

The Three Dimensional Character of Early Printed Greek ¹

One of the more interesting coincidences of history is the invention of moveable type with the accompanying explosion of printed books and the Fall of Constantinople resulting in the end of the Empire of Byzantium. Exiles from Byzantium came to Italy and other areas of Western Europe at just the time that printing with moveable type was beginning. Printing Greek however presented many problems for the printing house. There was no established alphabet for Greek as there was for the most part for Latin and other Western languages. Before Didot and Porson,² Greek was written in a miniscule form and rather than adopting a new alphabet to the writing style of the Greeks émigrés, the printers of the time merely created vast arrays of ligatures to follow and imitate the writing of those émigrés and the miniscule of the 14th through 16th centuries. Anyone who first discovers a book in Greek printed in this Renaissance style is often at a loss to read it without a key to the various ligatures used.³

Aldus Manutius (c1450-1519) was one of the earliest printers to print Greek classic texts at Venice. Aldus is often referred to as Aldus the Elder to distinguish him from his grandson known as Aldus the Younger. Aldus was a Humanist and scholar of the Greek and Latin classics. He studied Latin under Gasparino da Verona in Rome and Greek under Guarino da Verona at Ferrara, and later with Giovanni Pico in Mirandola. With Manutius began a tradition of scholar printers who dominated printing and classical studies in the Renaissance.⁴ He was responsible for the *Editio Princeps* of the Works of Aristotle in five volumes, except, curiously, the *Rhetoric* and *Poetics*. Francesco Griffio, the famous punch cutter, was responsible for making the punches which reflected Manutius' type designs. This is especially true of the Greek forms and the Italic form which Griffio and Manutius invented. A significant collection of Manutius' texts can be found at UCLA, in the Ahmanson-Murphy Collection,⁵ and also in a collection at Simon Fraser University.⁶

In Basel, Johann Froben set up a printing firm having made the acquaintance of Johann Amerbach at the end of the 15th century. He married the daughter of a bookseller and became acquainted with Desiderus Erasmus, the Humanist scholar. Froben published

¹ The font used for Greek in this paper is the creation of the author.

² Firmin Didot (1764-1836) was a French printer engraver and type designer. Richard Porson (1759-1808) was an English classical scholar in Cambridge. Independently they started the trend to write Greek without ligatures.

³ My first encounter with such ligatured Greek was during the research for my dissertation, when the only Greek text for Proclus' *Platonic Theology* available was Procli Successoris Platonici, *In Platonis Theologiam Libri Sex* Hamburg: Portus, 1618 reprinted by Minerva in 1960.

⁴ Encyclopedia of World Biography , 2004 <http://www.encyclopedia.com/doc/1G2-3404707723.html>

⁵ A catalogue of this collection is available. See: <http://unitproj.library.ucla.edu/special/misc/aldexhibit.htm> and <http://www.amazon.com/Aldine-Press-Ahmanson-Murphy-Collection-Incorporating/dp/0520229932> .

⁶ An exhibit of this collection is on-line See: <http://www.lib.sfu.ca/special-collections/projects/aldus> .

Erasmus' *Novum Instrumentum*, the first Greek edition of the New Testament, in 1519.⁷ Froben worked with the designer artist Hans Holbein and created a number of interesting woodcuts, initials, and other illustrations for his publishing activities. Froben died in 1527 without executing his project to print the works of the Church Fathers. However the task of continuing his printing efforts were carried out by his son Hieronymus and son-in-law Nikolaus Episcopius. Consequently Basel not only became a prominent university center but also a significant center of the publishing industry.

A colony of Greek émigrés emerged in Geneva in the 16th century and Franciscus Portus (a Greek) a professor of Greek founded a printing establishment and, along with his son Aemelius, was responsible for printing a number of classical grammars and philosophical and historical works. Franciscus became a Calvinist and Aemelius taught Classical Greek in Lausanne, Kassel and Heidelberg. His son Aemelius continued the printing business in Frankfurt in the early 17th century. At this point Greek grammar and Greek authors, including Proclus and Apollonius of Alexandria (Dyscolus), were brought to German soil, especially to that part of Germany which had become Calvinist.

In Paris the Estiennes, Henry and his son Robert, became the chief printers of their day. Robert also became a Calvinist late in his life escaping from France to Geneva. Henry died in 1520 and Robert, under his stepfather Simon de Colines, began to follow his father's trade. In 1524 he took over the press of his stepfather. In 1539 he became printer of Greek to the King, (*Grecs du Roi*) and the font by that name designed by Claude Garamond became the standard for a number of years after Robert's move to Geneva.⁸ Like most Humanist printers Stephanus (the latinisation of the Estienne name) printed many Greek classics including Plato and Aristotle. The Bible was printed by this firm which was first to divide the Bible into verses. Robert twice published the entire Hebrew Bible, which was a daunting task for the printing house. He worked not only in the classic texts but also devised a *Thesaurus linguae graecae*, which served up to the 19th century as a standard. He also worked with Beza, Calvin's successor, and published the Greek New Testament. He made a concordance of the New Testament and translated Calvin's catechism into Greek. His edition of Plato standardized the pagination of Plato's works. Stephanus' pagination still remains to this day the standard method of referring to passages in Plato's dialogues. Charles the younger brother of Robert became interested in Anatomy and published many illustrated works on Anatomy. It is assumed that Robert's son Paul became heir to the presses in Paris, and Paul's son Antoine became Printer to the King in 1613.⁹ Henry, Robert's son and grandson of Henry the elder, also became a famous printer.

⁷ Erasmus' *Novum Instrumentum* was not an edition of the Greek New Testament as such, but a new Latin translation of the New Testament with supporting Greek Text. Erasmus felt the Vulgate had become corrupted and was anxious to produce a New Testament in the Humanist Latin of his day. See: H. J. De Jonge "Novum Testamentum a nobis verum: The Essence of Erasmus' Edition of the New Testament," *The Journal of Theological Studies* NS, 35 (1984) 395. Erasmus also had associations with Aldus in Venice.

⁸ A computerized font "Grecs du Roi" is available for download at: <http://www.ucl.ac.uk/GrandLatGreekFonts/frameFontsGroupOneSmall.html#GrecsSmall>, but this font, although the glyphs connect, does not contain many of the ligatures common to those used by Stephanus.

⁹ A. W. Ward, *The Cambridge Modern History* Vol. 1 (New York: Macmillan, 1903) 576- .

In Antwerp Christophe Plantin set up his press to publish not only Greek and Latin texts but also to print liturgical formularies. He fled to France in 1562 under suspicion of heresy, but his friends bought up the equipment of the press on his behalf, thus saving it. Plantin's successors continued to print in Antwerp until 1867. In Holland Louis Elzevir (Elsevier) took to bookselling, printing, and publishing and (for at least 3 generations) this family was involved in that trade, principally in Leiden. Although their Greek and Latin texts were considered inferior to Aldus and Stephanus, they achieved some renown for their smaller editions of classics. The modern Elsevier Company takes its name from the family although there is no direct relationship. In England the Oxford University Press operated at the Sheldon Theatre, with the clergyman John Fell at its head. The Fell types are still in existence and from them we can determine the gradual decline of the use of ligatures for printing Greek.¹⁰

Although much of printed Greek was done by non-Greeks it should not be thought that Greeks were not involved. Much of the publishing at the time was done for the Humanist agenda and so the classical texts were of utmost importance. Greece, except for some of the islands, was now under the control of the Ottomans and the only use for printed material in Greek became the liturgical books and pamphlets distributed through churches in the Ottoman Empire. Greek education became a matter for the Orthodox church, and served little purpose other than learning to read, recite, and copy liturgical and Biblical works. The Orthodox Church in Greece felt as if the Fall of Byzantium was due to the corruption Byzantium had come under and so determined Ottoman conquest to be divine retribution and acquiesced itself to, rather than resisted, the Ottoman conquerors.¹¹ But this is not to say that many Greek exiles were not involved in the process. Much of the printing that occurred by the Humanists was done with assistance from Byzantine exiles, and in some cases Greeks themselves became involved not only in teaching Greek and Greek Literature, but also publishing. Franciscus Portus is a perfect example, since he was himself Greek and although his son became professor in Heidelberg, Franciscus himself was one of the scholar printer-publishers in the 16th century.¹² Many of the Greeks involved in the early printing trade were associates and assistants to others, such as Markos Mousouros.¹³ But many also became publisher-printers in their own right, such as Nikolaos Sophianos, Zacharias Kallierges, and Janus Laskaris.¹⁴ Yet for the most part early printing of Greek was done by westerners and confined primarily to the classics. It should be noted though that many

¹⁰ Talbot Baines Reed, *A History of the Old English Letter Foundries* (London: Elliot Stock, 1887) 60-. See also <http://iginomarini.com/fell/>.

¹¹ Three and a half centuries later the Orthodox Church played an important role in the War of Independence for Greece.

¹² See: George Karamanolis, "Was there a Stream of Greek Humanists in the Late Renaissance?" *Hellenika* 53.1 (2003), 19-46, especially 27-30 for Portus.

¹³ See: Bruce Merry, *Encyclopedia of modern Greek literature* (Westport: Greenwood Publishing Group, 2004) p. 335 - .

¹⁴ Evro Layton, "The History of a Sixteenth-Century Greek Type Revisited", *The Historical Review, Institutes for Neohellenic Research* 1, (2004) 35-50

of the early Greek printers were also calligraphers, and calligraphy survived the print revolution for a number of years. By this brief history of Renaissance Greek typography,¹⁵ we can have context to the main point of this essay, namely the 3-D character of the calligraphic early Greek printed text.

Renaissance Printing Characteristics-

When one first encounters an early printed Greek text, one is tempted to give up and search for modern Post-Didot-Porson version of the text. But if there is none, one is forced to learn to read the heavily-ligatured version.

To browse through some early Greek printing may seem to most people an interesting, fun exercise; but for the printing historian it is not so. Ascenders, descenders, abbreviations, contractions, and especially the excessive amount of diacritical marks on the top and even underneath the characters create a loose page. The lines literally dance, thus destroying any sense of base, or x-line.¹⁶

Not only do the characters on the page dance, so to speak, but they jump in and out towards and away from the reader. But this overall appearance is due primarily to the 3-axis method of writing late miniscule. While Western languages were printed and written simply from left to right (→), Greek was not only primarily left to right, but also up-down (↓), down-up (↑), in-out, out-in and in-front-behind, a subject we shall take up shortly after some preliminary considerations..

The first thing one needs to realize with Early Greek Printing is that there are alternative forms for most letters, alternative also in the sense that they are written differently in order to successfully join with other letters. Alpha has many forms the two most common being α and λ̣. Beta for instance has an initial form β̣ and a medial form β̣̣, the medial form being a part of printed Greek in France up to the early 19th century and can be found as late as Migne's *Patrologia Graeca* in the mid 19th century and is sometimes even seen today. Gamma has two principle forms γ and γ̣ with variants of the latter with a long descender γ̣̣. γ̣ is a lowercase version of the uppercase gamma Γ. Delta has two forms δ̣ and Δ̣. Epsilon has several forms, ε, ε̣, ε̣̣, ε̣̣̣, the latter two coming from earlier formal book hands and also a form which resembles a latin 'c' as in κ̣ and it sometimes appears as a mere hook as an attachment to a ligature as in π̣σ̣. Sigma has also several forms. In addition to the ones common in Post-Didot-Porson Greek, there are also initial sigma forms σ̣ and σ̣̣, both of which are lowercase forms and should not be seen as uppercase. Some of the characters are nearly indistinguishable

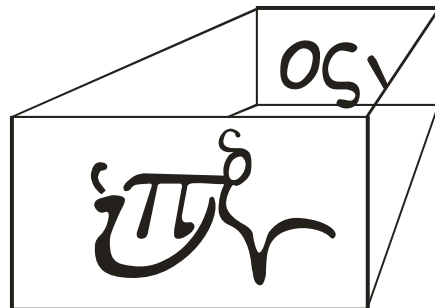
15 For this brief historical contextualization, I rely primarily on John E. Sandys, *The History of Classical Scholarship* 3 vols. (Cambridge: Univ. Press, 1906-8) and A. W. Ward et al. eds. *The Cambridge Modern History* [vol 1] (New York: Macmillan, 1903).

16 Klinis Mastoridis, "The first greek typographic school" *ΗΥΦΕΝ Βήμα για την τυπογραφία* 2, 77.

from one another, especially the nasals nu (μ) and mu (μ), to the beginner. μ is used finally while μ is used continually. One should note the tail on mu. There are several other alternative forms for single letters and they can be found in the appendix.

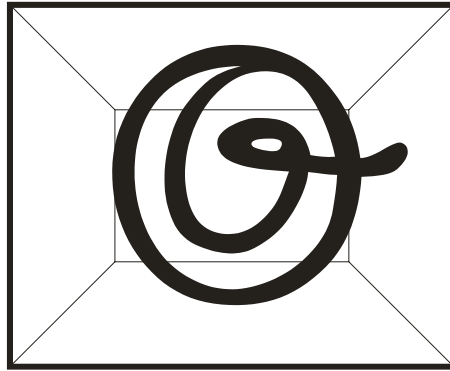
A ligature is a combination of two or more letters and may be either a simple join, or an abbreviation, or an entire word as in the articles and some of the pronouns. The prepositions and other syncategoremata also form the largest group of whole word ligatures. The conjunction $\kappa\alpha\iota$ has several forms, one of which is straight forward $\kappa\alpha\iota$. The others are more abbreviations in nature $\kappa\upsilon$, and $\kappa\epsilon$. Sometimes two or more of these forms can be found on the same page and even in adjacent lines or the same line. $\kappa\upsilon$ and $\kappa\epsilon$ are again being found in Modern Greek texts and signage. Sometimes the circumflex accent appears separate and sometimes it is represented as a hook on one of the letters of the glyph, as in $\kappa\upsilon$, $\kappa\epsilon$, $\kappa\iota$ and $\kappa\upsilon$.

We should now consider the 3-dimensional effect of the glyphs in more detail. The most common up-down are δ , θ , ϕ , σ , while the down-up are represented by other forms of the article τ , τ , τ , τ . Although the articles are the most common forms of up-down and down-up they are not the only ones, ν for $\sigma\nu$ and others for instance. θ is a combination of up-down and out-in. The most common out-in ligature is σ , but there are others formed with a large omicron, σ , σ , σ . There are also other forms where the letters are enclosed within other letters. These in a sense wrap around the initial characters. For instance σ for $\sigma\iota\sigma$, where the ligature σ for $\sigma\nu$ wraps or encloses the initial $\sigma\iota$. σ is another case of wrap around where the tau is wrapped by a ligature for $\alpha\iota$. σ is an epsilon wrapped around by the $\tau\alpha\iota$ ligature (σ). The front to back situation can be seen, if one examines ligatures (sorts) which have what looks like a superscript attached to them but actually is what I prefer to call a hyper-script, since it is written above the main characters of the glyph. Unlike a super-script where the characters are written above the x-line, but to the side of the glyph in a separate space, hyper-script is written strictly above like the accents and breathings. It is combined with the main glyph e.g. σ , σ , σ , σ , σ . The Estienne (Stephanos) sort σ is one of these; where the σ plus the grave accent are written above and slightly to the right of main characters σ , and if one imagines this in a kind of Perspective¹⁷ it is clear that the σ is behind the σ .



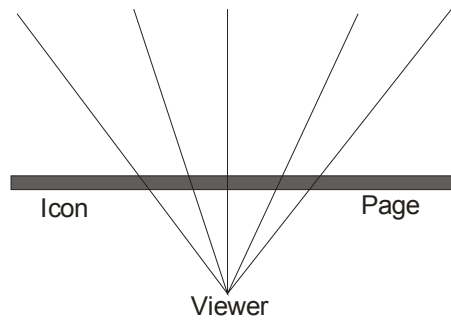
¹⁷ I use the term 'Perspective' as a proper noun referring to a class or type of drawing, Icon, or picture as opposed to 'perspective' which connotes a viewpoint, philosophical or otherwise. Similarly 'Humanist' denotes a member of a Renaissance school of thought as opposed to 'humanist', a modern humanistic viewpoint.

If one imagines a single focus (1-point) Perspective, then it would be obvious that the ligature Θ and other outside-inside ligatures are also such that the ligature is 3-dimensional. In the example below the sigma (σ) is behind the omicron (\omicron).

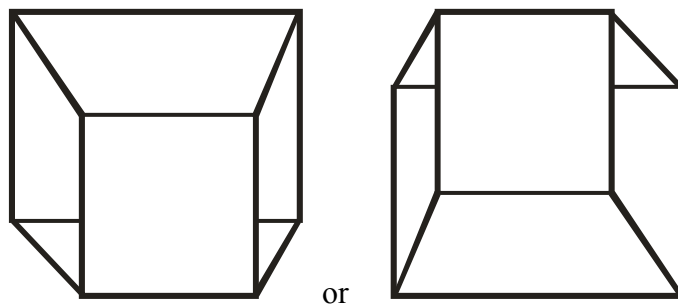


It cannot be determined that the writers of Greek in the Renaissance knew or intended to write in this 3-dimensional manner, one cannot read their minds as to what exactly they were thinking as they were writing. But clearly this 3-dimensional aspect is there in Renaissance writing and printing. I have not as yet discovered any phonological rhyme or reason (syntax or semantics) for this 3-dimensional effect, but if it were intentional, there would be something like the dropping of the stress in the voice with the front-back or out-in characteristic described above. It is clear, however, that with this 3-dimensional effect the writing does make the text dance over the page.

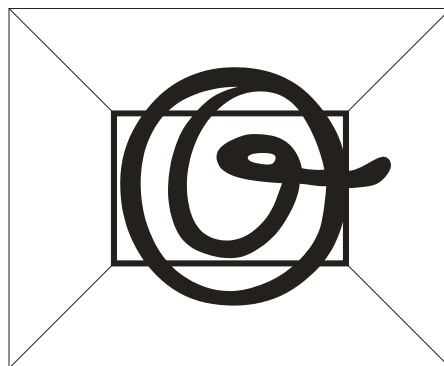
The invention of Linear Perspective is generally attributed to the Florentine architect Brunelleschi, at about the same time as printed Greek in this style came into existence, but this may only be coincidental. With the number of glyphs in miniscule from earlier centuries which are hyper-script in character, it is doubtful that the writers and printers of the Renaissance had intended this 3-dimensional character. Or did they? One of the ways the Medieval world represented Perspective in artwork was to note the relative importance of the object compared to other objects. Thus the painting or icon had a relative size delineation of objects, rather than a delineation of the space in which the objects reside. In other words it is the relative importance of the object that determines its size rather than the distance from the viewer. But additionally, what was in Perspective in Byzantine and Russian iconography was what is called Reverse Perspective or Byzantine Perspective, where the lines of the Perspective converge at the viewer rather than at some point in the visual space away from the viewer (in the icon).



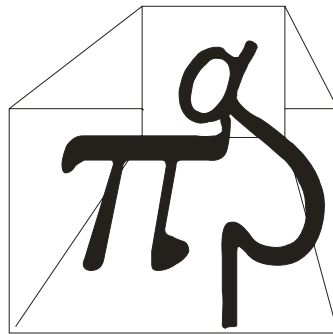
Philosophically the Reverse Perspective centers the icon or page in the viewer and not what is viewed. This is important theologically in iconography and is responsible for the interesting feature of Byzantine icons that from whatever angle the icon is viewed the subject of the icon is seen to be observing the viewer. When viewed, the Saint, Christ or Theotokos appears to be looking back at the viewer, no matter at what angle from which the icon is viewed.



Only the outside-inside ligatures would seem to fit this Perspective category. It would be expected that if there is a 3-dimensional aspect intended by the Byzantine writers that it would be in this reverse form of Perspective. Since Renaissance printing followed the style of ligatures found in late Medieval miniscule, the form represented in print would likewise be in this Byzantine Perspective, not just capable of being seen in this Perspective. In the example below the sigma (σ) is in front of the omicron (\omicron)



Other hypertext ligatures occur where the hypertext comes in the center of the ligature and not at the end of the word as in Ϡ^{oc} . πϠ , ϣ and ϣ^{oc} are typical examples. Again it is difficult to determine whether they are in Linear or Byzantine Perspective. Byzantine would be the most likely Perspective, if a 3-dimensional effect is the intent.



It is not possible to determine whether or not a ligature such as πϠ or Ϡ are in Linear Perspective or Reverse Perspective without other clues from the page and this aspect of early Greek printing may be worthy of further pursuit. If one imagines Ϡ as a small helical compression spring such as that found as battery contacts in small electronic devices, the sigma may be seen to have its tail in front of the omicron or behind it. However, if one imagines how it is written with one continuous stroke in a counterclockwise direction, it becomes evident that the sigma is over the top (i.e. in front) of the omicron and the ligature is in Byzantine Perspective.

The majority of Renaissance ligatures are simple 2-letter joins where one letter is simply tied (joined) to its successor. The glyph that is the ligature then is simply a combination of two easily distinguishable letters, where the shape is not changed but simply tied to the next. δν , αν , απ , αρ , αρ , δρ , η , η , η , η , η and hundreds of others, fall into this category. Several 3-letter joins can also be found, ϠϠ , λπο , αη , γυ , λγα , λφο , δφο , ϣ and many others fall into this category. Some ligatures are entire words as joins, this is especially seen in some of the previous examples and many of the prepositions, but they occur also in the pronouns αυτο , αυτο , αυτο , αυτο and others.

Tachygraphy also made an appearance in Renaissance printing, not only in the many diacriticals indicating word-endings developed in earlier manuscripts 11th to 15th century, for example ϣ , ϣ , ϣ , ϣ , ϣ , ϣ , but also in line with the text itself, ϣ , ϣ , ϣ , ϣ , ϣ , for example. Others are less formal but nonetheless owe their existence to tachygraphic traditions ϣ , ϣ , ϣ , ϣ , ϣ , ϣ .

Some letters overhang others, so even if they do not touch each other they require that they be formed as ligatures when cast in lead type. η , η overhang the succeeding letter so they will form a ligature with the succeeding letter even though they only overhang and do not actually touch. The same is true for the medial tau τ and the alternative gamma γ . In the former the overhang is to the predecessor and to the latter it is to the successor, but the effect is the same. Double letters also display some differences. πω , π , τ , ω , ω , ς , for instance. Double pi (πω) always seems to follow


the order of π and then ω , $\pi\eta$ can have both forms $\pi\eta$ and $\omega\eta$, and there seems to be no syntax defining one preference for the other. ω , a combination of σ and ω , are tightly composed making it difficult to distinguish the two letters that compose the ligature (glyph). ω is simply made up of two σ 's, the second one being open at the top. The open-at-the-top feature can also be seen in the Θ ligature. It should easily be seen in what direction open top sigma is written, namely counter-clockwise. But in the ω ligature it is clear that the first sigma was written in a clockwise direction while the second was written counter-clockwise, leaving it incomplete (open) at the top. In this way the two letters could be written in one continuous stroke. Stigma ζ is a sigma-tau ($\sigma + \tau$) combination and also represents the number 6. The evolution of the form shows that $\sigma + \tau$ combination $\sigma\tau \rightarrow \zeta \rightarrow \zeta$.

Many of the glyphs differ because of the position they need to attach to the succeeding letter. For instance ω had a curved cap (lintel) to tie itself correctly (at the right place to ρ as in $\omega\rho$, $\omega\rho\alpha$, $\omega\rho\iota$, $\omega\rho\theta$, $\omega\rho\omega$. Likewise τ has a curved cap (lintel) to properly join with ρ , $\rho\alpha$, $\rho\iota$, $\rho\theta$, $\rho\omega$. But ω has a straight cap in order to connect properly with $\omega\alpha$, $\omega\sigma$, $\omega\varepsilon$, $\omega\upsilon$, $\omega\omega$ etc., and similarly with τ , in order to connect properly with $\tau\alpha$, $\tau\alpha\upsilon$, $\tau\alpha\varsigma$, $\tau\alpha\omega$, $\tau\eta$, $\tau\acute{\omicron}$, $\tau\varepsilon$ etc. Tau and sigma also have initial forms which connect to succeeding letters from below, τ - $\tau\alpha$ $\tau\iota$ $\tau\theta$ $\tau\omega$, and σ - $\sigma\alpha$ $\sigma\rho$ $\sigma\varsigma$ $\sigma\alpha\upsilon$ $\sigma\upsilon$ $\sigma\omega$ $\sigma\varsigma$ $\sigma\omega$. Because of the fragile nature of the type, it was impossible for the early printers to cast type which would connect with the succeeding or preceding letters, so a system of two and/or more letter ligatures was devised by Aldus and his associates in order to imitate the writing of the Renaissance which tended towards cursive. In a sense this is Aldus' great influence and it is, as some have said, a great setback for Greek typography.¹⁸

Accents and breathing also made for difficulties in early printing. Sometimes the vowel and its appropriate accent and/or breathing were cast together into a single sort, and when not needed either the accent, breathing or both were simply cut away. But this method proved unsuccessful, since the typesetter did not always catch the fact that the sort which still contained diacriticals and false letters with diacriticals were then incorporated by mistake into the text where they didn't belong. But also the position of the diacritical with respect to the ascenders created problems leaving the accent often too high above the letter (circumflex) or misaligned left-right as in the grave and acute. Eventually printers worked out these problems with additional leading between lines. But this also resulted in often misaligned diacriticals. While in Post-Didot-Porson Greek the accents follow precise rules for placement, many of those rules were not adhered to in the Renaissance or the Medieval miniscule. The shape of the glyph often prevented the accent being placed directly above the vowel and was placed somewhere in the syllable but not necessarily on the vowel. Appendix 2 shows some examples where this may be found.

In addition to the calligraphic nature of the written text, Renaissance books were often highly ornamented. Ornaments formed a significant feature of early printed works and they functioned as an aesthetic concomitant to the text. Oftentimes the initial page of

¹⁸ Robert Proctor, *The Printing of Greek in the Fifteenth Century* (Oxford: University Press, 1900) 15. Proctor had an obvious preference for Renaissance fonts which used earlier more formal book hands.

text whether a chapter or book contained a graphic header, while often section and chapter divisions contained an ornamental divider. Chapter and book endings were often ornamented with a graphic figure and sometimes merely with the word ΤΕΛΟΣ in all caps, small caps or uppercase letters. But sometimes, depending on the printer and his preference for ornament, the ornament and the text were combined in a colorful ligature such as .

Greek is often referred to as a musical language with its system of accents and breathings (aspirants). The accents, rather than based on stress, were based on changes in voice pitch - the grave a lowering of pitch, the acute a raising and the circumflex a combination of the two. The circumflex is thus only possible on a long vowel or diphthong. Many languages from a phonological viewpoint have an aesthetic quality to them which makes them pleasant to the ear and in that sense beautiful. If at this spoken level a language can have an aesthetic quality, it surely can have that quality in writing and print. Calligraphy is just a method of putting that aesthetic quality in the written word that is in the spoken word. One can therefore expect a certain amount of beauty in the printed page, not only in its ornamentation, but also in the text itself. The 3-dimensional aspect to early Greek printing contributes greatly to this. It should be noted that printers had a variety of semantically equivalent sorts and the typesetter would have a number of options for the ligatures used.¹⁹ The typesetter just as the calligrapher is responsible for putting the beauty into the text and making it dance. Clearly the dance can be either a tango or a waltz, depending on the typesetter or calligrapher.

Creating a Renaissance Greek font (ttf)-²⁰

Given that there is a kind of beauty in the Renaissance printed Greek and that even though the letter forms seem a bit crude, it is a wonder in the age of computers that such fonts have not been devised and that the calligraphic style of Greek has not come back into vogue. It has to some limited extent done so, but has not been overly successful since Greek seems cryptic to the beginning student and it is not prudent to make it any more so than necessary, with a complicated system of ligatures. Yet there is something of a comeback to these calligraphic styles. The Greek Font Society and others have published works imitating Renaissance typography.²¹ But even though creating a computerized font to imitate this style avoids many of the problems with lead typesetting, it has problems of its own. Choices need to be made and the first choice is to either do what the typesetters did or create as set of glyphs which will properly connect with other glyphs. The first alternative involves a huge number of ligatures. The typesetters

¹⁹ Compare the ligatures used in examples 1 and 2 in appendix 2 for different ways of typesetting the same text.

²⁰ The font RGreekL2 is a True Type Font and can be downloaded from <http://schmidhauser.us/tools/rgl/>, Unfortunately it works only in the Windows environment and does not work in Macintosh or Linux environments.

²¹ Pindar's Olypian Odes have been published by the Greek Font Society in French and Greek using a Renaissance style typeface. See: http://www.greekfontsociety.gr/pages/en_publications2004_FR.html (accessed June 8. 2009).

sometimes had well over 1000 sorts in their boxes. This would mean that there would be more glyphs than the Unicode Private Use area allows. The second alternative involves a large number of glyphs which would connect not only in the right position left-right, but also up-down curved straight etc, leaving one to make room for hundreds if not a thousand or more possible glyphs with various connection possibilities. If one thinks of Unicode WGL4 positions as compartments in a digital box, the problems of early Greek printing are much the same as the lead typesetting is to the computer environment.

Another decision would be to follow the Unicode standard and do what early typesetters did and have accents and breathings in the Greek Extended section or follow the keyboard style set up in the way that the font S-Greek works²². Opting for the former would involve a large number of glyphs to accurately represent the accentuation methods of Renaissance printing – a number larger than is practical. If one follows the S-Greek method then there remains the same problem early typesetters had with misaligned accents and breathings except that a more historically accurate placement of the accents upon the syllable is possible, if accents can fall on consonants when the nearest vowel does not permit an accent because of its shape. Since there are a large number of alternative vowel forms, accurate placement of the accents on each would result in a huge number of glyphs, again exceeding the places available in the Greek Extended section of Unicode. So a compromise was made and although it is not perfect and does not follow the Unicode standard, the font RGreekL2 is acceptable for most uses.

RgreekL2, which stands for Renaissance Greek with Ligatures version 2.0, is a large font with approximately 960 glyphs and uses Unicode or WGL4 numbering to accommodate the number of glyphs. However, semantically the font is not a Unicode font. It is beta encoded similar to other Greek fonts which use beta encoding (in an S-Greek style). The font is freeware and may be used and distributed freely. However, the author retains the copyright, prohibiting modification without permission. It is not an imitation of any particular font such as those of Robert Estienne, Froben, Holbein, Manutius or Portus. It is rather a composite font which incorporates many glyphs (sorts)²³ from each of the many early printers. The font has achieved a modest distribution world wide and is not intended to be a mere curiosity. The font is meant to imitate early printed Greek from the age of incunabula to the end of the 18th century. The font is organized in such a way that it can be used either as a standard Greek font or a font with Ligatures. The basic Latin section contains control codes and keyboard characters for standard Greek with ligatures for $\kappa\alpha\iota$, $\omicron\nu$ and $\omicron\upsilon$. The Latin supplement section contains Unicode control codes, prepositional prefixes, alternate letter forms and essential diacriticals. These two Unicode sections are all that is absolutely necessary to write Greek in a Renaissance style. But the Latin extended A section is used for two or three letter combinations in order to more adequately imitate the style of Renaissance typesetters. The Latin extended B section is likewise used for glyphs representing

²² Sgreek is a shareware font distributed by Silver Mountain Software. The font is used to add/compose diacriticals from the keyboard and not done, as in many fonts, through pre-composed characters as in Unicode and WinGreek encodings.

²³ A sort is a piece of lead type put (sorted) into various compartments of the typesetter's box (case). In this way a sort is equivalent to a glyph in a computing environment. The term refers to the physical form of a letter or ligature while character refers to the meaning of a glyph. Hence the term character refers to the semantic aspect of the letter or ligature while the term glyph refers to the material form (shape).

characters which are variants of those given in the previous section as well as some characters from earlier minuscule forms (used in some Renaissance fonts), entire words found in most Renaissance printed books and a number of combining characters used to make up other ligatures not included in other sections.

For those who would use the font mainly as a standard Greek font of "Old Face" design, a number of symbols for use in the critical apparatus of a text are provided. Because of the size of ascenders and descenders there is more leading in the font than normal. If one wishes one could partially solve this effect with paragraph line spacing. One cannot say that the font is complete in the sense that every Renaissance ligature is represented; many early printers had at least 500 sorts in their boxes and some had well over a thousand. The author of the font continually finds ligatures he has not included. The Renaissance printers imitated the minuscule current at their time, and the glyphs they used were determined by the minuscule. Thus this font can also be used as a late minuscule font. And it can to a great extent imitate the text of Magdalen College *MS. Gr. 8*, (Basil the Great [attrib.], *Comm. on Isaiah*, 16th century) Oxford.²⁴ The Unicode Greek section contains manuscript miniscule forms which can be used, as some Renaissance printers did, for more earlier formal book hands, and thus to a modest extent can be used to imitate those earlier hands.

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²⁴ See: <http://image.ox.ac.uk/show?collection=magdalen&manuscript=msg8>

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lect 1683, Lectionary, 13th Century, Gospels lectionary manuscript. 241 leaves, two columns per page, 26 lines per column. Measures 29.5 cm x 22 cm. , Muenster,

lect 1684, Lectionary, 13th Century, Gospels lectionary manuscript; a large portion of this manuscript is also a palimpsest of manuscript 0233, an 8th century Gospels manuscript written in majuscule letters., Muenster,

Available at <http://www.csntm.org/Manuscripts.aspx>

Appendix 1

Ligatures & Alternate letter forms found in RGreek12.ttf

λ	α	ας	ας	γη	γη	δεξ	δεξ
α	α	αυ	αυ	γι	γι	δδ	δευ
gυ	α	αὐτο	αὐτο	γῆ	γινεται	δη	δη
λθι	αθι	αὐτθ	αὐτοῦ	γκ	γκ	δι	δι
αι	αι	αὐτθ	αὐτῶ	γλ	γλ	δια	δια
αγ	αι final	β	β	γν	γν	δια	δια
αλ	άλ	υ	β	γο	γο	διο	διο
αλλ	άλλ	β	β	γρ	γρ	διο	διο
αλ	αλ	γ	γ	γρ	γρ	διφθογγ	
αλλ	αλλ	γ	γ	γράφεται		δο	δο
αυ	αυ	γα	γα	γράμμα		δρ	δρ
αυ	αυ	γαι	γαι	γυ	γυ	δυ	δυ
αν	αν	γάρ	γάρ	γχ	γχ	δυαδι	δυαδι
αντι	αντι	γαρ	γαρ	γω	γω	δυν	δυν
αξ	αξ	γάρ	γάρ	γω	γω	ε	ε
αοριστ	αοριστ	γάρ	γάρ	γω	γω	ε	ε
απ	απ	γγ	γγ	δ	δ	ε	ε
απο	απο	γγ	γγ	δα	δα	ε	ε
απο	απο	γγ	γγ	δα	δα	ε	ε
αρ	αρ	γε	γε	δα	δα	ε	ε
αρ	αρ	γει	γει	δ᾽	δ᾽	εγω	εγω
αρ	αρ	γει	γει	δε	δε	ει	ει
αρ	αρ	γει	γει	δει	δει	ει	ει
αρ	αρ	γει	γει	δει	δει	ει	ει
αρα	αρα	γευ	γευ	δεξ	δεξ	ει	ει
		γευ	γευ	δεξ	δεξ	ει	ει

ϛ	εἶ	ϛ	ἔσται	ϛ	θν	λ	λ
ϛ	ει	ϛ	ἔστι	ϛ	θο	λα	λα
εἶ	εἶναι	ϛ	ἔστι	ϛ	θρ	λο	λο
εἶ	εἶναι	ϛ	ἔστι	ϛ	θρο	λλ	λλ
εἶ	εἶναι	ϛ	ἔστιν	ϛ	θρω	λ	λίτρα
εἶ	εἶναι	ετ	ετ	ϛ	θυ	λο	λο
εἶσι	εἶσι	ετ	ετ	ιν	ιν	λόγος	λόγος
εἶσιν	εἶσιν	ετο	ετο	ιν	ιν	μ	μ
εκ	εκ	ευ	ευ	κ	κ	μα	μα
ελ	ελ	ευ	ευ	κ	κ	μαι	μαι
ελάττον	ελάττον	ευ	ευ	κα	κα	μάτωμ	μάτωμ
ελλ	ελλ	εὐθεία	εὐθεία	κα	και	μεν	μεν
εν	εν	εχο	εχο	καὶ	καὶ	μεθ	μεθ
εν	εν	ζ	ζ	καὶ	καὶ	μὲν	μὲν
εὐ	εὐ	ζ	ζ	καὶ	καὶ	μεν	μεν
εξ	εξ	η	η	κατὰ	κατὰ	μεν...	μεν...
ἐξαίτιον	ἐξαίτιον	η	η	κατὰ	κατὰ	μεσ...	μεσ...
ἐπειδὴ	ἐπειδὴ	η	η	κεφάλαιον	κεφάλαιον	μετὰ	μετὰ
ἐπευ	ἐπευ	η	η	κεράτιον	κεράτιον	μετὰ	μετὰ
ἐπι	ἐπι	λη	λη	κη	κη	μη	μη
ἐπι	ἐπι	ῥ	ῥ	κη	κη	μην	μην
ἐπι	ἐπι	θ	θ	κλ	κλ	μι	μι
ἐπι	ἐπι	θα	θα	κρ	κρ	μν	μν
ἐπι	ἐπι	θε	θε	κοτύλη	κοτύλη	μνᾶ	μνᾶ
ερ	ερ	θει	θει	κν	κν	μο	μο
ερ	ερ	θη	θη	κρ	κρ	μν	μν
ερ	ερ	θι	θι	κρ	κύσθη	μν	μν
εσ	εσ	θλ	θλ	κρ	κων	μω	μω

μῶν	μῶν	πῶ	παρ	πω	πω	σθ	σκο
μ	ν	πῶ	παρα	ρ	ρ	σμ	σμ
ρ	ν	παρα	παρα	ρα	ρα	σο	σο
ζ	νικ	πῶ	παρακείμενος	ρι	ρι	σο	σο
ξ	ξ	πε	πε	ρο	ρο	σου	σου
ξ	ξεστῆ	πει	πει	ρω	ρω	σου	σου
θ	οι	περ	περ	σ	σ	σπ	σπ
θ	οιον	περ	περ	σ	σ	σπα	σπα
λ	ὀλκή	περι	περι	σα	σα	σπαι	σπαι
θ	ον	περι	περι	σα	σα	σπαν	σπαν
\	ον	περι	περι	σαι	σαι	σπο	σπο
τ	ον	περι	περι	σαν	σαν	σπω	σπω
θ	ος	πην	πην	σαῦτα	σαῦτα	σσ	σσ
θ	ὅτι	πι	πι	σβ	σβ	σσα	σσα
αἶ	αἶ	πλ	πλ	σε	σε	σσαν	σσαν
β	αἶ	πλ	πληθυντι	σε	σε	σση	σση
ακ	ακ	ορ	ορ	σει	σει	σσω	σσω
ακα	ακα	πν	πν	σει	σει	στ	στ
β	αἶ	πο	πο	ση	ση	στ	στ
αἶ	αἶ	πο	πο	σην	σην	στ	στ
αυ	αυ	ππ	ππ	σκ	σκ	στα	στα
υ	αυ	πρ	πρ	σθ	σθ	σται	σται
αἶ	αἶ	προ	προ	σθαι	σθαι	στε	στε
π	π	προ	προ	σθαι	σθαι	σται	σται
ω	π	προς	προς	σι	σι	στη	στη
πα	πα	πτ	πτ	σι	σι	στη	στη
παι	παι	πτ	πτ	σκα	σκα	στι	στι
πρ	παρ	πυ	πυ	σκη	σκη	στο	στο

ςυ	στυ	ται	ται	ϛο	τρο	χαει	χαρι
ςω	στω	ται	ται	τη	ττ	χη	χη
συ	συ	τας	τας	τυ	τυ	χλω	χην
σφ	σφ	ταυ	ταυ	τω	τω	χθ	χθ
σω	συν	ταῦθα	ταῦθα	τω̂	τω̂	χι	χι
σχ	σχ	ταῦτα	ταῦτα	τω̃	τω̃	χί	χόα
χα	σχα	τε	τε	των̂	των̂	χί	χόινιξ
χε	σχε	τερ	τερ	υ̂	υ̂	χί	χορος
χθ	σχει	τει	τει	υ	υ	χρ	χρ
χη	σχη	τέλος	τέλος	υ̂	υ̂	χου	χου
χη	σχη	τη	τη	υι	υι	ψαν	ψαν
χλω	σχην	τιω	την	υ̂	υ̂	ψε	ψε
χι	σχι	την	την	υν	υν	ψθ	ψει
χιν	σχιν	της	της	υω̂	υ̂	ψη	ψη
χο	σχο	τι	τι	υ̂	υ̂	ψι	ψι
χολον	σχόλιον	τι	τι	υ̂	υ̂	ψυ	ψυ
χρ	σchr	τι	τι	υς	υς	ψω	ψω
χυν	σχυν	τι	τι	υς	υς	ω̂	ω̂
χων	σχων	τικ	τικ	υσι	υσι	ω	ω
χω	σχω	τλ	τλ	υσι	υσι		
ϛω	σω	το	το	φ	φ		
σω	σω	το	το	φ	φ		
σ̃	σ̃ων	το	το	φ	φ		
τ	τ	τον	τον	φ	φ		
τα	τα	του̂	του̂	φρ	φρ		
τα	τα	του	του	χα	χα		
τ̃	τα	του	του	χαι	χαι		
τ̃	ται	τρ	τρ	χαν	χαν		

Tachygraphy-

^ ην
 √ ας
 √ αν
 " ειν
 ~ ως
 √ ες
 √ αις
 " ον
 ε επι
 c εν [ος]
 √ οις
 √ ης
 √ εις
 < εν
 ε ις
 ε ης
 ρ ηρ
 ρ αρ
 ρ ωρ
 ρ ωρ
 ρ αν
 ρ αυ

∘ ας
 ∘ οις
 ∘ ες
 ∘ ις
 ∘ ην
 ∘ εις
 ∘ ιν
 ∘ ις
 ∘ αρα
 ^ ην
 ≧ εις
 ∘ ιν
 " αις
 ∘ ου
 ∘ ος
 ~ ων
 ~ ...των
 ~ ...των
 χ ...τών
 ~ ων
 (ων
 ~ ως

Hyper-script-

α ους
 α ς
 αις τ
 ας τ
 δλ π
 ε
 εις
 ες
 η
 ην
 ης
 ∫
 ι
 κ
 λλ
 ν
 ο
 οι
 οις
 ον
 ος
 ς

Ligatures made-up from combining glyphs-

α => αο αμ ασ αθ αω

αδ => αδα αδε αδι αδο αδω

β => βς κβ μβ πβ

γ => γμ γας γλω γρα γρι γρο γρω

ζ => ζα ζο ζυ ζω ζς ζω

δ => δας δφ δδυ δη δι δυ δλω δς

δ => δρ δρα δρι δρο δρω

δλ => δλα δλι δλο δλυ δλω

ε => ει εν ες ευ

η => ηη μη ψη

θ => θρ θρα θρι θρο θρω θλυ θλυ

θ => θαν θας θαν θω θη θη

θ => θαν θας θαν θω θη θη

κ => καν κας καν κι

κ => κι κλω κρ κρα κρι κρο κρω

λ => λα λο λυ λω λφ

μ => μα μαμ μαρ μο μυ μω μω μω

μ => μαν μας μαν μβι μι μο

π => παν πας παυ πω

π => πω πω πω πω πω πω

π => πω πω πω πω πω πω

π => πρ πρα πρι προ πρω

Ϸ => Ϸαρ Ϸαν Ϸας Ϸαν Ϸυ Ϸω Ϸω

σ => σαν σας σαν σκ σκα σκο σμ

σδ => σδαν σδας σδαν σδη σδε

σπ => σπαν σπας σπαι σπε σπό σπη

σρ => σραν σρας σραι σρη σρφ σρσ

ς => Ϸαν Ϸας Ϸαν Ϸη Ϸη Ϸε

ς => Ϸα Ϸε Ϸι Ϸη Ϸο Ϸυ Ϸω

τ => ταν τας ται τη τό τε

τ => τρ τρα τρι τρο τρω

ϸ => ϸα ϸι ϸο ϸω

υ => υν υο υπ υφ

υ => υω υφρ υω

Ϻ => Ϻα Ϻο Ϻω Ϻω

Ϻ => Ϻρ Ϻρα Ϻρι Ϻρο Ϻρω

χ => χαν χας χαν χη χφ

χδ => χδαν χδας χδαν χδη χδσ

ψ => ψαν ψας ψαι ψη ψό ψο ψω

σεν τὸν ὀζίαμ. ὀζίας δὲ ἐγέννησεν τὸν Ἰωάθαμ. Ἰωάθαμ δὲ ἐγέννησεν τὸν Ἀχάσα. Ἀχάσα δὲ ἐγέννησεν τὸν Ἐζεκίαμ. Ἐζεκίας δὲ ἐγέννησεν τὸν Μανασῆ. Μανασῆς δὲ ἐγέννησεν τὸν Ἀμὼν. Ἀμὼν δὲ ἐγέννησεν τὸν Ἰωσίαμ. Ἰωσίας δὲ ἐγέννησεν τὸν Ἰεχονίαμ, καὶ τοὺς ἀδελφοὺς αὐτοῦ, ἐπὶ οἷον μετοικεσίας βαβυλωνος, μετὰ δὲ πάλιν μετοικεσίαμ βαβυλωνος, Ἰεχονίας ἐγέννησεν τὸν Σαλαθιήλ. Σαλαθιήλ δὲ ἐγέννησεν τὸν Ζοροβάβελ. Ζοροβάβελ δὲ ἐγέννησεν τὸν Ἄβιουδ. Ἄβιουδ δὲ ἐγέννησεν τὸν Ἐλιακίμ. Ἐλιακίμ δὲ ἐγέννησεν τὸν Ἀζὼρ. Ἀζὼρ δὲ ἐγέννησεν τὸν Σαδὼκ. Σαδὼκ δὲ ἐγέννησεν τὸν Ἀχίω. Ἀχίω δὲ ἐγέννησεν τὸν Ἐλιοὺδ. Ἐλιοὺδ δὲ ἐγέννησεν τὸν Ἐλεάζαρ. Ἐλεάζαρ δὲ ἐγέννησεν τὸν Ματθᾶμ. Ματθᾶμ δὲ ἐγέννησεν τὸν Ἰακώβ. Ἰακώβ δὲ ἐγέννησεν τὸν Ἰωσήφ, τὸν ἀνδρα μαρίας, ἧς ἐγεννήθη Ἰησοῦς, ὁ λεγόμενος Χριστός. πᾶσαι οὖν αἱ γενεαὶ ἀπὸ Ἀβραάμ ἕως Δαβὶδ γενεαὶ δεκά τεσσαρεσ. καὶ ἀπὸ Δαβὶδ ἕως οἷον μετοικεσίας βαβυλωνος, γενεαὶ δεκά τεσσαρεσ, καὶ ἀπὸ οἷον μετοικεσίας βαβυλωνος ἕως Ἰησοῦ Χριστοῦ γενεαὶ δεκά τεσσαρεσ.

τοῦ δὲ Ἰησοῦ Χριστοῦ ἡ γενεήσιν οὕτως ἦν, μνησθῆναι ἵνα οἱ μνησθῆναι αὐτοῦ μαρίας ἡ Ἰωσήφ, πρὶν ἢ συναλθεῖν αὐτοῦ, εὐερέσθαι ἐν γαστρὶ ἔχουσα ἐκ πνεύματος ἁγίου. Ἰωσήφ δὲ ὁ ἀνὴρ αὐτῆς, δίκαιος ὤν, καὶ μὴ θέλων ἀπολύσαι αὐτήν, ταῦτα δὲ αὐτῆς ἐφάνθη, ἐφάνθη αὐτῆς λέγων. Ἰωσήφ ἡδὲ Δαβὶδ μὴ φοβηθῆς παρὰ λαβῆναι μαρίαν πλὴν γυναικά σου. τὸ γὰρ ἐν αὐτῇ γεννηθὲν, ἐκ πνεύματος ἁγίου. τὸ ἐξέταται δὲ ἡ οὐκ, Ἐκ καλέσθαι τὸ ὄνομα αὐτῆς Ἰησοῦν, αὐτὸς δὲ σώσει τὸ λαὸν αὐτῆς ἀπὸ ἅμαρτιων αὐτῶν. τὸ ὅτι ἡ οὐλομ γέννησεν, ἵνα πληρωθῆς ὁ λόγος ὁ κενεῖν διὰ τῆς προφητείας

it Ozias. Ozias autem genuit Ioatham. Ioatham autem genuit Achas. Achas autem genuit Ezeciam. Ezecias autem genuit Manasse. Manasse autem genuit Amon. Amon autem genuit Iosiam. Iosias autem genuit Iechoniam, & fratres eius in demigratione in Babylonē. Porro post demigrationē in Babylonē, Iechonias genuit Salathiel. Salathiel autem genuit Zorobabel. Zorobabel autem genuit Abiud. Abiud autem genuit Eliacim. Eliacim autem genuit Azor. Azor autem genuit Sadoc. Sadoc autem genuit Achim. Achim autem genuit Eliud. Eliud autem genuit Eleazar. Eleazar autem genuit Matthan. Matthan autem genuit Iacob. Iacob autem genuit Ioseph, maritū Mariæ, ex qua genit⁹ fuit Iesus, ille qui dicitur Christus. Vniuersa itaque generationis, ab Abraham usque ad Dauid, generationes quatuordecim, & a Dauid usque demigrationem in Babylonem generationes quatuordecim, & a demigratione in Babylonē usque ad Christum generationes quatuordecim. Christi uero natiuitas sic fuit. Cū mater eius Maria desponsa esset Ioseph, priusquam congressi fuissent, deprehensa est grauidæ a spiritu sancto. Porro Ioseph maritus eius, quoniā erat uir iustus, & nolbat illam diffamare, uoluit clandestinè ab ea diuertere. Hæc autem cum in animo uerfaret, ecce angelus dñi in sonis uisus est illi dicēs. Ioseph fili dauid, ne metuas adiungere tibi Mariā uxore tuā. Nā quod in illa cōceptū est, a spū scto pfectū est. Pariet autem filiū, & uocabis nomē eius Iesum, is em saluū faciet pplm suū, a pctis suis. Porro totū hoc factū est, ut impleretur id quod dictum fuerat, a dño per prophetam

Example 3- Erasmus *Novum Instrumentum* (Basel: Froben, 1516) Digitized by Bibles.org UK

CAPVT III.



Mnes igitur, quotquot unquam Theologiam attigerunt, ea, quæ secundum naturam primam sunt, Deos nominarunt, & in his corporandis theologicam scientiam versari dicunt. Et alii quidem, corpoream hypostasim ipsius Esse tantum probandam censent. Omnia verò rerum incorporearum genera cum Substantia, vel Essentia conferunt, secunda statuunt. Et ipsa principia Entium, vel rerum que sunt, corpoream formam habere, corporea esse dicunt, & illum habitum, qui est in nobis, qui nobis hæc principia nota facit, corpoream esse pronuntiat. Alii verò, omnia quidem corpora ex incorporeis substantiis suspendentes, & ex iis pendere dicunt, primam, ut ita loqui liceat, existentiam, vel essentiam, in anima, & facultatibus animalibus esse definiunt, Deos quidem (ut arbitror) vocat, præstantissimas animas scientiam verò ad hæc usque progressas, & has præstantissimas animas cognoscentes, Theologiam appellant. Quotquot vero etiam animarum multitudinem ex alio antiquiore principio deducunt, & Mentem rerum univrsarum ducem statuunt, præstantissimum quidem finem esse dicunt, ipsam animam cum mente unionem, atque coniunctionem ætiosam, quæ facit, ut anima & Mens in unum coeant, & intellectualiæ vitæ genus, quod ab omni corporea materia separatum, in sola intelligentia versatur, excellentiam ceteris omnibus prætare putat. In idem autem profectò ducunt, & statum idem esse, Theologiam, & ipsam de intellectuali essentia enarrationem, ac interpretationem. Omnes igitur quod antè dixi prima Entium, vel rerum, quæ sunt, principia, & quæ sunt sua forte maximè contenta, & perfectissima, & quæ nullis alienis subsidiis indigent, Deos vocant, & Theologiam, horum scientiam appellant.

Sola verò Platonis divina enarratio omnia quidem corporea, cum ratione principii conferens, & collata perpendens, aperte contempnit. Quia profectò quicquid in partes dividit, & intervallis distinguit, separari potest, vel omne dividuum, & quod habet dimensionem, neque producere, neque seipsum conservare natura solet, nisi potest: sed & ipsum esse, & ipsum agere, & pati, vel suam essentiam, & actionem, & passionem, ut vulgus loquitur, per animam habet, & per motus in ipsa infusos. Animalem verò substantiam, i. e. animam verò essentiam, corporibus quidem antiquiorem esse demonstravit: sed ex intellectuali hypostasi pendens. Quia quicquid secundum tempus, & in ipso tempore movetur, quamvis per se mobile sit, illis quidem, quæ ab altero moventur, est principalius, i. e. præstantius, & ob principium nobilissimum, æterna verò morione posterius, ac inferius. Corporum igitur (ut dictum est) & animarum partem, & causam Plato Mentem pronuntiat, & in ea, ut per eam omnia & esse, & agere, quæcunque vitam habent in exitu, & explicatione, vel in transitu, & evolutione posuit, id est, quæ in aliquem locum ingrediuntur: & illinc excedunt, & quæ sese quasi ex quibusdam introductis, quibus introductum, evolvunt, & exvolvunt.

Progreditur autem ad aliud principium ex ipsa mente prius exemptum, & magis incorporeum, & ineffabile, à quò omnia, quamvis ipsa ipsorum Entium extrema, vel summa dicas, suam hypostasim habere necesse est. Animam enim non omnia à natura datam habent: sed quæcunque vitam in se sortita sunt clariorem, aut obscuriorem. Neque fieri potest, ut omnia mente, & ipse esse sic fixentur: sed ea quæcunque subsistunt in specie, & quæ sunt esse in ipsa res forma posita, & inde pendens habent.

Κεφάλαιον γ.

Πάντες οὖν, ὅσοι τινὲς θεολογίας εἶπον ἠμετέροις, περὶ πάντων τῶν Φύσιν, θεοὺς ἐπινοήσαντες, καὶ ταῦτα τῶν θεολογικῶν ἀποφασίμων ἀποφασίζουσι. καὶ οἱ μὲν, τῶν σαματικῶν ὑποθέσεων τὸ ἴδιον μόνον ἀξιοῦντες. τὰ δὲ τῶν ὑποθέσεων ἡμῶν συμπάσαντες πρὸς οὐσίαν ἀδύνατον ἡγήσαντο, τὰς τε δεξιὰς τῶν ὀφθαλμῶν, καὶ τὰς ταύτας γνώσεσθαι ἐν ἡμῶν εἶναι σαματικῶν ἀποφασίμων. οἱ δὲ, τῶν μὲν σαματικῶν πάντων τῶν ὑποθέσεων ἐξ ἀναγκαστῶν, τῶν σαματικῶν ὑποθέσεων ἐν ψυχῇ, καὶ ταῖς ψυχῆς δυνάμεσιν ἐκκενῶν, θεοὺς μὲν (ὡς ἔφη) καλοῦσι, τῶν σαματικῶν δὲ τῶν ἀντικειμένων, καὶ πάντων γνώσεσθαι ἀποφασίζουσι, θεολογίας ἐπινοήσαντες. οἱ δὲ, καὶ τῶν ψυχῶν ἀπὸ τῆς παρεχόμενης ἐξ ἀλλοῦ ἀποφασίζουσι ἀρχῆς, καὶ τοῦ ἡγεμονίου τῶν ὀφθαλμῶν ἀποφασίζουσι, καὶ τῶν ὀφθαλμῶν ἐννοίας φασὶν τῶν σαματικῶν τῶν ψυχῆς ἐννοίας, καὶ τὸ νοεῖν τῆς ζωῆς ἀπὸ τῆς ἡγεμονίας τῶν σαματικῶν ἀποφασίζουσι. εἰς δὲ ταῦτα ἀγνοοῦσι θεολογίας εἶναι, καὶ τῶν σαματικῶν ἐννοίας ἀποφασίζουσι. ἀποφασίζουσι οὖν (ὡς ἔφη) τὰς σαματικὰς δεξιὰς τῶν ὀφθαλμῶν, καὶ ἀποφασίζουσι, θεοὺς ἀποφασίζουσι, καὶ θεολογίας τῶν τούτων ἀποφασίζουσι.

Μόνον δὲ ἡ τῶν Πλάτωνος ἐν τῇ ὑπόθεσιν τῶν σαματικῶν πάντα πρὸς ἀρχῆς λόγον ἀποφασίζουσι. διότι δὲ τὸ μερικὸν πᾶν, καὶ ἀποφασίζουσι, οὐτὶ περιεχόμενον, αὐτὸ σαματικῶν ἐννοίας, ἀλλὰ καὶ τὸ ἐννοίας, καὶ τὸ ἐνεργεῖν, ἡ περιεχόμενον. ἀπὸ ψυχῆς ἐξῆλθε, καὶ τῶν ἐν αὐτῇ κινήσεων, τῶν δὲ ψυχικῶν οὐσιῶν, ἀποφασίζουσι μὲν ἐννοίας σαματικῶν ἀποφασίζουσι: τῆς δὲ νοεῖν ὑποθέσεων ἐξ ἡγεμονίας ἐκκενῶν, καὶ τῶν μὲν σαματικῶν κινήσεων, καὶ ἀποφασίζουσι τῶν μὲν ἐπικρατητικῶν ἐπὶ ἡγεμονικώτερον. τῆς δὲ διαφανείας κινήσεων, ἀποφασίζουσι σαματικῶν μὲν (ὡς ἔφη) καὶ ψυχῶν περιεχόμενον, τῶν σαματικῶν, καὶ ἀποφασίζουσι, καὶ τῶν σαματικῶν ἐννοίας, καὶ ἐνεργεῖν, ὅσα τῶν σαματικῶν ἐννοίας, καὶ ἀποφασίζουσι κινήσεων.

Πρόσθετον δὲ ἐπὶ ἀλλοῦ δεξιῶν τῶν τούτων πάντων λόγῳ ἐξηγητικῶν, καὶ ἀποφασίζουσι, καὶ ἀποφασίζουσι, ἀπὸ τῆς πάντων καὶ τῶν δεξιῶν τῶν ὀφθαλμῶν λόγῳ, τῶν σαματικῶν ἐξῆλθε ἀναγκαστῶν. ψυχῆς μὲν γὰρ οὐ πάντα μετέχουσι περιεχόμενον, ἀλλὰ ὅσα σαματικῶν ἐλαχίστη περιεχόμενον, ἡ ἀποφασίζουσι. ἐν αὐτοῖς οὐδὲ τὸ πάντα, καὶ τὸ ὅλον, οὐτως ἀποφασίζουσι διανοητικῶν, ἀλλὰ ὅσα καὶ ἀπὸ τῆς ὑπόθεσιν. Δεῖ δὲ

Example 6- Proclus Diadochus, Platonic Theology (Frankfurt: A. Portus, 1618) Digitized by Google

ΕΙΣ ΤΑΣ ΚΑΤΗΓΟΡΙΑΣ. ΠΟΡΦΥΡΙΟΥ ΕΙΣΑΓΩΓΗ (*).

Οντος αναγκαίον, Χρυσώριον, ἢ εἰς τὴν τῶν παρὰ Ἀριστοτέλει κατηγοριῶν διδασκαλίαν τῷ γινώκει τί γένος ἢ τί διαφορὰ τί τε εἶδος ἢ τί ἴδιον ἢ τί συμβεβηκόσ, εἰς τε τὴν τῶν ἰσομῶν ἀπόδοσιν ἢ ὅπως εἰς τὰ περι διαίρεσεως ἢ ἀποδείξεως χρησίμους ὄσως τῆς τῶν θεωρίας, σύντομόν σοι παράδοσιν ποιήμενος περὶ ἄσσομα δια 5 βραχέων, ὡσπερ ἐν εἰσαγωγῆς τρέπω, τὰ παρὰ τοῖς πρεσβυτέροις ἐπελθεῖν, τῶν μὲν βαθυτέρων ἀπεχόμενος ζητημάτων, τῶν δ' ἀπλυστέρων συμμέτρως συχάζόμενος. αὐτίκα περὶ γενῶν τε ἢ εἰδῶν τὸ μὲν εἴτε ὑφέριγεν εἴτε ἢ ἐν μόναις ψιλῶς ἐπινοίας καίτω, εἴτε ἢ ὑφεριγότα σώματα ἐς τὴν ἰσώματα, ἢ πύττερον 10 χωριστὰ ἢ ἐν τοῖς αἰδητοῖς ἢ περὶ ταῦτα ὑφεριώτα, παρατηρήσομαι λέγειν, βαθυτάτης ὄσως τῆς τοιαύτης πραγματείας, ἢ ἄλλης μείζονος δεομένης ἐξετάσεως· τὸ δ' ὅπως περὶ αὐτῶν τε ἢ τῶν προκειμένων λογιώτερον οἱ παλαιοὶ διέλαβον, ἢ τῶν μάλλιστα οἱ ἐκ τῶ περιπέδου, νῦν σοι περὶ ἄσσομα δευκῶσαι.

2 Ἐσκε δὲ μήτε τὸ γένος μήτε τὸ εἶδος ἀπλῶς λέγειν. γένος γὰρ λέγειν ἢ ἢ τῶν ἐχόντων πῶς πρὸς ἓν τι ἢ πρὸς ἀλλήλους ἄσσοις· καθ' ὃ σημαῖόμενον τὸ Ἑρακλειδῶν λέγειν γένος ἐκ τῆς ἀφ' ἑνὸς ἡέσεως, λέγειν δὲ τὸ Ἑρακλέους, ἢ τὸ πλῆθος τῶν ἐχόντων πῶς πρὸς ἀλλήλους τὴν ἀπ' ἐκείνου οἰκειότητα, καὶ ἀποτομήν 20 ἀπὸ τῶν ἄλλων γενῶν κεκλημένον. λέγειν δὲ ἢ ἄλλως πάλιν γένος ἢ ἐκάστου τῆς γενέσεως ἀρχὴν εἴτε ἀπὸ τῷ τεκόντος εἴτε ἀπὸ τῷ τύπου ἐν ᾧ τις γίνονται· ὅτω γὰρ Ὀρέστη μὲν ἀπὸ Ταντάλου φασὲν ἔχειν τὸ γένος, Ἐλλαν δὲ ἀφ' Ἑρακλέους, ἢ πάλιν Πύδαρον μὲν Θεβαίων εἶναι τὸ γένος, Πλάτων δὲ Ἀθηναίων· ἢ γὰρ 25 ἢ πατρὶς ἀρχὴν τις ἐστὶ τῆς ἐκάστου γενέσεως, ὡσπερ ἢ ὁ πατήρ. τῶτο δὲ ἔσκεν πρῶχειρον εἶναι τὸ σημαῖόμενον· Ἑρακλειδῶν γὰρ λέγονται οἱ ἐκ γένος καταγόμενοι Ἑρακλέους ἢ Κεκροπίδαι οἱ ἀπὸ Κέκροπος ἢ οἱ τῶν ἄγγις· εἰς ἢ πρῶτερον γε ὠνομάσθη γένος ἢ ἐκάστου τῆς γενέσεως ἀρχὴν, μὲν δὲ ταῦτα ἢ τὸ πλῆθος τῶν ἀπὸ μῆος ἀρχῆς, οἷον τῷ Ἑρακλέους· ὃ ἀφορίζοντες ἢ ἀπὸ τῶν ἄλλων χωρίζοντες φασὲν τὸ ὅλον ἄσσομα Ἑρακλειδῶν γένος. ἄλλως δὲ πάλιν γένος λέγεται ἢ ὑποτάσσεται τὸ εἶδος, καθ' ὁμοιωτητα ἴσως τῶν εἰρημένων· ἢ γὰρ ἀρχὴν τις ἐστὶ τὸ τῶτο γένος τῶν ὑφ' αὐτῷ, ἢ δοκεῖ ἢ τὸ πλῆθος περιέχειν πάντ' ἐφ' 35 αὐτῷ. τριχῶς ὅν τῷ γένος λεγομένον, περὶ τῷ τρίτῳ παρὰ τοῖς φιλοσόφοις ὃ λόγος. ὃ ἢ ὑπογράφοντες ἀποδεδύκασιν, γένος εἶναι λέγοντες τὸ καὶ πλειόνων ἢ διαφερόντων τῶν εἰδῶν ἐν τῶν τί ἐστὶ κατηγορούμενον, οἷον τὸ ζῶον. τῶν γὰρ κατηγορουμένων τὰ μὲν καθ' ἑνὸς λέγεται μόνον, ὡς τὰ ἄσσομα, οἷον Σωκράτης ἢ ὄστος ἢ τῶτο, 40 τὰ δὲ καὶ πλειόνων, ὡς τὰ γένη ἢ τὰ εἶδη ἢ αἱ διαφοραὶ ἢ τὰ

ἴδια ἢ τὰ συμβεβηκότα κοινῶς ἀλλὰ μὴ ἴδιως τῶν. ἔστι δὲ γένος μὲν οἷον τὸ ζῶον, εἶδος δὲ οἷον ὁ ἄσσομος, διαφορὰ δὲ οἷον τὸ λογιῶν, ἴδιον δὲ οἷον τὸ γαλακτικόν, συμβεβηκόσ δὲ οἷον τὸ λευκόν, τὸ μέλαν, τὸ καθέξωξ. τῶν μὲν ἔν καθ' ἑνὸς μόνον κατηγορουμένων διαφέρει τὰ γένη τῶν ταῦτα καὶ πλειόνων κατηγορούμεν, τῶν δ' αὐτῶν πλειόνων, τῶν μὲν εἰδῶν ὅτι τὰ μὲν εἶδη, εἰ ἢ καὶ πλειόνων κατηγοροῦν, ἀλλ' ἢ διαφερόντων τῶν εἰδῶν ἀλλὰ τῶν ἀριθμῶν μόνον· ὃ γὰρ ἄσσομος εἶδος ὡν καὶ Σωκράτης ἢ Πλάτωνος κατηγοροῦν, οἱ ἢ τῶν εἰδῶν διαφέρουσιν ἀλλήλων ἀλλὰ τῶν ἀριθμῶν· τὸ δὲ ζῶον γένος ὅν ἄσσομος ἢ βοῶς ἢ ἵππου κατηγοροῦν, οἱ διαφέρουσιν ἢ τῶν εἰδῶν ἀλλήλων ἀλλ' ἢ καὶ τῶν ἀριθμῶν μόνον. τῶν δ' αὐτῶν ἴδιον διαφέρει τὸ γένος, ὅτι τὸ μὲν ἴδιον καθ' ἑνὸς μόνον εἶδος, ὃ ἐστὶν ἴδιον, κατηγοροῦν, ἢ τῶν ὑπὸ τὸ εἶδος ἀτόμων, ὡς τὸ γαλακτικόν ἄσσομος μόνον ἢ τῶν καὶ μέρος ἄσσομων· τὸ δὲ γένος ἢ καὶ εἶδος κατηγοροῦν ἀλλὰ πλειόνων τε ἢ διαφερόντων τῶν εἰδῶν. τῆς δ' αὐτῶν διαφορᾶς ἢ τῶν κοινῶς συμβεβηκότων διαφέρει τὸ γένος, ὅτι εἰ ἢ καὶ πλειόνων ἢ διαφερόντων τῶν εἰδῶν κατηγοροῦν αἱ διαφοραὶ ἢ τὰ κοινῶς συμβεβηκότα, ἀλλ' ἢ ἐν τῶν τί ἐστὶν κατηγοροῦν ἀλλ' ἢ ἐν τῶν ὁμοῖον τι ἐστὶν. ἐρωτησάστω γὰρ τῶν τί ἐστὶν ἐκείνου καθ' ὃ κατηγοροῦν ταῦτα, τὸ γένος ἀποκρινόμεθα, τὰς δὲ διαφορᾶς ἢ τὰ συμβεβηκότα ἢ ἀποκρινόμεθα· ὃ γὰρ ἐν τῶν τί ἐστὶν κατηγοροῦν τῷ ὑποκειμένῳ, ἀλλὰ μάλλον ἐν τῶν ποῖόν τι ἐστὶν. ἐν γὰρ τῶν ἐρωτῶν ποῖόν τι ἐστὶν ὁ ἄσσομος φασὲν ὅτι λογιῶν, ἢ ἐν τῶν ποῖόν τι ἐστὶν ὁ κόραξ φασὲν ὅτι μέλαν· ἔστι δὲ τὸ μὲν λογιῶν διαφορὰ, τὸ δὲ μέλαν συμβεβηκόσ. ὅταν δὲ τί ἐστὶν ἄσσομος ἐρωτησῶμεν, ζῶον ἀποκρινόμεθα· ἢ ἢ ἄσσομος γένος τὸ ζῶον. ὡς τε τὸ μὲν καὶ πλειόνων λέγειν τὸ γένος διασέλλει αὐτὸ ἀπὸ τῶν καθ' ἑνὸς μόνον τῶν ἀτόμων κατηγορουμένων, τὸ δὲ διαφερόντων τῶν εἰδῶν διασέλλει αὐτὸ ἀπὸ τῶν ὡς εἰδῶν κατηγορουμένων ἢ ὡς ἴδιων. τὸ δὲ ἐν τῶν τί ἐστὶν κατηγοροῦμεν χωρίζει αὐτὸ ἀπὸ τῶν διαφορῶν ἢ τῶν κοινῶς συμβεβηκότων, ἢ ἢ ἐν τῶν τί ἐστὶν ἀλλ' ἐν τῶν ποῖόν τι ἐστὶν ἢ πῶς ἔχον ἐστὶν κατηγοροῦν ἢ ἑκάστων ὡν κατηγοροῦν. ὅθεν ἄρα περιττὸν ἢ δὲ ἐλλείπον περιέχει ἢ τῶν γένος ἢ ἑκάστων ὑπογραφή τῆς ἐπινοίας. τὸ δὲ εἶδος λέγειν μὲν ἢ ἐπὶ τῆς ἐκάστου μορφῆς, καθὸ εἶρην ἢ πρῶτον μὲν εἶδος ἄσσομος τυραννίδος· λέγειν δὲ εἶδος ἢ τὸ ὑπὸ τὸ ἀποδοθῆν γένος, καθὸ εἰώθαμεν λέγειν τὸ μὲν ἄσσομος εἶδος τῷ ζῶον, γένος ὄστος τῷ ζῶον, τὸ δὲ λευκόν τῷ χρωμάτος εἶδος, τὸ δὲ τρίγωνον τῷ σχήματος εἶδος. εἰ δὲ ἢ τὸ γένος ἀποδοθῆν τῷ εἶδος ἐμμεμῆμεθα, εἰσόντες τὸ καὶ πλειόνων ἢ διαφερόντων τῶν εἰδῶν ἐν τῶν τί ἐστὶν κατηγορούμενον, ἢ τὸ εἶδος φασὲν τὸ ὑπὸ τὸ ἀποδοθῆν γένος, εἰδέναι χρὴ ὅτι ἐπεὶ ἢ τὸ γένος τινὸς ἐστὶ γένος ἢ τὸ εἶδος τινὸς ἐστὶν εἶδος ἐκάτερον ἐκάτερον, ἀνάγκη ἐν τοῖς ἀμφοτέρων λόγοις κεχρηθῆν ἀμφοτέρους. ἀποδοθῆσιν ὅν τὸ εἶδος ἢ ὄστος, εἶδος ἐστὶ τὸ ταπτόμενον ὑπὸ τὸ γένος, ἢ ὃ τὸ γένος

(* addit A: τῷ φόνου τῷ μαθητῷ πλατῶν τῷ λυκοπέδου. χρῆσθ' ὃ θεῖς ἑμῶν σύμματα.

A



NOVA IOANNIS SERRANI
INTERPRETATIO, PERPETVIS EIVSDEM
notis illustrata, quibus methodus & series
disputationis commonstratur.

EUTHYPHRONIS ΤΑ ΤΟΥ ΕΥΘΥΦΡΟ-
dialogi personæ ,
νος Διαλόγου περί σωπα ,

EUTHYPHRO, SOCRATES. ΕΥΘΥΦΡΩΝ, ΣΟΚΡΑΤΗΣ.

Occasio dialogi. Socrates Euthyphroni causam à se quærenti occur præter more in forum venisset, aut se impetratis à Melito accusari. Ita opportune sternitur via ad disputationem de RELIGIONE. Prudenter etiam Euthyphronis personam quæritur Plato, summam quandam Religionis cognitionem vendicatis, & quasi illam arte aditantis (erat enim arctolus a fictitex sequentibus & Cratylus apparet) ut in illius persona, & Religionis decedente munus gereret, vanas suorum hominum de Religionis opinionones comodi refutaret.



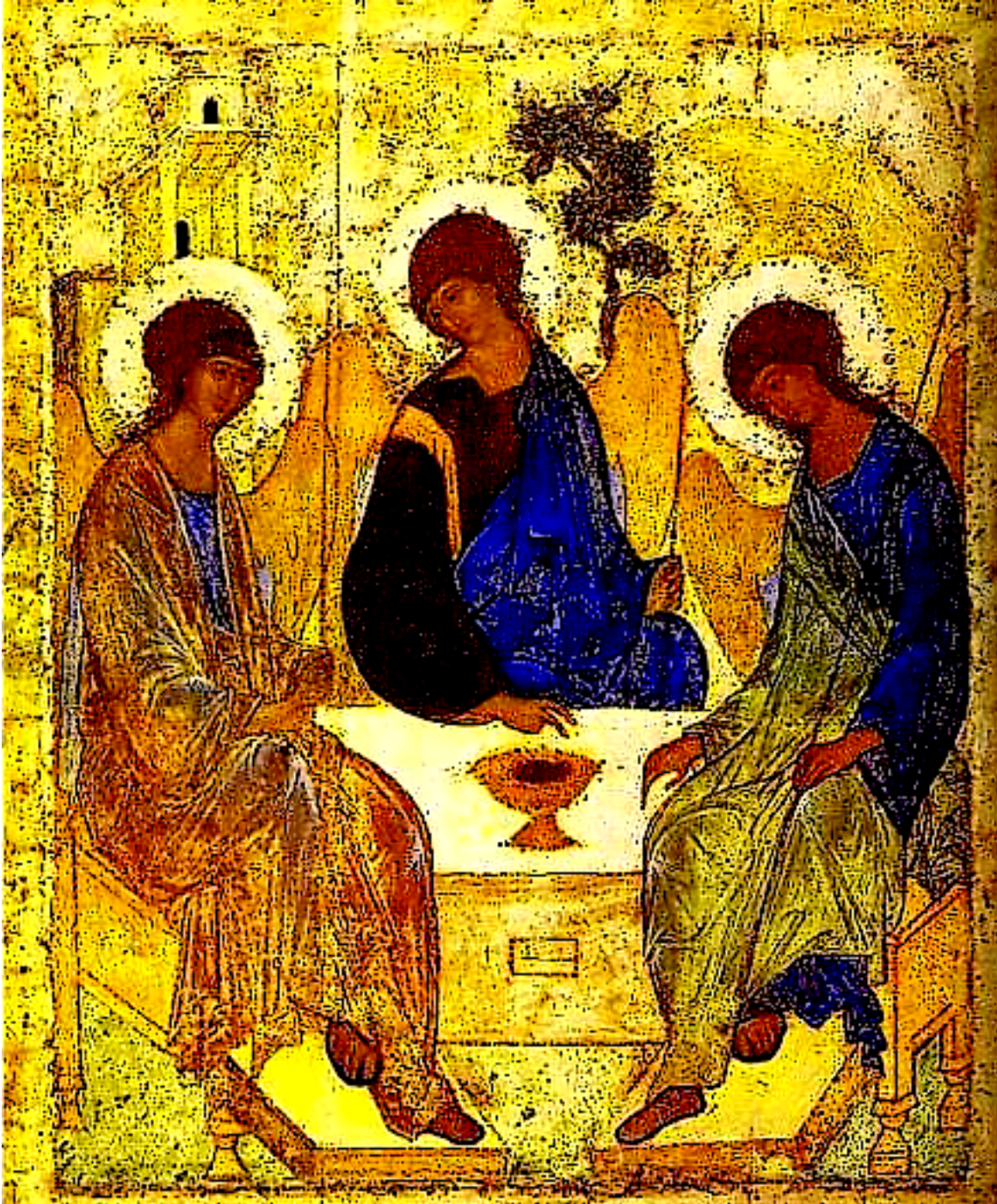
Q V I D N A M hoc nomen est, Socrates, te relicto Lycei spatii, in hac Regis porticu nunc versari? non enim tibi aliqua est illis apud Regem, ut mihi. S O C R. Non eam quidem Athenienses, Euthyphro, litem, sed accusationem vocant. E V T H. Quid ais? aliquis, ut videtur, te accusat. non enim illud quidem statuerim, te alium accusare. S O. Neminè sane accuso. E V. Tene ergo alius? S O. Alius. E V. Quisnam ille est? S O. Ne ipse quidem illum bene novi, Euthyphro. iuuenis enim quidam & incognitus mihi videtur. eum autem (ut arbitror) Melitum vocant. est verò gente Pitthenfis. siquem in animo habes Melitum Pitthensem, hirtis capillis, non ita promissa barba: at naso præadunco. E V. Non subit, Socrates. Verùm equam aduersus te accusationem ille instituit? S O C. Equam rogas: haud ignobilem illam, mea quidem sententia, neque hominis ignavi. iuuenè enim tantam re persequisse, haud certè parui & humilis ingenii est. Nam affirmat se nosse & qua ratione iuuentus corrumpatur, & quomam illi sint qui eam corrumpant. Sapiens quippe videtur, meaque inscitia animaduersa, quasi suos ego æquales corrumpere, prodit me accusaturus apud ipsam ciuitatem, tantquam apud matrem: atque adeo, opinor, Reipublicæ administrandæ rationem ab eo quod consentaneum est arcessit primordio. Consentaneum enim est primam de ipsis iuuenibus curam suscipere, ut quamoptimi euadant: quemadmodum decet agricolam nouellarum plantarum primam curam gerere, tum verò de cæteris curandis rationes inire. Et certè, Meliti hoc

b Aduersariorum suorum contra se accusationem commemoratis Socrates, suoque more, nullo aut personatum aut rectum odio, rem simpliciter & modestè proponens, ita agit ut illorum suorum aduersariorum improbitas & scelus perspicatur: qui nimium pietatis & publicæ utilitatis præterit, in hoc vno elabo rarent, ut prauas suas cupiditates exequerentur. Ita primum caput est λόγος de Religionè, Homines obediunt religionis nomen ad susceperat, ut bonos opprimant: quemadmodum perspicuum est in persona Socratis innitè voluit.



I N E Ω Τ Ε Ρ Ο Ν ὡς Σώκρατες γέροντι, ὅτι σὺ γὰρ ἐν Λυκείῳ καταλιπὼν ἄρχεσαι, καὶ ἐνθάδε νῦν ἀρχετέλεις, καὶ τί πῦρ βασιλέως τοῦ αἰῶνός γε γάρ περ καὶ σοὶ δίκη τις ἔσται τυγχάνει σοῦ βασιλέως, ὡς σὺ εἶπες. S O. Οὐτοὶ δὲ Ἀθηναῖοί γε, ὦ Εὐθύφρων, δίκην αὐτῷ καταλύουσιν, ἀλλὰ γραφίᾳ. E V. Τί φησὶ γραφίᾳ; τίς τις, ὡς εἶπες, γέγραπται. ἔστι γὰρ περὶ ἐκεῖνο γε καταγνώσθημι, ὡς σὺ γὰρ ἔτερον. S O. Οὐ γὰρ ἔστιν. E V. Ἀλλὰ σε ἄλλος; S O. Παῖν γε. E V. Τίς ἄλλος; S O. Οὐδὲν αὐτὸς πάντων γιγνώσκω, ὦ Εὐθύφρων, ἄνδρα νέος γὰρ ἔστι μοι φαίνεται καὶ ἀγνώστου. ὀνομαζομένου ῥητοῦ αὐτῶν, (ὡς ἐγὼ γάρ) Μελίτων. ἔστι δὲ ἄνθρωπος Πιτθικός· εἴ τι γὰρ ἐνθάδε Πιτθίκα Μελίτων, ὅστις τετάρτος γὰρ, καὶ ἐπὶ πάντων βέλτερος, ἔπιτθου δέ. E V. Οὐκ ἔστιν ὡς Σώκρατες, ἀλλὰ δὲ τίνα γραφίᾳ σε γέγραπται; S O. Ἡλίνα; οὐκ ἀγνοῖ, εἰ μοι γὰρ δοκεῖ. ὁ γὰρ, νέος ὄντα, ποσῶν τε ἀρχαίων ἐγνωκέναι, καὶ φασγάνῳ ἔστιν. ἐκεῖνος γὰρ, ὡς φησὶ, οἱ δὲ τίνα ἔσονται οἱ νέοι ἀρχαίων, καὶ τίνας οἱ ἀρχαίων ἐσονται αὐτοῖς. καὶ κινδυνώδης σοφός τις ἔστι καὶ ἔμμελῶς ἀμαθίαν καλιδῶν, ὡς ἀρχαίων ἐσόντος τοῦ ἡλικιωτάτου αὐτῶν, ἔρχεται καταθήρησάν μου, ὡς σὺ σοῦς μνηστῆρας, σοῦς τῶν πόλεων καὶ φαίνεται μοι τῶν πολιτικῶν μόνος ἀρχεσθαι ὀρθῶς. ὀρθῶς γὰρ ἔστι τῶν νέων ἀρχεσθῆναι ὑπερμεληθῆναι, ὅπως ἐσονται ὅτι ἀεῖται, ὡς σὺ γὰρ ἄρχον ἀρχῶν τῶν νέων φουτῶν εἰκός ποσῶν ὑπερμεληθῆναι, μὲν δὲ τὸ τοῦ καὶ τῶν ἄλλων καὶ δὲ καὶ Μελίτων ἴσως ποσῶν ῥητοῦ

Example 8- Plato Opera quae extant omnia (Geneva?: Stephanus, 1578)
From the Library of John Adams digitized by Sloan Foundation. See:
<http://www.archive.org/details/platonisoperaqua01plat>



Example 9- Icon in Reverse Perspective (Note the floor and the chairs) The Icon is by Andrei Rublev ca. 1410 "The Hospitality of Abraham" Tretyakov Gallery Moscow See: <http://experimentaltheology.blogspot.com/2008/07/notes-on-theology-of-icons-part-4.html>