Dulos, Not Duloz: Pierre Edelestand Stanislas Dulos (1820-1874)

By Farley P. Katz[1,2,3]

The Ottoman Empire issued its second design of stamps, commonly known as the "Duloz" stamp, beginning in 1865 (Figure 1). According to Max Passer, the Turkish Ministry of Finance designed the stamp but the die was engraved by a M. Duloz, a Frenchman, and the Poitevin firm in Paris printed the stamps by typography.[4] Passer quoted an 1867 article by "Dr. Magnus" (pseudo. for Dr. Jacques Amable Legrand, the "father of French philately") in *Le Timbrophile* about the Paris International Exhibition (the "Exposition Universelle") of 1867.[5] Passer understood that Duloz had invented a process by which he could convert a recess-engraved die (or intaglio) into a "cliché" for typographic printing, which he presumably used in preparing the plates.

Figure 1. Ottoman stamp 1865

A translation of Dr. Magnus' article, "Review of the Postage Stamps in the French Exhibition," appeared in the September to November 1867 issues of *The Philatelist.* M. Duloz exhibited in that show and included his then recent Ottoman postage stamps that came in six values, as well as the corresponding postage dues or "chiffre taxe":[6]

> In the same machine gallery, M. Duloz, Class 95, exposes specimens of metal engraving and patterns of impressions executed by means of these engravings. He is the inventor of a procedure which is a wonderful combination of science applied to the art of engraving, reproducing an artist's design on copper, either in cameo or intaglio. From a plate made for *taille-douce* he forms a typographic die. This corner of the machine gallery is a branch of his workroom, where the plates are engraved and printed at the same time. All around figure the productions. In one frame are the Moldo-Wallachians, with Prince Couza's effigy, four blue, two orange, two carmine and four violet. In the centre are four of the French empire stamps, blue, lilac, orange and carmine. In a similar frame are the Ottoman labels. *In a larger one, near the door, are the Ottomans, both postals and chiffres-taxe*, in series of six, as well as the commercial labels of the same empire; then four sheets of Moldo-Wallachians, orange, violet, carmine and blue; then three rows of French commercials, blue, violet, and orange. (Italic emphasis supplied by author).[7]

The Moldo-Wallachian stamps were essays for Romania that Dr. Magnus attributed to Duloz.[8] Are these the 1864 unissued essays pictured in the Scott catalogue? Or proofs for the 1865 issue (Scott 22-25)? The colors seem right for this. Unfortunately, I have no idea what were the Turkish commercial labels that Duloz engraved. The French commercial labels may refer to revenues, discussed below.

In other galleries there was an exhibit of stamps engraved for Poitevin, the company for which Duloz worked. His Ottoman stamps and others were included:

> In M. Poitevin's cases we again find the Ottoman stamps, for this engraver's exhibition is in two parts. In one are found entire sheets of the 10 paras, the 20p. stamp and *chiffre-taxe,* the 1 piastre and the 2p., and a quarter of a sheet of 5 piastres. There are to be seen, moreover, the French commercial and telegraphic, of which we shall speak anon. On one side of the glass case, in two rows of eight stamps each, may be

seen the 1p. pearl-grey, the 2p. blue, the 5p. red, and the 25p. orange, as well as the 10 paras green, the 20p. orange-yellow, and the brown 25 piastres *chiffre-taxe*...[9]

The author went on to describe a display of "French *timbres de dimension*... worked off under M. Poitevin's direction in his stamp atelier," which "depict the arms of the French empire on a shield, upon the imperial mantle, surmounted by a crown." These are the 1864 "Dimension" revenue stamps for document tax based on size of document,[10] assigned numbers 9-14 in Forbin's *Catalogue de Timbres-Fiscaux*[11] (Figure 2). Then he described "intended French telegram stamps" that "are very similar in type to the old adhesive *dimension* labels [the 1862 Dimension stamps, Forbin nos. 1-8]: representing a crowned eagle holding a thunderbolt, within a coloured oval." In the upper corners are bees. These appear to be the telegraph stamps issued the following year (Figure 3). Finally, the author concluded "We imagine these stamps have been modified on the primitive die, *and multiplied by the method of M. Duloz.*" (Emphasis supplied.) One or both of these revenues may be the French "commercial labels" displayed in Duloz' case as examples of his work. And what about the four "French empire stamps, blue lilac, orange, and carmine"? Could those be the French Colonies stamps of 1859–1865 (Scott no. 1-6; Figure 4)? Blue, orange and carmine are the colors of the higher values, but I do not know of any in lilac. Did Duloz engrave those also? I don't know, but it is clear that the Turkish second design stamp was not the only stamp that Duloz engraved.

Figure 2. French Dimension revenue 1864.

Figure 3. French telegraph stamp of 1868.

Although the Ottoman stamp has long been known as the Duloz issue after its engraver, his given name or names have been elusive. His name is not provided in Passer or in Pulko or any other philatelic reference I have consulted. I had searched extensively on the web, in old philatelic catalogues and articles and have asked other philatelists, but I had been unable to identify Mr. Duloz. In January 2012 I lamented in *The Levant* that the new book on Max Plantinga's magnificent Duloz collection "does not answer a question that has nagged me for years – what was Duloz' first name?"[12] Surely, someone so important in the history of Turkish philately should be better known.

Recently, I tried again. One Google search turned up a snippet view of a 1926 journal *Printing,* discussing a method of using mercury to make a printing surface by "P.E.S. Duloz, a French inventor, who had an English patent No. 447, or 1860." A quick email to the British Patent Office inquiring about patent no. 447 led me to the British Library, where Steve van Dulken kindly sent me a weblink to the *London Gazette* of May 15, 1860. There on page 1842 appeared the following summary of patent 447:

> Pierre Edelestan Stanislas Dulos, of No. 60, Boulevart [sic] Strasbourg, Paris, Metallic Plates Engraver, has given the like notice in respect of the invention of "improved process for engraving metallic surfaces either in relief or sunk lines, applicable to copper plate presses, and to ordinary printing presses."[12]

Figure 4. French Colonies stamps of 1859–65.

M. Duloz is nameless no more! He is Pierre Edelestand[15] Stanislas Dulos! – a worthy name for a legendary engraver.

The misspelling, Duloz instead of Dulos, kept this information hidden. Searches with the Dulos spelling then led to the complete text of his 1860 patent application. It appears in a volume digitized on Google Books.[13] The patent was filed on February 18, 1860 and granted on August 30, 1860.[14]

The patent describes a process based on the fact that mercury and certain amalgams of mercury will adhere to silver plates only where the silver is exposed and not where the plate is covered by certain substances such as varnish or a lithographic pencil line. In addition the mercury amalgam will form a raised surface on the parts where it adheres, and will react with the silver to form an insoluble compound. Dulos recognized these qualities could be used to produce a recess–engraved plate (intaglio) by first drawing on a flat silver or silver–coated copper plate and then covering the plate with a mercury amalgam that will adhere everywhere but where the drawn lines are. When hardened, the mercury will produce a plate with recessed lines corresponding to the drawn lines, which can then be used as a mould to produce an intaglio plate. The same process can also be used to produce a surface printing plate (typographic) by treating the plate so that only the drawn lines have the silver base exposed. By washing the plate with a mercury amalgam, the mercury will adhere only where the drawn lines are exposed, producing a plate with raised lines suitable for making a mould for a typographic plate. Finally, he recognized that the same process can be used to make intaglio or typographic plates of drawings and prints. Passer was confused about this procedure and mistakenly thought that it involved creation of a typographic plate directly from an intaglio one; what was said is simply that both types of printing plates can be made starting with a flat (silver–coated) copper plate, used traditionally for intaglio.

Apparently he used this process to prepare the typographic plates for printing the Duloz stamps from the designs provided to him.

Dulos had also applied for the same patent in France on December 30, 1859. It was described as "Un nouveau procédé de gravure des planches d'impression en creux et en relief" ("a new process for engraving printing plates in hollow and relief").[15] In that work he is referred to simply as "sieur Dulos, à Paris."

But the correct spelling leads us to much more than just patents. In 2001, Klaus Hentschel, a renowned historian of science and technology, and his wife published a long article about Dulos! The article is entitled "An Engraver in Nineteenth Century Paris: The Career of Pierre Dulos."[16] In 2005 Hentschel published a second article on Dulos in German.[17]

Hentschel's article tells us much about Dulos' life. Pierre Dulos, or more fully Pierre Edelestand Stanislas Dulos, was born on June 1, 1820, in Dax, a small town in the Landes department in the far southwest corner of France.[18] Between 1835 and 1838 Dulos studied industrial arts at the local École Nationale des Arts et Métiers in Angers.[19] On January 26,1860, he married Lucie Legrand with whom he would have two children.[20] By late 1850 or 1851 he was in Paris working as an engraver for the Parisian Académie des Sciences and between 1852 and 1874 he executed a great number of copper engravings of technical subjects, both for the Académie and the publisher Imprimerie Loiguon & Cie.[21] His works were signed simply "Dulos sc" for "Dulos sculpsit," i.e., engraved by Dulos, a name rather rare in France, allowing him to dispense with his initials, which would have been the common practice.[22] Many of his engraved plates appeared in technical journals such as the *Annales de Chimie et de Physique*.[23]

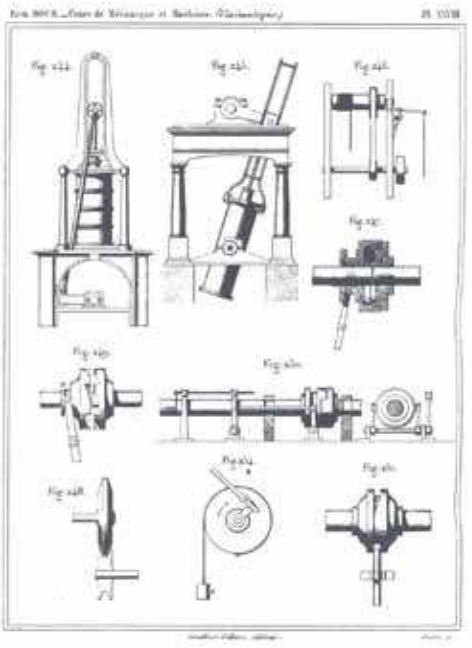

Figure 5. Bour, Cours de Mécanique et Machines, 1865.

Figure 6. Adam Jerzy Czartoryski 1860.

Dulos produced a great variety of engravings including not only illustrations of light spectra and chemical equipment, but also images from "architecture, portraiture, the decorative arts, and even commercial advertising."[24] See Figures 5 and 6 for examples. He also engraved topographic maps for the French Ministry of War and the Harbour Commission.[25] In recognition for that work he was made a Chevalier de la Légion d'Honneur in 1867.[26] Dulos was, Hentschel tells us, "one of the most highly skilled technical engravers of his time."[27]

However, Dulos was not just a technician; he also was a chemist and inventor and he enjoyed great success from the engraving process that he invented and patented. Indeed his process is known as the "Procédé Dulos" or "Dulos Process," and also as "capilligraphie," a term derived from the capillary action on which his invention is based.[28] He was also awarded a gold medal by the Société d'Encouragement pour l'Industrie Nationale for his engravings and invention.[29]

In his later years Dulos employed many workers to enable him to keep up with his growing commissions.[33] Dulos died in Paris on April 15, 1874 at age fifty-three.[31] One wonders whether Dulos' extensive use of mercury may have contributed to his early death.

Hentschel's article was based primarily on archival sources, notably the inventory of Dulos' estate, his marriage contract and civil and church records, as well as the books and journals containing his engravings. Since the work is based on primary sources, including numerous signed engravings, we may confidently accept that his last name was indeed spelled with an "s" – Dulos – and not Duloz as he is known in the Turkish philatelic world. Hentschel also twice spelled one of his given names "Edelestand," with a final "d" not present in the printed version of his English patent.[32] Again, we may take that as accurate.

I am not entirely sure where the Duloz spelling came from. The earliest philatelic reference to the stamp, from which I have obtained information, is the aforementioned

Dr. Magnus article about the Paris International Exhibition of 1867, in which his name was spelled Duloz. Dr. Magnus had a number of inaccuracies in his article;[33] perhaps the spelling is another of his mistakes. In any event at some early date his name in the Turkish philatelic world became Duloz and remained so thereafter, with only rare exceptions where is has been spelled with an "s."

Hentschel's article will seem surprising to philatelists in one respect – he was entirely unaware that Dulos engraved stamps, let alone that he is of legendary stature in the world of Turkish philately and that one of Turkey's most interesting stamps bears his name.

Although there is no mention of Turkish stamps, Hentschel does note that in January 1874, Dulos had contracted with Grant & Company of London to prepare the plates for the engraved bonds of the Ottoman Railway[34] This leads to interesting questions: Was there some connection between Dulos' original 1865 stamp commission and the later Ottoman Railway commission? How did Dulos get the original commission anyway? Unfortunately, I have no answers.

It is also interesting that Hentschel, too, was frustrated by the elusiveness of Dulos' given names:

> Strangely enough, neither [the] city-almanac entries nor any other publications describing Dulos's noteworthy inventions and improvements in printing technique... divulge his given names.[35]

One might speculate that Dulos indulged a bit of artistic ego similar to some Renaissance artists. Finally, searching with the correct spelling led to the spring 2007 auction catalogue from David Feldman in which there was offered a collection of French fiscal proofs and essays that had been awarded seven international gold medals.[36] Included in the collection were no less than "104 pièces de Dulos dont épreuve unique, essais avec chiffres non retenus (rarissime)"("104 Dulos items including a unique proof and essays with unused values."). Dulos indeed engraved many revenue stamps and there is much material for an in depth study of his philatelic productions.

I set out to identify Duloz' first name; I was rewarded with three! – surprising certainly. However, I was even more surprised to discover that the only name I did know – or thought I knew – Duloz, was not correct. Duloz in fact is Pierre Edelestand Stanislas Dulos.

In the course of preparing images for this article, I noticed something in the lower left portion of the heraldic mantle or cloak on the Dimension stamps. There, in tiny capital letters less than a millimeter high, is written DULOS. See Figure 7. The correct spelling of the engraver's name, thus, has been right in front of us all the time. Perhaps this is why, despite Dr. Magnus' error, Dulos' name is spelled correctly in the world of French philately.

Figure 7. French Dimension stamp detail.

Acknowledgement

I received invaluable help in finding obscure references for this article from Neil Coker formerly of the American Philatelic Research Library, for which I am very grateful. I also owe thanks to Klaus Hentschel, Gene Fricks and Robert Abensur for their assistance.

Endnotes:

[1] Farley P. Katz, *The Levant,* Vol. 6, no. 3 (Sept. 2011): 37-41.

[2] Andreas Birken, translator, "Dulos, nicht Duloz," *Türkei-Spiegel,* no. 98 (April 20, 2011): 32-42.

[3] Farley P. Katz, "Dulos, Not Duloz: Pierre Edelestand Stanislas Dulos (1820-1874)," *OPAL,* no. 229, (May 2012): 22-31.

[4] Adolf Passer, *The Stamps of Turkey* (London: The Royal Philatelic Society, 1938): 22-24. Passer's statedment that the stamp was designed by the Ministry of Finance is erroneous. See Kaan Ertem, "About Ser-Sikkeken Abdülfettah Efendi: Designer of the Tughra Stamps," *OPAL.* No. 202 (2001): 46, 48-49, and my forthcoming article about the designer.

[5] I have not located a copy of the article in *Le Timbrophile.* See also Legrand, Dr. Jacques Amable. *Manuel de l'Amateur de Timbes* (Paris: E. Bernard et Cie, 1867). Phllips, Charles J. "Dr. J.A. Legrand (Dr. Magnus), Father of French Philately," *Stamps,* January 14, 1933: 153. Anon., interview with Dr. Legrand, *Postal Journal of Great Britain,* 16 (190) October 25, 1906: 169. Anon., "Death of Dr. Legrand," *London Philatelist,* 21 (247) July 1912: 177-178. Melville, Fred J. Obituary, *Postage Stamp,* July 6, 1912.

[6] Apparently the postage dues included the 10 para blue, which was not regularly issued, but exists as an essay.

[7] *The Philatelist* (October 1, 1867): 161, 163.

[8] See "Exposition Universelle de 1867," *Le Timbre-Poste,* 5th An., no. 50 (August 1867): 70, correcting several errors of Dr. Magnus and attributing the Couza essays to M. Stern, whose display was next to Dulos'. But see http://www.romaniastamps.com/essays/page4.htm (visited August 14, 2011), attributing the Couza essays to "J.Dulos."

[9] *The Philatelist, op. cit.*

[10] Charles F. Bastable, *Public Finance* (London: Macmillan and Co., Ltd., 3rd edition 1917): Bk. 4, Ch. 8, Sec. 5.

[11] "Book Review, The Duloz Issues of Turkey 1865-1887 formed by Max Plantinga," *The Levant,* vol. 6, no. 1 (January 2011): 12, 15. Plantinga's collection was recently auctioned. See *Auktionhaus Christoph Gärtner GmbH & Co. KG, Auktion 19, 29 August – 2 September 2011, Vol. 2, Single Lots: Europe, nos. 10000-10356.*

[12] The notice also appeared in the *London Gazette* for March 2, 1860, p. 907.

[13] As we shall see, Edelestand has a final "d."

[14] Alexander Macintosh, *The Repertory of Patent Inventions and Other Discoveries and Improvements in Arts, Manufactures, and Agriculture: being a Continuation, on an Enlarged Plan, of the Arts and Manufactures: a Work Originally Undertaken in the year 1794, and Still Carried on, with a View to Collect, Record, and Bring into Public Notice, the Useful Inventions of All Nations, Enlarged Series,* Volume XXXVI, (London: July–December 1860): 390-395. See http://books.google.com/books?id_CwcLAQAAIAAJ.

[15] *Description des Machines et Procédes pour lesquels des Brevets d'Invention ont été Pris sous le Régime de la Loi du 5 Juillet 1844,* Vol. 73 (Paris, Imprimerie Nationale 1871): 316-319, digitized online on HathiTrust. See http://hdl.handle.net/2027/coo.31924062401900.

[16] Vol. 15, no. 1 (2001): 64-102.

[17] Klaus Hentschel, "Auf den Spuren eines Pariser Kupferstechers des 19. Jahrhunderts" ("On the Trail of a Parisian Engraver of the 19th Century"), in Beate Ceranski & Andreas Kleinert (eds.), *Auf den Shultern von Zwergen, Essays an der Grenzen von Physik und Biographie* (Berline & Liebenwalde: ERS-Verlag 2005): 35-75. I have not read this article.

[18] Hentschel, *supra:* 74-76.

[19] *Id.*: 74.

[20] *Id.*: 74, 76. My thanks to Robert Abensur who provided the birth record from the French National Archives for Lucie Legrand Dulos, establishing that she was not the daughter of Dr. Legrand. If she were, this would have introduced even more questions regarding Dulos' connection to him and the misspelling of the name.

[21] *Id.*: 65-66, 73.
[22] *Id.*: 65, 76.
[23] *Id.*: 79.
[24] *Id.*: 81.
[25] *Id.*: 81.
[26] *Id.*: 71.
[27] *Id.*: 70.
[28] *Id.*: 79, 81-82.
[29] *Id.*: 85.
[30] *Id.*: 84 & n. 70.
[31] *Id.*: 75.
[32] *Id.*: 73, 77.
[33] See no. 8, *supra.*
[34] *Id.*: 84. I do not know if these were ever executed.
[35] Hentschel, *supra*: 73.
[36] David Feldman SA. *Rarities of the World* (Geneva: David Feldman S.A., April 19, 2007): 31.