the amount of music that could be printed at any given time.\textsuperscript{20} Second, great attention and precision was required in order for the staves and notes to line up accurately, and pitch ambiguity in the final product was not uncommon.

Because of this, printers began searching for a way to print music in a single impression. Awarding credit for the first practical application of this method has proven to be very puzzling. Some sources name John Rastell, an author, politician, and entrepreneur from England, as the original source.\textsuperscript{21} Others name Winterburg, from the Viennese “house of Winterburg” as the first.\textsuperscript{22} Without a doubt, however, it was the work of one man that popularized the new method.

When Attaingnant appeared on the scene, the Parisian music industry was a very unsteady market. Several printers, including Michel Toulouze and some

\textsuperscript{19} Ibid., 169.
\textsuperscript{21} Ibid.
\textsuperscript{22} Boorman, \textit{Studies of Music in the 16\textsuperscript{th} century}, 235, 244.
students from the University of Paris were printing music in multiple impressions, but their results were less accurate and by far less elegant than those of Petrucci.23

Attaingnant quickly supplanted them as the most prominent figure in music publishing when he began printing music in a single impression. With his technology, each piece of type contained both the note and a short fragment of the staff, solving one of Petrucci’s most significant problems while creating a few new ones. First, Attaingnant did not have to worry about note accuracy anymore: his notes were by default already printed on the correct line on the staff. Second, his production time was reduced threefold, only requiring one impression. However, he did have to find a way to line up the vertical segments so that they gave the illusion of a continuous staff, and his fragments of staff had to be of equal spacing and thickness for the same reason.24

Significantly less study has been given to the exact materials and methods of Attaingnant, mostly due to the fact that he lacks the kind of historian who, like Stanley Boorman, has relentlessly catalogued the minute details of Petrucci’s operations. Perhaps the scholar most dedicated to Attaingnant’s works would be Daniel Heartz, although he tends to focus more on Attaingnant’s typography than anything else. This is not to say that we do not have studies of Attaingnant’s activities; they are simply not as in depth as those of Petrucci.

24 Ibid., 45-46.
Attaingnant’s earliest works, chansonniers in oblong part-books, use a much smaller paper than Petrucci, about 15x10 centimeters.\textsuperscript{25}

Attaingnant used two distinctly different kinds of type, making a change from Typography I to Typography II in 1530. The noteheads of Typography I were slender and diamond-shaped, with stems that are quite long and thin in comparison (Figure 2).


\textsuperscript{25} Ibid., 66.
The noteheads of Typography II are less peaked and more rounded, and their size is small enough to fit in the staff without overlapping the staff lines (Figure 3).²⁶

While it is difficult to know whether or not Petrucci did his own punchcutting, Attaingnant almost certainly engraved his own type at least for a time during his career, perhaps during his early years. A peculiar dispute between Pierre Simon Fournier le Jeune and a family known as the Ballards—who held a two-hundred-year-old monopoly on music printing from about 1550 to 1756, even though their technology was hilariously outdated—ended up in court, and the resulting documents mention “atteignant” as the inventor of “large chant note carrying its staff,” meaning the individual pieces of type carrying both the note and

its fragment of staff.\textsuperscript{27} Heartz goes into great detail of this court case in his \textit{Historical Study}, but the main conclusion applicable to this discussion is that Attaingnant did indeed engrave his own type for a time.\textsuperscript{28}

During Attaingnant’s later years, however, craftsmen such as Robert Granjon became famous enough to operate as freelance punchcutters, and Attaingnant likely purchased type from him rather than engraved his own. Several examples of Granjon’s type still survive at the Plantin-Moretus Museum in Antwerp and at the Oxford University Press (Figure 4).\textsuperscript{29} A comparison of Granjon’s specimens and

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{granjon_type_specimen}
\caption{Specimens of music type made from Granjon’s matrices. By courtesy of the Plantin-Moretus Museum.}
\end{figure}

\begin{flushright}
\textsuperscript{27} Heartz, \textit{Pierre Attaingnant: Royal Printer of Music}, 56.
\textsuperscript{28} Ibid., 49-56.
\textsuperscript{29} Ibid., 47.
\end{flushright}
Attaingnant’s later publications leads the author to believe that Attaingnant did indeed purchase and use type from Granjon.\textsuperscript{30}

With regard to spacing, Attaingnant and Petrucci took completely different approaches to the relative positions of the notes. While Petrucci used kerning to space his noteheads as evenly as possible, regardless of flags and other protruding elements, Attaingnant seemed to give more consideration to the duration of the notes, the position of the lyrics, and the spacing across systems.

In Figure 5 one can see wider spacing given to the phrase “luy dus me voulez vous” to accommodate the lyrics. However, Attaingnant has given this page narrower spacing as a whole in order to fit all the music on one page.

As mentioned previously, Petrucci was, in many historians’ eyes, the father of music printing, and his publications represent “perfection” in elegance and general aesthetic. However, after this review of his materials and methods, and their comparison to those of Attaingnant, a convincing case has yet to be made for their superiority. Petrucci’s ink recipe was common for his time, and the quality of his paper was widely inconsistent throughout his career. His type, while spaced very evenly through the process of kerning, was never altered to accommodate lyrics or note duration. While Petrucci may or may not have engraved his own type, we know that Attaingnant had his professionally manufactured in his later career by Granjon, a decision which, in the opinion of the author, improved the visual quality of his publications. Petrucci’s method was expensive, with regard to setting the type with spacing sorts and with regard to the multiple impressions. Even after all this, the notes were not guaranteed to end up on the correct line of the staff. Attaingnant solved a great deal of these problems by capitalizing on the single impression method, and yet history seems to have forgotten him, merely because his staff lines aren’t as consistently smooth. Could Petrucci’s success and Attaingnant’s relative obscurity be explained by some other reason than their technical procedures?

While he was alive, Petrucci dominated the music publishing market in Venice for the simple reason that he held a legal monopoly. Petrucci obtained this monopoly, known as a “privilege,” in two ways. First, Petrucci applied to the Venetian Signoria in 1498 for a privilege by presenting it as a patent. He claimed to have discovered a convenient way to print polyphony, although other printers of the time were completely capable of setting type for two impressions and registering
them accurately.\textsuperscript{31} As mentioned before, it would be a mistake to claim that Petrucci truly “invented” a new method of printing when his true skill lay in the expert application of old methods. Nonetheless, Petrucci apparently spun a convincing case—with no small amount of flattery towards the city of Venice—since he was granted his privilege.

Petrucci’s patronizing approach was not unusual however. Standard practice of the time was to praise the city to which one was applying, and to mention the strengths of the city while making a case for one’s own loyal citizenship. Petrucci abided by this convention and followed it with a piece of deliberate campaigning for granting his privilege: Petrucci argued that his method would make it much easier to print chant, a significant benefit for the Christian religion. Boorman finds this claim to be a bit ingenuous, since there had been over fifteen years of successful liturgical music printing in Venice, and Petrucci’s method was comparable with that employed by the printers involved.\textsuperscript{32} Boorman suggests that since Petrucci couldn’t point to any direct benefits for the Venetian state or economy, he felt it necessary to produce some other form of advantage, and chose the benefit to Christianity in order to appeal to the moral sense of the city’s rulers. The author finds that just this kind of marketing is sprinkled throughout almost all facets and time periods of Petrucci’s career, from his privilege, to his technology, to his musical content.

Lest we conclude that Petrucci was merely at the head of a money-making scheme and he was enabled to sit on his laurels for the next twenty years, it must be

\textsuperscript{31} Boorman. \textit{Ottaviano Petrucci: Catalogue Raisonne}, 77-79.
\textsuperscript{32} Ibid., 77.
noted that his privilege was not necessarily respected by other printers. Although historically we can hardly tell to what extent his privilege was followed, records do exist of certain publishers petitioning to prevent other publishers from printing texts they should not.\textsuperscript{33} While none of these are attached to Petrucci, it is likely that he had to compete with many minor names.

More than his city-wide monopoly, Petrucci had to find a way to distance himself not only from these smaller names in music publishing but also from the international market. At this point in Petrucci’s story it is necessary to introduce two new characters: his editor, Petrus Castellanus, and his most-often published composer, Josquin des Pres.

While we know almost nothing about the life of Castellanus, significant research on his contribution to Petrucci’s works has been done by Bonnie J. Blackburn.\textsuperscript{34} Castellanus is mentioned in \textit{Odhecaton B} as the editor and Petrucci notes that it is from his “musical garden” that at least some, if not all, of the music has been selected.\textsuperscript{35} According to Helen Hewitt:

\begin{quote}
As an editor... he did an excellent job. As one compares the version he prepared for publication with manuscript readings, one is constantly impressed with the accuracy and good judgment he displayed. In almost every case where a choice is possible the \textit{Odhecaton} proves the better version. Of actual errors in the print the number is too slight to warrant mention. And his choice of compositions shows his penetration into the art of musical composition of his time.\textsuperscript{36}
\end{quote}

\textsuperscript{33} Ibid., 84.
\textsuperscript{35} Ibid., 17.
\textsuperscript{36} \textit{Harmonice musices odhecaton A}, ed. Helen Hewitt and Isabel Pope (Cambridge, MA: Medieval Academy of America, 1942), 9-10.
No doubt Castellanus’ careful selection of appropriate and relevant music contributed to the marketability of Petrucci’s prints.

Perhaps no selection of music in Petrucci’s works is more outstanding than those works by Josquin, perhaps the most renowned composer of vocal music in the Renaissance and one of the first international musical celebrities. Prior to Petrucci’s first publication of Josquin’s works, we have only eight of the composer’s motets in seven manuscripts that most likely predate 1502.37 Although the number of manuscripts which have been lost can only be speculated, the current evidence suggests that Josquin may have been virtually unknown before Petrucci began to print his music. Although Petrucci published the works of many other Franco-Flemish composers, such as Compere, Gaspar, Brumel, Obrecht, Agricola, and Ghiselin, Josquin was without a doubt his most often published. As Josquin rose to fame through his motets, especially those published in Petrucci’s Motetti A of 1502, it is difficult to determine which entrepreneur promoted the other. Did Petrucci, a well-known music publisher through his Odhecaton A, champion the music of a budding composer and thus give it prominence in the public eye? Or did Josquin, the rising composer of polyphony, provide the material necessary for a novice music printer to gain an international reputation? In the opinion of the author, these two businessmen rose at roughly the same rate, promoting each other equally with their respective skill set. Petrucci was nothing if not savvy, and as the works of Josquin became more and more in vogue, he published what the public demanded.

Comparing Petrucci’s business model to Attaingnant’s is a stark contrast indeed. Attaingnant probably did not have an editor selecting the works to be published, and thus he most likely went through this process himself. While Petrucci had the advantage of delegating this task to someone apparently more specialized (we do not even know if Petrucci was a musician at all), Attaingnant was loaded with the responsibilities of both compiler and publisher.

In his early works Attaingnant shows a definite preference for lament-type poems rather than light, “popular” ones. Drinking songs, pastorals, and narratives only account for a small number of the pieces—twenty percent or less. As his career developed, Attaingnant does show a shift towards these types of more popular pieces, such as dance music.38 This is not to say that Petrucci only published lighter, more frivolous kinds of music, or that Josquin’s music was unsophisticated. However, never in his lifetime did Attaingnant establish any sort of “partnership” with a composer or foster the popularization of any kind of new music in the same way as Petrucci and Josquin.

In many ways, Attaingnant’s historical longevity has been cut short by his lack of marketable zing. His notes were printed with perfect accuracy, his single-impression method was much cheaper, and his work flow would have been three times as efficient, but somehow he lacked the “right time, right place” opportunities that Petrucci always seemed to have. Marilee J. Mouser writes about Petrucci:

Long before the advent of the Hollywood sequel, entrepreneurs realized that their success was dependent not only on innovation, creativity, and

presentation, but also on capturing the interest of the market. A product that is beautiful and unique may have aesthetic value, but unless it also has market value, it is of little use in a capitalist venture.39

The single impression method of Attaingnant outlasted the triple impression method of Petrucci because his technology was more efficient and accurate, but Petrucci was more successful during his time because of his business skills. Because Petrucci dominated the music printing market both in the city of Venice and internationally, and because he associated himself with the life and works of Josquin, he permanently sealed his place in music history as the most prominent publisher of music in the Renaissance.

Bibliography


