

# Albrecht Dürer's fight against "neoplatonic" melancholy

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Karel Vereycken, founder Agora Erasmus, June 2005



Albrecht Dürer, Melencolia I (1514), Kupferstichkabinett, Staatliche Kunsthalle, Karlsruhe.

*Do such that by all thy efforts  
That God gives you the eight wisdoms  
One will call easily wise a man  
The one that will not accept to be blinded  
Neither by wealth neither by poverty  
  
The one who cultivates great wisdom  
Supports equally pleasure and sadness  
Is also a wise man  
The one that supports shame  
As well as glory  
  
The one who knows one-self*

*and withholds from evil,  
That man is on the road of wisdom  
Who instead of vengeance  
Takes his enemy in pity  
He distances himself  
by wisdom from the flames of hell*

*The one who knows to discern  
the temptation of the devil and Knows  
to resist it with the wisdom that God gave him  
The one who in all circumstance keeps his heart pure  
Has accepted the coronation of wisdom.  
And the one who really loves God  
Is a pure and pious Christian.*

(Albrecht Dürer, 1509)

## Nuremberg, cradle of genius

**Albrecht Dürer's** (1471-1528) self-portrait of 1484 “*done in front of a mirror*”, at age 13 shows us a kid filled with wonder. The father who guided him in that effort, was an of Hungarian origin goldsmith settled in Nuremberg and trained by Flemish “grand masters” in the difficult drawing technique of silverpoint in which they excelled.

Albrecht Dürer, self-portrait at the age of thirteen, 1484, Graphische Sammlung Albertina, Vienne.

Trade, mining and metallurgic centre furnishing the court of Prague, Nuremberg, around 1500, was a city of 50.000 souls attracting talents from far beyond Germany. Important city of the birth of rising printing industry, **Anton Koberger** (c.1445-1516) alone ran about 24 printing machines employing about a hundred skilled workers. **Friedrich Peypus**, the printer of the humanists published the great platonic **Erasmus of Rotterdam** (1469-1536). Nuremberg produced bibles and esoteric writings, but also every humanist author one could find in Italy, besides the scientific works of **Nicolas of Cusa** (1401-1462) or the correspondence of **Enea Silvio Piccolomini** (pope Pius II). Astronomers, geographers, mathematicians, craftsmen, sculptors (one thinks of **Veit Stoss** and **Adam Kraft**), goldsmiths, architects and poets, all flourish in Nuremberg. A medical doctor, **Hartman Schedel** (1440-1515) writes and prints his famous *Chronicle*, illustrated with 1809 engravings. **Martin Behaim** (1459-1509) whose family residence was close to the one of Dürer will build in the city the first earth globes.

Profiting from this exceptional intellectual, cultural and scientific environment, it is undisputable that Dürer, similar to **Rabelais** or **Mercator**, was a child of the “*Erasmus generation*[1]”. Any analysis of Dürer’s work and life must therefore start with a profound understanding of that author, because his worldview represent the giant step from feudalism to freedom, and understanding this impulse remains fundamental to circumscribe the humanism that animated the artist. Another giant, this one a scientist, will give Albrecht Dürer a supplementary extra help.

## From Bessarion to Dürer, passing over Regiomontanus

In 1470, Dürer's year of birth, the geographer, mathematician and astronomer **Johannes Müller** (1436-76), named **Regiomontanus** decides to settle in Nuremberg. He's quite assured to find in the city what he's looking for: erudites as he and highly skilled craftsmen specialized in the construction of scientific precision instruments, in particular for astronomy.

At the death of the Viennese mathematician **Georg Peurbach** (1423-61) who was his mentor, Regiomontanus made it into his own mission to accomplish what Peurbach had committed himself to for the Greek Cardinal **John Bessarion**[2] (1403-1472): retranslate and publish the abbreviated form of the *Almageste* of

astrophysicist **Claudius Ptolemy** (90-168), supposed to give a coherent explanation of the planetary movements of the solar system. This work concluded in 1463 and printed for the first time in 1496 under the title *Epitoma in Amagestum Ptolemei* (with some illustrations of Dürer) will nourish the great controversies taken up by Copernicus, Galileo and Kepler.

In service of Bessarion, Regiomontanus travels through Italy between 1461 and 1467. He produces an astrolabe, writes on trigonometry and the armillary sphere. At the University of Padua he exposes the ideas of al-Farghani and writes a critique of the *Theorica Planetarum* attributed to Gerard of Cremona.

Starting from his own observation, as he states the matter in a letter to astronomer Giovanni Bianchini, Regiomontanus observes that neither Ptolemy's, nor all the astronomical science known at his day could offer a coherent explanation of the observations he had made. By launching an appeal for an international cooperation among scientists for doing so, Regiomontanus arises as the man who set the agenda for the theoretical revolution to be made in astronomy, ultimately accomplished by Johannes Kepler.

Over more, Regiomontanus, in his luggage, brought with him to Nuremberg an exceptional collection of manuscripts. We still have today a "prospectus" [catalogue] dating from 1473 that lists those manuscripts he projected publishing in his newly founded print shop. This rare and prestigious collection was unparalleled at that time for its scientific content: the works of Archimedes, four codex of Euclid (of which a version of the *Elements* belonging to Bessarion and translated at the beginning of the XIIth century by Abelard de Bath), the *De arte mensurandi* (of Jean de Murs), on the *Squaring of the Circle* of Nicolas of Cusa or still the *De speculis cimburrentibus* of Alhazen among many others.



Maintaining his correspondence with **Paolo Toscanelli**[3] (1397-1482), Regiomontanus and his pupil **Berhardt Walther** (1430-1504) elaborated and printed in Nuremberg the famous ephemerides for the period 1475-1506, who, together with the famous map of Toscanelli, gave the tools to intrepid navigators, such as Columbus, to enlarge the horizons of humanity thanks to a new science: astronomical navigation[4].

Despite being very talented for drawing, the young Dürer will be trained as a craftsman and metalworker in the workshop of his father, a goldsmith. Dürer will then enter, at the age of fifteen, the studio of **Michael Wolgemut** (1434-1519), an engraver active as illustrator of Regiomontanus' publications. After Regiomontanus' death in 1476, Walther will inherit the rich library, while following up on the research program. When in 1501, Walther buys the house of Regiomontanus, –which Dürer will acquire in turn in 1509 when he becomes a member of the political body of the Great Council of Nuremberg– he undertakes the construction of a little window and a platform in the southern gable to operate it as an astronomical observatory.

But, deprived of sufficient knowledge of Latin and Greek[5], the adult Dürer was obliged, to unravel this treasure of documents, to spend long evenings with the turbulent correspondent of Erasmus, the patrician Willibald Pirckheimer[6] (1470-1530) and other humanists of his circle.

Dürer might have met there the nephew of the Duke of Milan, **Galeazzo de San Severino** (1458-1525), a friend of Pirckheimer from his university years, who went in exile in Nuremberg in 1499. It was in the stables of San Severino that Leonardo da Vinci had conducted his extensive research on the proportions of horses, and it is established today that some anatomical drawings of Dürer are mere copies of those of Leonardo.

Concerning geometry, it is thought of that Dürer profited the advice and friendship of another familiar of the Pirckheimer circle, the priest astronomer and mathematician **Johannes Werner**[7] (1468-1528), known for his love to exchange and share his knowledge with ordinary craftsmen on the wharfs and in the workshops.

Hence, Dürer, initiated into engraving by a collaborator of Regiomontanus, settles in the house of the scientist possessing by far the richest collection of manuscripts collected by Bessarion and Cusa. One could say that before discovering the Renaissance during his trips to Italy, the best of Italy's fifteenth century renaissance had come to his encounter.

### **“Melencolia I”, or Plato against Neoplatonism**

While the kernel of Dürer's fame and glory derives mainly from the large number of engravings on wood and copper featuring religious themes (Apocalypse, small passion series, engraved passion series, etc.), today he's mostly liked for his very detailed studies of natural subjects (*the hare, tall grass, etc.*). We've taken here one of his most enigmatic creations.

Three engravings, known as “*meisterstiche*” [master engravings] are readily seen together to facilitate understanding them. One can present from left to right “*Saint Jerome in his Study*” (1514), “*Knight, Death and Devil*” (dating from 1513), and “*Melencolia I*” (equally dated from 1514).

At the center, “*Knight, Death and Devil*” throws to the viewer the brutal question of human existence. The man on the horse pursues his road, undisturbed by a nearly ridiculous Devil and Death showing an hourglass to the soldier and the viewer. Often surrounded by bones or joined by a skull, its significance is not so much death as such, put the inexorable passing by of time assimilated with a *momento mori* (“recall that you have to die”), an invitation to live a life of reason, too precious to be wasted.

Then, very different from a contemplative life retreated from worldly matters, “*Saint Jerome in his study*” shows us a man busy with optimistic activity. Even more than the skull and the hourglass, it is the giant pumpkin hanging on the sealing that worries us here. For its many pits, it is a symbol of fertility and consequently as nourishment for immortality. A Chinese saying brings in the question of the meaning of life: “*Am I a calabash which has to remain suspended without being eaten?*”

Saint Jerome was the idol and the model for the Erasmian humanist current, since his undertaking of the translations of the Holy Scriptures brought us the beauty of Christianity. Jerome’s life, in that sense was dedicated to the advantage of the other[8].

Finally, the enigmatic “*Melencolia I*” has been, and certainly will remain a subject of intense controversy and speculation since it was conceived, and as we shall see, that is certainly not an accident.

The engraving identifies, in a **twilight** zone disturbed by the glow of a falling **comet** and what some have called a “**moonbow**”, a **winged figure** that remains seated on the floor. She sits in front of some kind of monument standing in front of a large lake bordered by a town in the distance. While possessing some male features, she carries on her head a **crown of leafs** and is clothed with a nicely embroidered dress. She carries a well filled **purse** and a set of **keys**. She is surrounded by a collection of objects and instruments relating to *geometry* (a pair of **compasses**, a **ruler**, a **sphere**, a strange **polyhedron**); to *craftsmanship* (a **plane**, a **gauge**, a **hammer**, some **nails**, **tongs**, a **saw**, a **crucible** with pincers, a **ladder**, a pair of **scales**, a **sandglass** with a **sundial**); to *numbers* (a **magic square**), to *literature* (an **inkpot**, a closed **book**) and to *music* (a **bell**).

Sitting besides her, one sees a **little angel** who looks quite inspired and sits on a rug hanging over a **millstone**. While this *putto* concentrates on his activity of writing, a miserable looking **dog** curves his back on the floor. On the upper left, a bat holding a sign with the text “*Melencolia I*” seems bounded to fly out of the picture. To penetrate this work, we will proceed stepwise.

### **An Aristotelian virus: melancholy**

No need to be initiated in all the secret significances of objects and attitudes to identify the general meaning of this artwork. The figure that incarnates melancholy seems suffering gravely from its own passivity, showing even some jealousy towards the happy, hardworking putto.

Aecedia, later renamed melancholy or spleen

The studies of art historian Erwin Panofsky[9], building on those of Karl Giehlow dating from 1903, usefully recall the origin of the theme: melancholy (of the Greek *melas* [black bile]), similar to *aecidia*, has always been considered by Christians as a sin[10]. This “*overwhelming sadness*”, this “*torpor of the spirit incapable of undertaking the good*” is not a simple sluggishness in the sense of laziness.



According to antique medical knowledge, melancholy is but the fourth of the four humors (temperaments, characters) affecting all human beings. But if one of them dominates too much, it can lead to vice and even folly.

1) The **sanguine** (associated with youthfulness, the morning and the element air): a passion for women, the love of voluptuousness.

2) The **choleric** (yellow bile, associated with mature virility, noontime and the element fire): irascibility, brutality, scandal mongering.

3) The **melancholic** or atrabilious (associated with middle age, evening time and the element earth): jalousie, sadness, bitterness.

4) The **lymphatic** or phlegmatic (associated with old age, night time and the element of water): inertia, sleepiness.

As Erasmus underlined in his *Enchiridion* [Manuel of the Christian Soldier] (1501), these humors have certainly painstaking defaults, but to a well-tempered man, they also leave some space for certain qualities capable of compensating the problems and weaknesses of character: “*It happens sometimes that nature, as if she was balancing between two accounts, compensates one sickness of the soul with a contrary quality: such or such individual is doubtlessly brought towards voluptuous pleasure, but in no way choleric, in no way jealous; another one is of incorruptible chastity, but slightly haughty, tempted by rage and scrappy.*” [f.46]

During the middle ages, melancholy was often represented similarly as laziness (*aecidia*), personified as a spinster having stopped spinning (unwinding the thread of life), who by its inaction becomes vulnerable to the devil. Dürer treated this theme, though differently, in an undated engraving called “The dream of the Doctor [11]”.

But Dürer’s melancholy has nothing to do with this laziness and here we are in front of something radically different: the winged figure is in a state, as one could say, of super awakenedness. Its face is darkened by the shadow, its eyes express intellectual search for the absolute, intense but sterile. It has suspended its laboring, not because of indolence, but because this work has lost, for her eyes, any purpose. As Panofsky wrote: “*It is not sleep that paralyzes its energy, it is thinking.*”

## Marsilio Ficino at the origin of romanticism?

This “new” interpretation of melancholy arrived with what is misleadingly called “neo-platonic ideas”. In reality it was a perverse attack against the very essence of platonic thinking delivered by the person, work and followers of Marsilio Ficino[12] (1433-1499), himself a staunch follower of the neo-platonic school of Alexandria.

As Giehlow, Panofsky noted, long before us, that this dominant personality of the neo-platonic academy of Florence had *inversed* the concept of melancholy, in particular in his treatise *De Vita triplici* [The three books of life] (1489). That Albrecht Dürer became familiar with these ideas is established fact. Already, Pirckheimer himself, when studying in Pavia in Italy, had sent back to his father a copy of this particular book. **Anton Koberger**, Dürer’s “godfather”, had printed in 1497 in Nuremberg, the letters of Ficino dealing with the same subject. More broadly, Ficino’s works were translated into German and circulated widely during that time. So there is no doubt that these ideas could have escaped from being discussed at Pirckheimers circle.



In chapter 3, 4, 5 and especially chapter 6 of the first book of the *De Vita triplici*, Ficino integrates the ideas of Plato’s enemy number one, Aristotle. The latter, in his *Problemata XXX, 1*, defines the “melancholic by nature” character as someone with such a particular sensibility that his thinking and emotions oscillate so much between paralysis and hyperactivity (the modern manic-depressive) that he can turn over into madness, delirium or mental incapacity. But, for Aristotle, “*all beings really exceptional, for it being in the domain of philosophy, of statesmanship, poetry or art, all are melancholics –some of them to the point that they suffer of the troubles provoked by the black bile*”.

Ficino makes an effort to give even more substance to Aristotle. After some pseudo-medical arguments he concludes that black humor “*has to be looked for and nourished*” as much as the white one, because, if correctly exploited, it can give a formidable force to the soul: “*And everything she [the melancholic soul] reaches for, easily she invents, and clearly perceives, and judges sincerely and retains till she has made up her judgment. Add to this, as we have demonstrated above, that the soul through this instrument corresponds with the centre of the world, which (so to speak) receives the soul as in its centre, and always tends towards the centre of all things, and penetrates there deeply. Over more she corresponds with Mercury and Saturn of which one is the highest planet which uplifts man to the search of the highest secrets. From there come the singular philosophers, principally when the soul is abstracted of the external movements and of the proper body, and close to the divines, she is made instrument of divine things. Hence being filled with divine influences and oracles from above, she always invents something new and unusual and predicts*



*things of the future. This is affirmed not only by Democritus and Plato: but also Aristotle in the book of Problems and Avicenna in the book of divine things, and in the book of the Soul, do confess it.”*

Aristotle will say elegantly, that if the melancholic succeeds in walking on the narrow ridge between madness and genius *“the behavior of his anomaly becomes admirable for its equilibrium and beauty”*.

By this stratagem, the Florentine neoplatonists adopted the Aristotelian doctrine for which *“furor melancolicus”* was the scientific foundation of the platonic conception of *“furor divinus[13]”*! Even if the process of human creativity, sometimes called *“creative agony”*, implies, following the extinction of a given level of hypothesis, qualitative jumps to *“higher geometries”*, that process, while bypassing mere rationality, obeys a harmonic legitimacy. To establish an automatic equivalence between madness and creativity has been a sophisticated instrument of the oligarchy to promote a factor of arbitrary irrationalism, destructive for both the arts and sciences.

Having regained lustrum thanks to this deceitful mixture, melancholy, till then considered evil, would wreath itself with the sublime[14]. Melancholy with its new halo will become the essence of a grave cultural disease of which the world suffers till today: **romanticism**[15].

### **Agrippa, Trithemius and Zorzi**

The rising influence of Erasmus of Rotterdam and Thomas More, the two great platonic reformers of state and church of that day will provoke growing ire and rage of the oligarchy, an oligarchy basically centered on the financial holdings and intelligence services of the Venetian “republic”[16].

Before Luther entered on stage, Venice will be engaged in the massive promotion of occultism, alchemy and cabbalism to confuse the erudite minds of those discovering the Greek and Hebrew cultural heritage. One of these was **Johannes Reuchlin** (1455-1522), who after having met Ficino and **Pico della Mirandola** will go down into the mysticism of the cabbala[17] that Pico made into fashion. Some time earlier, Erasmus had defended Reuchlin for his opposition to the burning of the Hebraic books by the Inquisition – a wild obsession since the arrival of **Torquemada**. Erasmus tried to recruit Reuchlin for his own project, the soon to be founded three languages college, a body of honest scholars that would retranslate the holy scriptures from the original Greek, Latin and Hebrew manuscripts in order to do away many of the misunderstandings that had originated from bad translations and reinterpretations.

The Erasmus networks rapidly decided to go after the alchemist operation. Erasmus himself in his *In praise of folly (1511)* wrote against: *“those who by new practices and mysteries try to change the nature of element and are looking for a fifth one, i.e. the quintessence, over the land and the seas... They have always in mind some marvelous inventions that dissipate them and they hold on so much to illusion that they loose all their belongings and have nothing left to build their last furnace.”*

To encourage real science, Erasmus later wrote the preface of *De Re Metallica* (published in 1556) of **Georg Agricola** (1494-1555) on geological processes, fossils, minerals and their useful transformations for mankind.

Other denunciations of alchemy were common, as the *Ship of Fools* of **Sebastian Brant** (1458-1521), published in Strasbourg in 1494 and for which Dürer made some woodcuts, and of course **Pieter Breughel the elder's** "*Al-ghemist*" (he missed all) of 1558 whose children are taken away and put on welfare.

At the centre of this alchemist offensive stood **Agrippa of Nettesheim**[18] (1486-1535).

In 1510, he traveled with the young Swiss physician **Paracelsius** (1493-1541) to Prague to meet the Benedictine abbot **Trithemius**[19] (1462-1516). With the latter, Agrippa founded, first in Paris and then in London, an international secret society called the *Community of Magicians*. As many other "astrologers" and alchemists of that time, Agrippa functioned as a diplomat, a spy and an agent of influence. Agrippa will first be the ambassador of Emperor Maximilian I of Austria, official protector of Nuremberg. In that capacity, Agrippa will be posted in London where he meets and works with the nefarious ambassador of Venice, **Francesco Giorgio**[20] (Zorzi). While at the surface the Vatican hierarchy had made Luther their official enemy, their covert operations will promote the Lutheran anti-erasmian "heresy", as a comfortable pretext for maintaining a spiritual power that had become sheer earthly power. Consulted to give his advice on king Henry VIII's divorce, Zorzi vividly encouraged him to break with Rome, along a strategy forged by the young elites of Venice out to make England into their "Venice of the north" at the epicenter of the new geographical reality between the new world and the old one centered around the Mediterranean.

That network, with all its deceitful appearance, will penetrate deeply into the humanist elites. Agrippa himself tried to maintain a correspondence with Erasmus. In England, he settled in the residence of Erasmus' friend **John Colet** (1469-1519), equally in contact with **Ficino** and **Pico della Mirandola** (1463-1494). Zorzi kept also relations with **Guillaume Postel**[21] (1510-1581), one of French kings François I esoteric super spies. In *De Harmoni Mundi* (1525), Zorzi's major work that he dedicated to pope Clement VII, one finds the classical hermetic themes of the seven spheres, angelology and the influence of the planets, with cabbalism in addition. In reality, the real subject was to introduce paganism and try to prove it was perfectly coherent with Christian doctrine.

This esoteric offensive will bring the subject of melancholy fully at the center of debates. An initial writing of Agrippa, *On the uncertainty and the vanity of all sciences and arts* deals already with this subject. Initially written, by the negation of the author's cabbalistic beliefs, to escape from the Inquisition, *De vanitate* appears as a book written by a depressed personality or somebody magnificently deceitful, stating that nothing makes sense, everything is in vain, even metaphysics.

As Panofsky keenly remarked, Agrippa, in chapter 60 (LX) of his book *De occulta philosophia* (written in 1510, and printed in 1530 in Antwerp), praises Aristotle's melancholia[22] *via Ficino*. The work established Agrippa's reputation as an occultist and is build by bits and pieces taken from Hermes Trismegistus, Picatrix, Ficino, Pico della

Mirandola and Johannes Reuchlin. Here one finds symbol-minded theories on the soul of the world, the spirit of the world and the occult virtues of a world on three levels (theory of Plotinus, turned into a worst caricature by Ficino): elementary, celestial and intellectual. These three levels correspond each to a given type of magic (perfumes, philters, poisons, how to bring the death back to life, etc.). In book II, Agrippa reveals the secrets of the celestial world thanks to mathematics and astrology. With the aid of magic squares (as the one present in Dürer's engraving), it is supposedly possible to obtain a symbolic representation of each of the planets. (Somebody remarked that unfortunately, the magic square that is supposed to correspond with the theme of Melancholy [Saturn] possesses nine figures and not sixteen as the one shown by Dürer...). Book III focuses then on the magic rituals necessary for a small circle of initiates to get access to "the truth".

England's occultist **John Dee** (1527-1609) and others will make Agrippa's *Occulta* the founding text for the early Rosicrucian order and its freemasonic offshoots.

### **So this explains (nearly) everything!**

So, at first glance, a symbolical or alchemistic reading of the engraving seems to give us all the keys of it!

The **magic square** in Dürer's engraving integrates the date of the mother of the artist, just some months before the making of the image: May 17, 1514. If one adds 5 to 15 and 14, one gets the figure 34, 34 being the number that limits all magic squares of 4 times 4 figures, whose addition, vertically, horizontally or in diagonal give all the sum of 34.

Wasn't Dürer himself a **geometer** and great architect? On the left, we see the **crucible** with a pair of small **pincers**, typical equipment of the alchemist purifying impure matter, metaphor for the process ongoing in the soul of the melancholic genius? The dark face of the figure doesn't that remind the famous *nigredo*, the black working which constitutes the first phase of the alchemic process? Aren't these tools and objects waiting for the awakening of the suffering genius?

Ladder of Jacob, 1519-1528, Chants Royaux sur la Conception Couronnée du Pays de Rouen, Paris BNF, Mss, Fr. 1537.

The **ladder** (with seven steps) isn't that a clear reference to the road of ascension of the soul traveling upward through the seven spheres, a metaphor one finds already in *Genesis* (XXVIII, 11)? "*And there stood on the earth a ladder whose summit reached heaven; God's angels were going up and down*".

The two **wings** of Melancholia, aren't they the two virtues which Ficino takes from Plato? Also, if one knows that Dürer's father's name was *Ajto* (Hungarian for *door*), Germanized into *Thür* (to become *Dürer*)[23] and if one rearranges the letters of the word "*Melencolia*", one gets "*limen caelo*[24]" or "*door to heaven*"...

But wasn't Dürer a melancholic, as Ficino reportedly was? One of his first self-portraits shows him pretty affected and sad looking, the head supported by the arm and elbow? In another drawing that he sent to his physician, Dürer indicated a precise spot of his torso:

the bile[25]... Melanchton, directing his school in Nuremberg mentions “*Dürer’s excellent melancholy*”.

So as you can see, all the “objective” conditions exist to have us believe that there was something to it. Since Dürer mentions himself the “platonian ideas” as soon as 1510, and since Trithemius was befriended to Pirckheimer, one could believe, with Panofsky, that *Melencolia I* “*is, in a sense, a spiritual self-portrait of Dürer*”: an artist, if not a follower, or certainly heavily influenced by the *zeitgeist* polluted by Agrippa and his Venetian networks.

Everything, or nearly everything, seems to find intellectual cohesion, besides the fact that it is hard to imagine how such a staunch Christian such as Dürer and especially someone as strongly committed to the education of broad layers of people (see box I) could ever engage in such a manifesto of heretical hermetic beliefs. It seems we forgot an essential detail of the engraving: its author.

### **Plato versus neoplatonism**

A recent discovery made quite some sensation. A London art historian, **Patrick Doorly**, in an article published in the *Art Bulletin* [26] in 2004, threw a rock in the tranquil waters of the Panofskyian lake. While reading one of Plato’s first dialogues, the *Hippias Major*, Doorly realized there exist strong iconographical correlations between the language of the philosopher and the one of the artist.

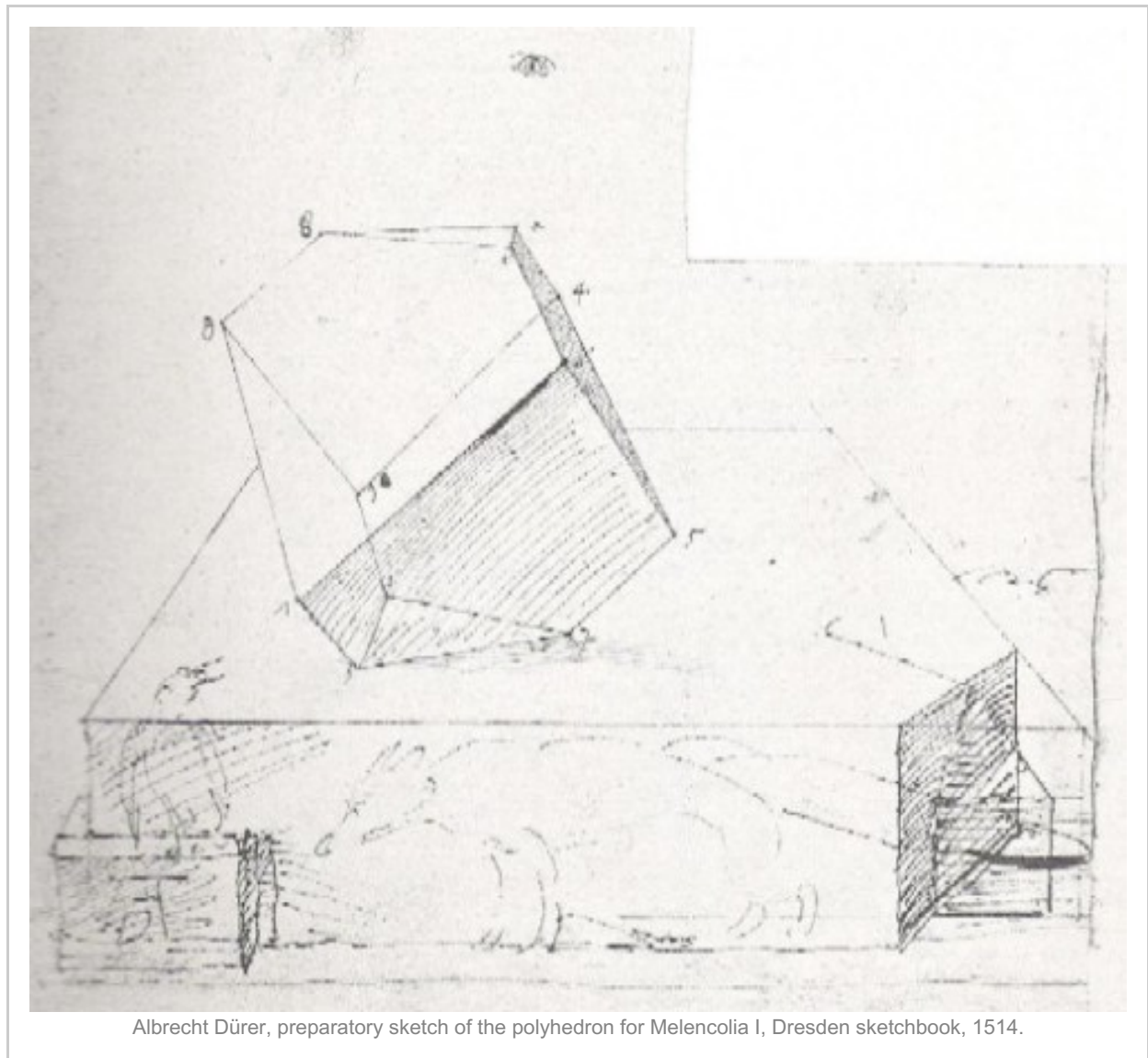
**Hippias of Elis** (around 450 BC), one of the worst sophist around, is cornered by Socrates who interrogates him on the real nature of beauty in itself. Trying one answer after the other, Hippias lines up a series of things to which beauty can be attributed, (a young woman [287e], gold [289e], being wealthy [291d], being powerful [296a], a speech that persuades the many [304a], etc.), while never accepting the conceptual challenge thrown to him by Socrates to answer the question of beauty in itself. At that point, Socrates, without losing nerves tells him: “*It is beauty in itself, dear man, that I ask you to describe to me, and I’m incapable of making myself understood like if I was sitting in front of a stone, or rather as a millstone with neither ears nor brain!*” [292d].

Suddenly this story gives some meaning to the millstone on which sits the little angel, right in the middle of Dürer’s engraving! One of the reasons why this new track of investigation, of a melancholy personified by Hippias, sheds new light on the matter, derives from the fact that, while completely redefining the general sense, it *maintains* the validity of the meaning of certain critical details, while completing the meaning of those lacking.

From this new standpoint, melancholy clearly seems an ironical attack against the followers of Agrippa (who was known for having always a big black dog with him called *Monsieur*) and his belief, as Trithemius, in the magical power of angels. The fact that Dürer denounces a sick state of mind is confirmed by the fact that the crown of leafs, a caricature of the crown of bay leafs offered to the best poets, in this case is composed of branches of water ranunculus and leafs of watercress! An irony many symbol-minded interpreters will simply ignore because they lack most of the time themselves a humorous character. In reality, since the melancholic humor was associated with fire and dryness, the ancient physicians advised their patients to apply aquatic plants to counterbalance the sickness...

Also, Plato's dialogues *Hippias Major* and *Minor* describe the physical wealth of the sophist, what would explain the sophisticated embroidered Venetian dress (Hippias reputedly manufactured his own cloths, belt and shoes). That he is wealthy and powerful is stated clearly with the filled purse [wealth] and the large set of keys [power][27]

### The disturbing polyhedron and the legacy of Piero della Francesca



Especially, one can see that it is uniquely the hypothesis of the *Hippias Major* that gives a real meaning (ironical-metaphoric and not mystical-symbolic) to the strange polyhedron so prominently occupying the center of the composition. That this volume was one of the key elements of the composition is clearly shown by the surviving preparatory drawing.

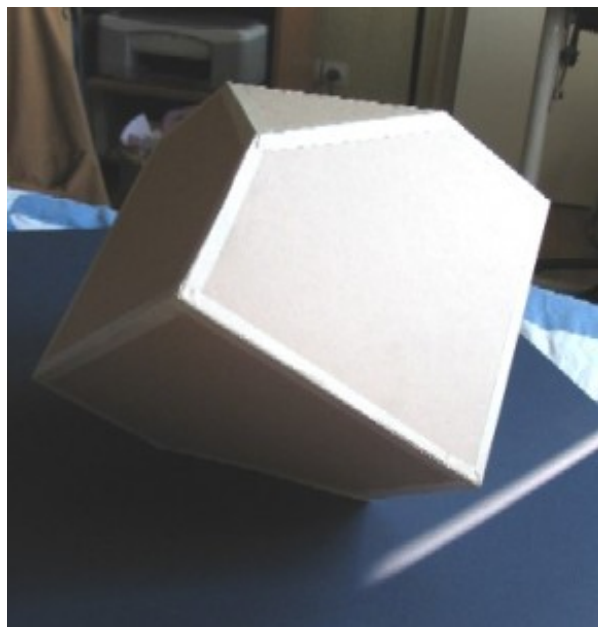
At a first glance, our senses identify five-sided irregular surfaces. The pentagon has always been the subject of unending speculative conjectures. Luca Pacioli's book, *De Divina Proportione*, published in 1509, established that the pentagon cannot be constructed without this specific relationship of divine proportion. The dodecahedron, a volume constructed with 12 pentagons, is over more the "boundary" volume in which all the others can be inscribed, as **Plato** develops that in the *Timaeus*. Since the volume Dürer presents us here doesn't figure among those that Leonardo drew to illustrate Pacioli's book, one wonders what the nature of this polyhedron might be.

Dürer seems to have chosen to deliberately deceive our sense perception and by doing so, our certainties, a deceit of which Plato accuses the painters of in his *Republic* [602d]. Also, in *Hippias Minor* [on cheating], he says that “if there exists a man which can deceive us about geometrical figures, it is the one we’re talking about, the competent geometer, since he is capable to do so” [367e].

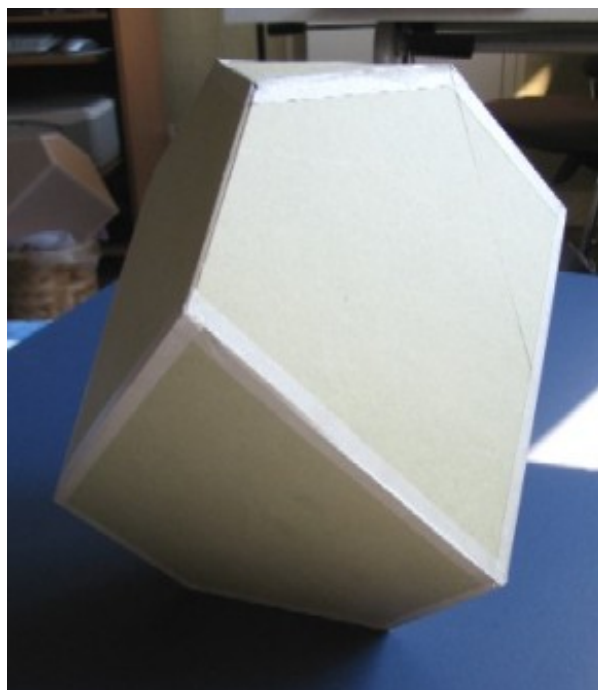
If one tries to physically build the volume we see, one gets the impression we’re facing an “impossible” volume, one that exists “in between” a **partially truncated cube** and a **partially truncated rhombohedron**.

By forcing the perspective foreshortening of a cube[28], which by himself, when seen from a certain angle is already difficult to distinguish from a rhombohedron (unless its surfaces, [diamond-shaped] lozenges, have pointed angles beyond eighty degrees, i.e. close to the 90 degrees of a square), Dürer creates here a geometrical in-betweenness that is identified in geometry with the *instable* or *non-generic viewpoint*[29]. Dürer selected here a particular angle of view and a particular perspective construction[30] bringing the two volumes to “rub” each other by their closeness –unless that closeness results directly from the closeness of the angles chosen for lozenges of the rhombohedron with those of the squares of the cube.

This closeness derives also from the “familiarity” that exists between the partially truncated square, the partially truncated lozenge and the **pentagon**, since they seem to belong to the same “species”. One can represent the first two of them as vertical sections of a visual cone indicating the projected image of a pentagon tilted forwards or backwards. The science of geometrical ambiguity was the original contribution of the Italian renaissance painter **Piero**



Partially truncated cube (constructed by the author).



Partially truncated rhombohedron (constructed by the author)

Evolution of a pentagon, a truncated square and a truncated lozenge, as a projected image on a forward/backward tilted screen (section of a visual cone). (drawing by the author)

**della Francesca** whose science and knowledge will be reduced to mere amusement after the famous *anamorphoses* still present in Holbein's painting, the *Ambassadors*, and a sketch of Leonardo in the *Codex Atlanticus*.

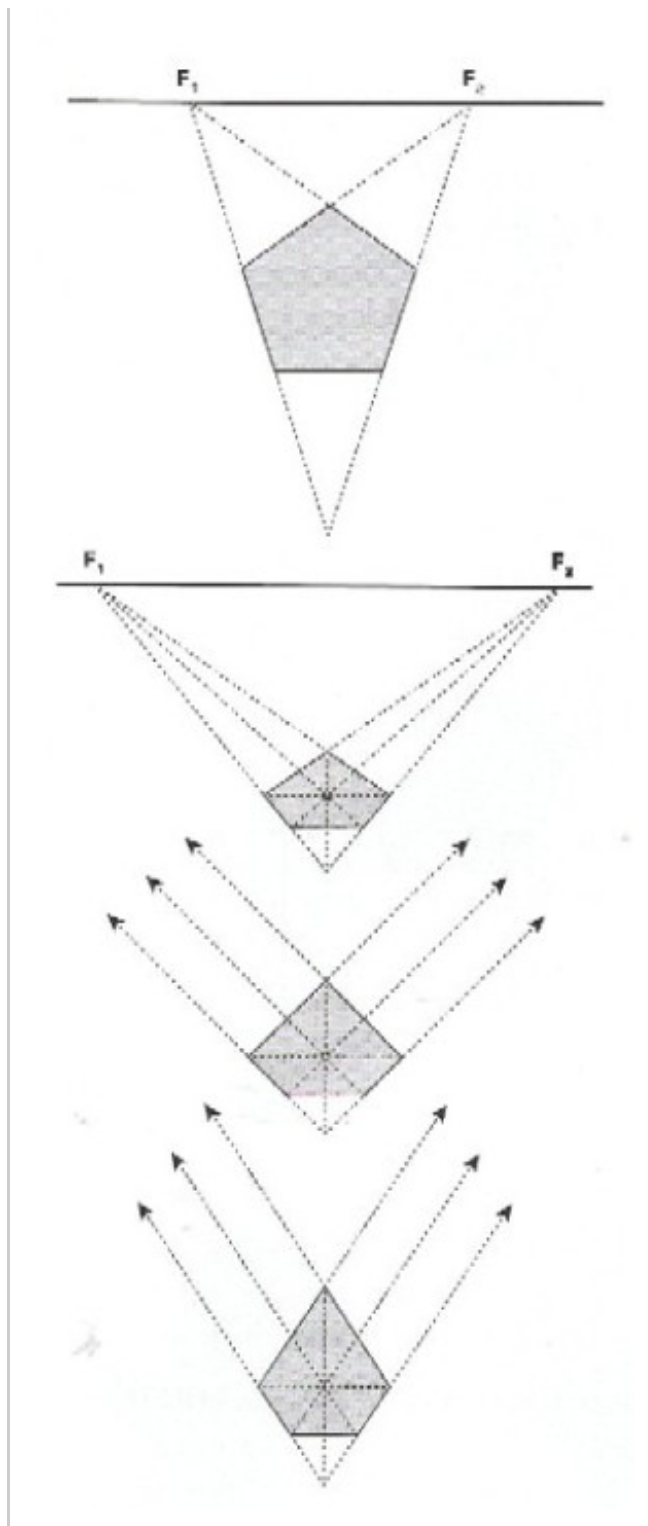
For Piero, this type of paradox, which blows our senses to the limits, became the backbone of any real work of art, since it represents the unique method of communicating ideas of the level of the incommensurable, i.e. the divine. A simple (linear, Cartesian) geometry, which doesn't appeal to the complex domain, locks up mans mind him inside a finite "dead" system.

Anticipating the calculus, Dürer, according to some, takes up the platonic idea that by truncating the angles and by replacing them with facets, one could generate ever more complex volumes capable of generating a good approximation of bodies bounded by given curvatures, including those of the human body. Pacioli projected to continue that process of truncation till the infinite.

But the real message here is a metaphysical, philosophical one. Dürer seems to tell us here: beauty and truth are nothing but one and the same substance, united in the One. Agrippa

and his followers, as Hippias the sophist, are living in a state of denial of reality and therefore are incapable of understanding what beauty and even reality is all about. This might explain us why the ladder stands *behind* the monument and not in front: by fixating on numerogy and symbols, one gets to it from the wrong angle!

Plato's conclusion of his dialogue is very tough and demanding: "*And how will you then know, (...), which speech is produced beautifully or not beautifully, and equally for all other action, since you don't know what beauty is? And as long as you are in that state, do you believe it is better to live rather than to die?*" [304d]



Hence, *Melencolia*, prisoner of the senses while lost in her dreams cannot but measure the visible, and unless accepting change and transformation, will never reach the invisible. The daring idea of bringing together in a single person the winged *Fortuna* descending from her sphere, an angel personifying *Geometry* and Plato's *Hippias* to tease ironically Agrippa and those who believed his nonsense, was an idea full of *hubris* (Greek word for *de-measure*)!

The gloom of the passing comet brings about a rainbow, such as the one announcing a new alliance between man and God after the deluge. Its light is sufficient to drive out of the picture the *vespertilio*, the bat with a lizard tail, symbol of an evil force operating in the dark that carries here the sign *Melencolia I* [31].

If music can also heal melancholy, it is up to the viewer to grab the rope and ring the bell... since, as Socrates concludes in *Hippias Major*: “*It seems that I understand what can signify the proverb that says that ‘beautiful things are difficult’*” [304e].



Portrait of Luca Pacioli.

### Dürer's geometry:

***“to bring in the open and teach”, the knowledge useful to workmen, “kept secret by the erudites”.***

At the closing of the winter of 1506, Dürer returns from Venice committed to write a vast treatise on the training of the artist and the craftsman. As soon as 1513 he thinks of the work as “food for painter apprentices” [speisen der malerknaben]. As any real humanist, he



desires to make available to the many the most beautiful and useful knowledge of humanity and denounces the oligarchs out to confiscate that knowledge for their own power grabbing.

Great progress needed to be accomplished in Dürer's time. If many artist kept their "master techniques" jealously secret, many writings existed as mere manuscripts (**Toscanelli**, **Leonardo da Vinci**) while others were published without any illustrations, including **Leon Battista Alberti's** famous treatise on perspective *De Pictura* of 1432, and **Pomponia Gauricus** *De Sculptura* printed in Florence in 1504.

One has to recognize that the first *printed* treatise on perspective in Europe was the one of the former secretary of the French king Louis XI, canon **Jean Pélerin Viator**[32] (before 1445-1524), *De Artificiali Perspectiva*, published in Toul in 1505. Regarding geometry, it is now recognized that Dürer integrated several parts of the *Geometria Deutsch* of **Matthäus Roritzer**, printed in German in 1498.

Following a nearly revolutionary political situation and repression against the reformation[33], Dürer is obliged, as Erasmus was, to leave the Netherlands at the beginning of the summer 1521. More and more affected by the malaria he contracted (see footnote nr.25), he returns to Nuremberg where he tries to put on paper all his research into a single treaty. At the end, only three parts, written in German, will result of the effort, of which a geometry manual, the *Unterweysung der Messung* [Instructions for measurement with ruler and compass of lines, surfaces and solids, united by Albrecht Dürer and printed with the corresponding figures for the use of all the art lovers, in the year 1525], a treatise on fortifications (1527), and the famous *Four books on the proportions of man*, published in 1528 by his friends after his death.

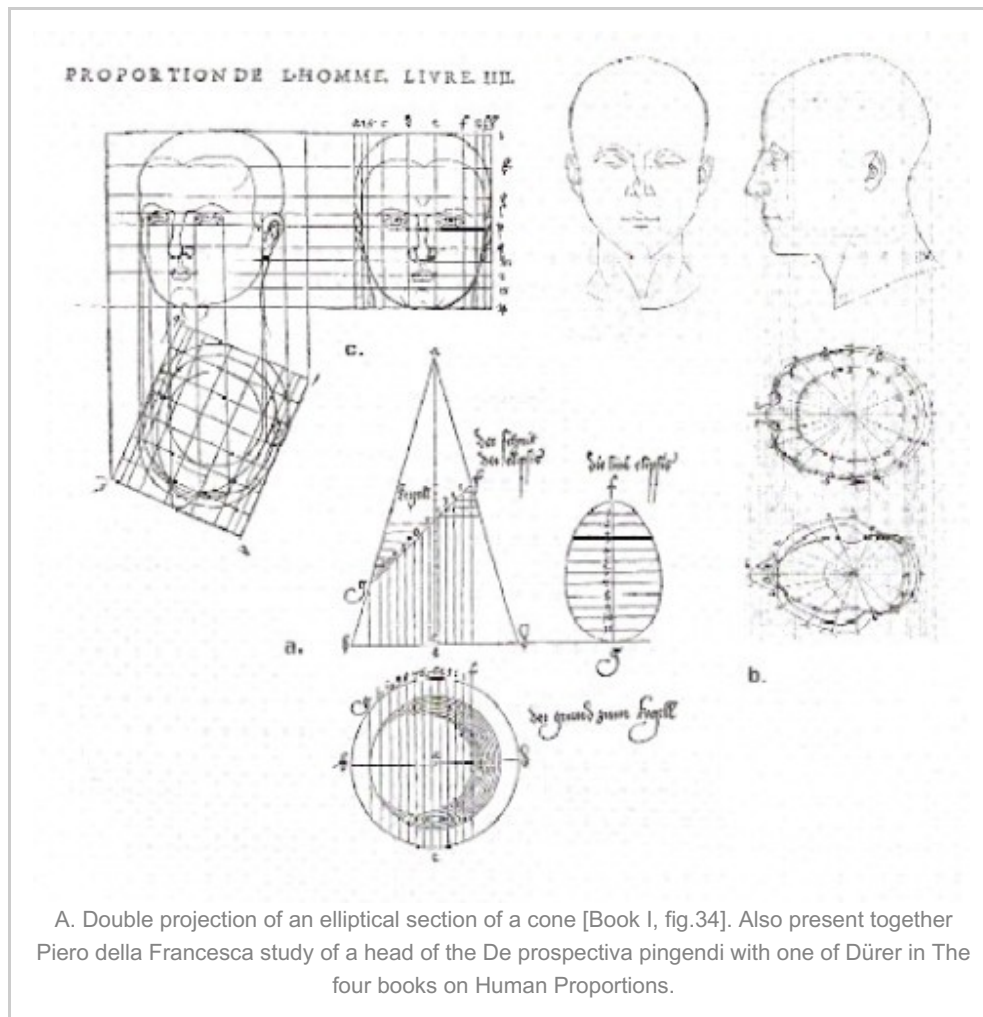
The origin of that passion to communicate "secrets" might originate from an experience Dürer personally went through. On April 20, 1500, the Venetian painter **Jacopo dei Barbari** (c.1445-1515), then resident of Nuremberg showed him "a man and a woman he had done after proportions", while unwilling to give any explanation about how to proceed in their construction. Criticized in Italy for drawing clumsy figures[34], Dürer, as Leonardo, studied the *Ten books of Architecture* of the roman architect **Vitruvius** (first century after D.C.).

During his stay in Italy, it is quite probable that Dürer met the Franciscan monk, and "traveling mathematics teacher", **Luca Pacioli**[35](c.1445-1517). Pacioli was at that time the most acknowledged scholar on the Greek mathematician **Euclid** (325-265 B.C.)[36], whose identity was then mistakenly seen as identical with that of **Euclid of Megarus** (c.450-c.380 B.C.), a pupil of Plato.

As a pupil of **Piero della Francesca** (1420-1492) and collaborator of **Leonardo da Vinci** (1452-1519) at the court of Milan, Pacioli was on top of all the major scientific, mathematical and intellectual discoveries of the Italian *Quattrocento*. In his book *De Divina Proportione* (1509), he demonstrated that the *golden section* is a specific case of geometrical mean dividing a length into an extreme and middle reason, as indicated by Euclid in his *Elements*. In relation with architect **Leon Battista Alberti** (1404-1472) in Rome, Pacioli incorporated Piero's contributions into his own treatise that got illustrated by

Leonardo. In Milan, Pacioli assisted Leonardo to read and understand the Latin text of Euclid's *Elements*. Dürer, as many others of his time, projected to translate Euclid into German.

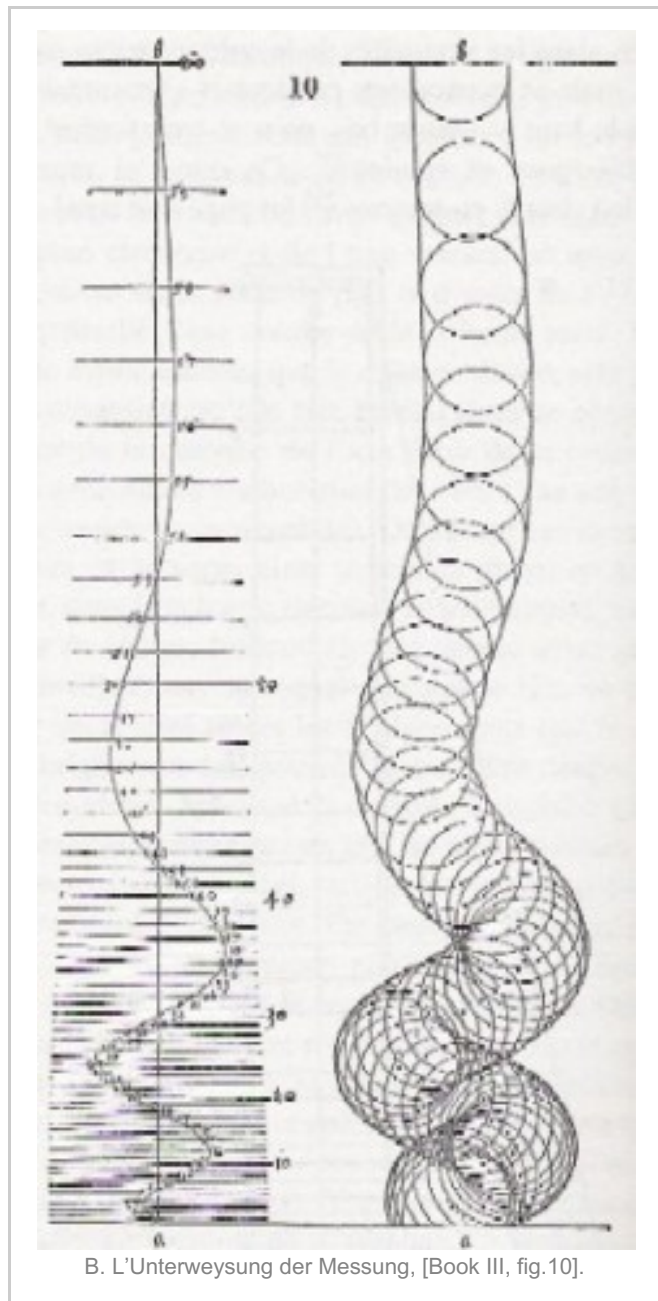
Encyclopaedical synthesis uniting the craftsman's know-how with the German, French and Italian treatises enriched with own original contributions, the *Unterweysung der Messung* might be one of the first pedagogical exercises. To be accessible to all, it goes from simple to more complex: starting from straight lines and curves one generates the surfaces, the volumes and the polyhedra, to evolve into drawing of shadows and perspective.



I quote here the excellent writings of Jeanne Peiffer[37] who describes Dürer's geometry work as follows: "Those who studied Euclid's *Elements* will find nothing new, Dürer warns in the opening pages. However, it is quite something different than a compilation of Euclidian propositions that one find in his work. His geometry isn't demonstrative, but constructive. Dürer's aim is here to construct the forms useful for the craftsman, by procedures easy to operate with commonly used instruments, the ruler and the compass in particular and easy to repeat. There is no single calculation of area and of volume, so characteristic for the geometry practiced at his time. Dürer obtains his most original results, when he applies craftsman workshop's methods to abstract mathematical objects. Hence, by applying the method of double projection (**Fig. A**), familiar to masons, stonecutters and architects, to conical sections, he obtains a very original construction, whose method will be codified by [the founder of Ecole Polytechnique] Gaspard Monge's constructive geometry at the end of the eighteenth century. His conception, in the section dedicated to architecture, a wreathed column, Dürer is lead to conceive the envelope of spheres with

constant radius and having their centre on a curve [Book III, fig. 10] (**Fig. B**). (...) Or also, Dürer indicates the original construction of an otherwise unknown curve [a conchoid, or shell curve], useful for the architect and that serves him, according to the drawings conserved in Dresden (**Fig. C**), to obtain the desired curved shape of Renaissance towers. The generation of that curve is made explicit: a constant length ( $c$ ) moves with one of its extremities on a vertical axis, in such a way that the length of the curve generated by its second extremity is proportional to the distance covered on the vertical axis.

The example of the duplication of the cube, and the use that can be made of it, are particularly revealing for the practical orientation Dürer intended to give to his geometry, but also to the work style of the painter. Dürer knows the problem goes back to antiquity, and originates from the legend –since it was at the demand of Apollo and to save the city that the Athenians[38] are found to be looking to double the volume of the cubical altar. He repeats this tale, and renders homage to Plato for having been capable of indicating the right solution, since he says: ‘Since this knowledge is very useful to workers, and since has been kept hidden and in great secret by the erudite, I propose to bring it in the open and teach it.’ *Why is*



B. L'Unterweysung der Messung, [Book III, fig.10].

C. The conchoid (shell curve) of Dürer, with Fig.151 Dresden sketchbook, (in Annexe 4 of J. Peiffer).

*this knowledge useful? Dürer indicates: 'One could melt the bombards and the bells, double their volume and aggrandize them as wanted, while conserving their proportions and weight. Similarly one will be able to aggrandize barrels, coffers, gauges, wheels and everything one wants.' He gives three solutions to the problem, those recognized in classical literature as those of Sporus, Plato and Heron, and for the latter, he even indicates a demonstration."*

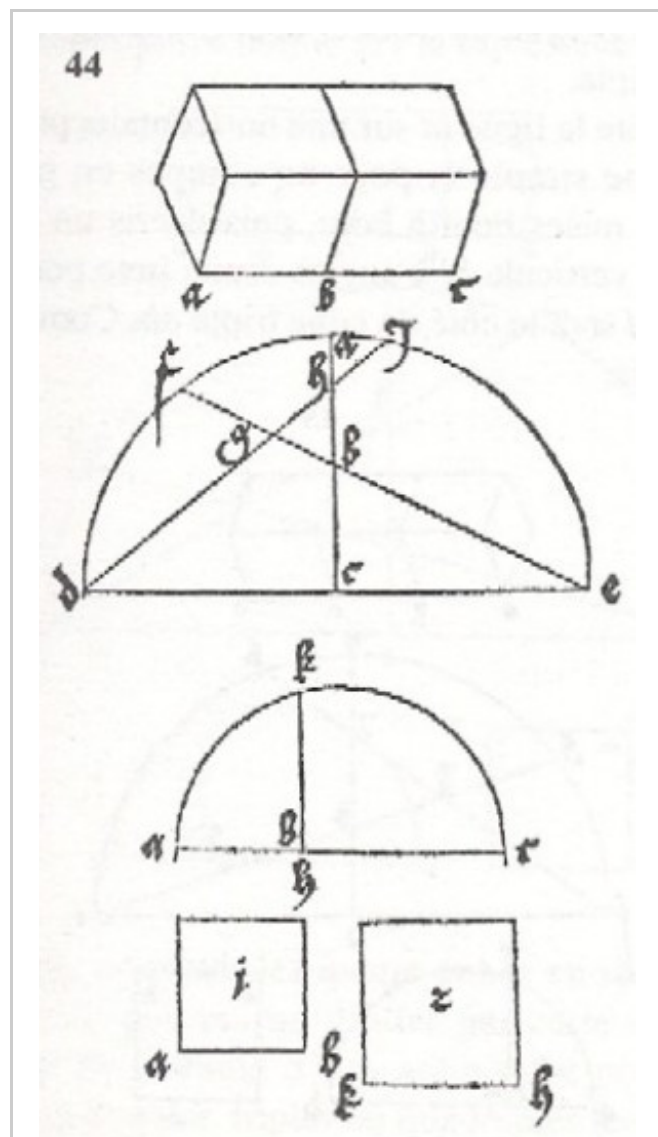
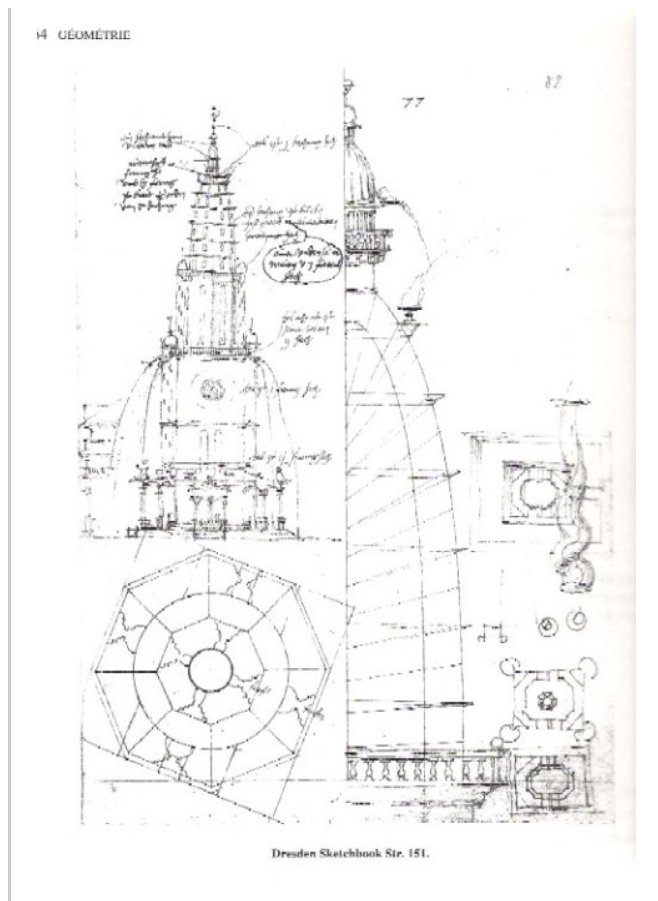
**(Fig. D)**

### How Ficino's Neoplatonism gave Plato a bad reputation

**Marsilio Ficino** (1433-99) was a doctor and son of the personal physician of **Cosimo di Medici** (1389-1464).

Cosimo had become very impressed by the speech of **Georg Gemisthos Plethon** (1355-1450), a wise old man that had come with John Paleologus of Byzantium to attend the Council of Florence in 1438. Plethon, who resolutely opposed Aristotle, was one of the actors of the Council. Between the meetings, he enthusiastically organized the Florentine population by making them discover Plato, but also the **neoplatonists of Alexandria**[39].

It was therefore not astonishing that Plethon got accused of drifting toward paganism since he brought to discover, to a world basically centered on Christianity (the only religion that was right to believe in), the existence of other religious beliefs (Judaism, Zoroastrism, Islam, Chaldean oracles, Orphic hymns, etc.), beliefs of which everything was not necessary worth assimilating.



In any case, it is Plethon that got Cosimo so enthusiastic that he decided to initiate a project to translate from the Greek into Latin, the totality of Plato's works, hardly known in the west. Cosimo seems to have cultivated some doubts on the capacities of the translator he selected for the job, the young Marsilio Ficino. When the latter offers in 1456 his first work, *The Platonic Institutions*, Cosimo asks him kindly not to publish this work and to learn first the Greek language...

But seeing his age advancing, Cosimo finally gave him the post. He allocates him an annual stipend, the required manuscripts and a villa at Careggi, close to Florence, where Ficino would organize his "Platonic Academy" with a handful of followers, among which **Angelo Poliziano** (1454-94), **Pico della Mirandola** (1463-1494) and **Cristoforo Landino** (1424-1498).

Astonishingly, each single gathering of this academy will be attended by the ambassador of Venice, notably the powerful oligarch **Bernardo Bembo** (1433-1519), father of "poet" cardinal **Pietro Bembo**, later special advisor to Pope Julius II.

But before translating Plato, and at the specific demand of Cosimo, Ficino translates first (in 1462) the *Orphic Hymns*, the *Sayings of Zoroaster*, and the *Corpus Hermeticum* of **Hermes Trismegistus**[40] the Egyptian (between 100 and 300 after BC), a manuscript brought by a monk from Macedonia.

It will be only in 1469 that Ficino will finish his translations of Plato after a nervous breakdown in 1468, described by his contemporaries as a crisis of "profound melancholy".

In 1470, and with a title plagiarized from Proclus, Ficino writes his *Platonic Theology or on the immortality of the Soul*. While completely taken in by esoteric Platonism, he becomes a priest in 1473 and writes *The Christian Religion* without changing his convictions, since he starts then a whole new series of translations of the neoplatonists of Alexandria: he translates the fifty four books of **Plotinus**, **Porphyry** and **Proclus**.

In 1489, he publishes a book combining astrology and health, *The book on the three lives*, and in 1492, before dying, he starts translating **Iamblichus**.

The Florentine neoplatonic Academy will serve as a "Delphic" operation: defend Plato to better destroy him; praise him in such terms that he becomes discredited. And especially destroying Plato's influence by opposing religion to science, at a point where **Nicholas of Cusa** and his followers are succeeding to do exactly the opposite. Isn't it remarkable that Cusa's name doesn't appear a single time in the works of Ficino or Pico della Mirandola, so overfed with all encompassing knowledge?

Ficino maintained epistolary relations with the elites of his epoch. In Venice, it was the *Aldine Academy*, the circle of printer **Aldo Manuce**, which was the outpost of Ficino's operation. According to Ficino's biographer in 1505, **Giovanni Corsi**, Ficino nearly dictated the Neo-Platonic themes of **Sandro Botticelli's** paintings, sensuous wedding between paganism and Christian thematic. His evil influence on Raphael, Michelangelo and Titian is equally well documented.

## More from the same author:

- [How neo-platonism gave Plato a bad name](#)
- [Neo-platonisme and Huxley's « Doors of Perception »](#)
- [How Erasmus' folly saved civilisation](#)

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## FOOTNOTES/

[1] **Erasmus of Rotterdam** admired very dearly his personal friend Albrecht Dürer and asked him several times to have his portrait done. He said that “*Dürer, (...) knows how to render monochromatically, i.e. with black traits [in engraving] –what does he knows not to render! Shadows, light, brilliance, heights and depths, and... (Perspective). Even better, he paints what is impossible to be painted: fire, thunder, lightening and even, as one says, the clouds on the wall, all the sentiments, and finally all the human soul reflected in the disposition of the body, and nearly the word itself.*” Dürer’s last engraving was a portrait of Erasmus, who was also one of the first to receive a copy of his treatise on geometry.

[2] Born in 1403 in Trebizonde (today Turkey), on the shores of the Black Sea, **John Bessarion** was one of the key organizers of the successful great Ecumenical Council of Ferrare/Florence, together with **Nicolas of Cusa**, **Ambrogio Traversari** and pope **Eugene IV** in 1437-38. After being a monk of Saint Basilius in Constantinople, he attended for six months the teachings of **Georges Gemisthos Plethon** at Mistra. Bessarion became later the Catholic bishop at Nicea. After the fall of Constantinople in 1454, he went in exile and settled in Vienna.

[3] **Paolo Toscanelli del Pozzo** (1397-1482), one of the greatest scientific minds of his time, was in the same time befriended with the architect of the Florentine dome **Philippo Brunelleschi**, the painter engineer **Leonardo da Vinci** and the Cardinal philosopher **Nicolas of Cusa**.

[4] See K.Vereycken, *Percer les mystères du dôme de Florence*, Fusion N°96, mai/juin 2003, p. 18-19.

[5] This is notably proven by a letter of Dürer to Georges Spalatin in January 1520, asking him to send him everything “*doctor Martinus [Luther] writes new and is in German.*”

[6] Nearly of the same age as Dürer, **Pirckheimer**, who studied in Padua and Pavia, was a cultivated Hellenist who authored some 35 translations of classical writers among which Cicero, Lucian, Plutarch, Xenophon, or Ptolemy. While being a high level political official, this high ranking military commander animated also a literary circle, where people as **Christoph Scheurl**, **Johannes Camerarius** and **Thomas Venatorius**. Numerous correspondents occasionally would meet there, such as the poet **Conrad Celtis**, the Hebraiser **Johannes Reuchlin**, **Ulrich von Hutten**, Erasmus’ friend **Melencthon** or **Conrad Peutinger**, i.e. the hard core of what would become the reformation in Germany. With Erasmus, Pirckheimer had a common friend: **Beatus Rhenanus**. Erasmus got repeatedly invited but could never make it. In Italy, Pirckheimer became familiar with the

ideas of **Marsilio Ficino** and **Pico della Mirandola**. Art historian **Victoria Salley** believes that in Milan, Pirckheimer “met **Donato Bramante** (v.1444-1515) and **Leonardo da Vinci** (1452-1519)” but without giving any indications to make that statement convincing.

[7] **Werner** published in 1522 his *Libellus super vigintiduobus elementis conicis*, a treatise on conical sections followed by the discussion of the problem of doubling the volume of the cube and the eleven solutions that were discovered in antiquity to solve that problem if one believes **Eutocius**. Werner had translated from Greek to Latin **Apollonius** treatise on conics, of which a copy existed in Regiomontanus’ library. Werner’s influence on Dürer is generally identified in Dürer’s *Unterweysund der Messung* (on the art of measuring), where the problem of the doubling of the cube is treated in Book IV, 44-51a.

[8] **Erasmus of Rotterdam**, in his *Life of Saint Jerome* (1516), says that “*his works contain nearly as many miracles as they contain phrases.*”

[9] **Erwin Panofsky**, *The life and art of Albrecht Dürer*, 1943, Princeton University Press.

[10] **Thomas of Aquinas** (1224-1475), in his *Summa Theologica* (Question 35) specifies that “*Hence, since a spiritual good is a real good, sadness deriving from a spiritual good is bad in itself. Concerning the sadness deriving from a real thing of badness, it is bad in its effects when it affects man to the point of preventing him of acting for the good. Also Apostle [Paul] (2, Co 2, 7) does not want those that are penitent to ‘go down in excessive sadness’ when facing their sins. So, because acedia, as we conceive it here, and as a sadness originating in a spiritual good, it is bad twice: in itself and through its effects. And this is why acedia is a sin, because, and we have shown so, what is bad in the movements of the appetites is a sin...*”

[11] **Claude Makowsky**, in his essay *Albrecht Dürer, the dream of the Doctor and the Witch* shows in a convincing way that the doctor sleeping behind his furnace with the devil blowing air in his ears, is not a luxurious dreamer in front of Venus. It is very probable that this is a polemic against the alchemists, who, waiting for hundreds of hours to see how impure metal becomes gold, would generally fall asleep and make themselves incapable of grabbing the chances thrown to them by Lady *Fortuna*, as does the little angel, playfully mounting on its stilts.

[12] See box II, *How Ficino’s neoplatonism gave Plato a bad reputation.*

[13] In Plato’s dialogue *Ion*, **Socrates**, to harass the rhapsode, says that “*a poet is something light, winged and sacred, which cannot compose before being inspired by a god, before losing his reason, before having lost it. As long as a man remains master of his intellect, he is perfectly incapable to generate poetry or to sing the oracles.*” When Socrates realizes that the rhapsode Ion wants to be the slave of the divinities [534d], on top that he’s out for financial compensations [535e], he compares him to Protee [Egyptian sophist] [541e]. For Plato, divine inspiration has to bring man to the self perfecting sovereign reason and as such towards freedom. *A contrario*, in *The Laws*, VII, 709d, Plato brings up the “*evil of the Corybants*”, the mythical priest that honored the mother goddess [of fertility] Cybele with their frantic dances.



Ficino, for his part, cultivates this confusion in the preface of his translation of Plato's dialogue *Ion*, "De furore poetico" (1482). After stating that a first type of madness can make man fall "*below human appearance and (...) in a sense to the level of the beast*", Ficino, imitating Plotinus, claims that there is another kind of delirium, which is divine (mystical ecstasy). By this delirium, man is "*uplifted above human nature, and joins with God. The divine frenzy is the illumination of the rational soul, by which God pulls the souls fallen from the heights and lifts them from below towards those here. The fall of the soul, since the One, principle of all things till the body, operates by successive degrees: intelligence, reason, opinion and nature. In effect, since there are six degrees in any order of things, the most elevated being the One in person, the lowest being the body, the intermediary degrees as foresaid, it is therefore necessary that everything that falls from the first till the last passes by the four intermediaries. The One is the limit of all things, and its measure, free of infinity and multiplicity.*"

Also in Ficino's *Seventh letter*, published by Dürer's godfather **Anton Koberger** in 1497, the Florentine states again that the soul, according to Plato, after having been able to contemplate *ideas* (justice itself, beauty, wisdom, harmony, and the marvelous beauty of divine nature) in the heavens, our soul finds itself degraded by the desires for earthly things. According to a beautiful metaphor of Socrates, the soul can fly thanks to two wings (two virtues): justice obtained through a (active) moral behavior and (contemplative) wisdom. One could see here the *Knight* and the *Saint Jerome*. The fact that Dürer represented his melancholia with wings has its own platonic reasons. When the soul sees a beautiful form, it is "*fired by this memory and, shaking its wings, by degrees, purges itself from contact with the body and its filth and becomes wholly possessed by divine frenzy.*" (...)

But, insists Ficino, "*Plato says that this kind of love is born out of human sickness and is full of trouble and anxiety, and that it arises in those men whose mind is covered over with darkness that it dwells on nothing exalted, nothing outstanding, nothing beyond the weak and transient image of this little body. It does not look to heavens, for in its black prison it is shuttered by night.*"

[14] *The school of Athens* of **Raphael** shows us a *Heraclites* with the physical resembling of what is believed to be **Michelangelo**, pausing in a melancholic attitude. After 1519, Michelangelo used the same attitude for his *Pensieroso* on the tomb of Lorenzo de Medici, himself a frequent visitor of Ficino's "platonic" academy; The French sculptor **Auguste Rodin** will transpose it into his *Penseur* [The Thinker], an enlarged version of a detail of the figure sitting in front of his initial work, the *Gates of hell*. **Goya**, mocking the romantics warns against melancholy in his *Sleep of Reason creates monsters*.

[15] Neoplatonism in the domain of aesthetics insisted on the beauty that comes from the grace of visible forms and not from the beauty of an invisible principle of truth. This doctrine, put forward most prominently by **Pietro Bembo's** poems, the *Asolani*, and by **Balthasar Castiglione's** book *The Courtier* will drive art from *Bella Maniera* into *Mannerism*. *Romanticism*, the official art imposed on Europe by the Congress of Vienna in 1815, will give birth to *Symbolism*, which, in its final metastases of utter degeneration will give us *modern* and *contemporary* "art" as imposed after WWII by the *Congress for Cultural Freedom*, run by **Allan Dulles**, then head of the CIA. One same invariant remained: the

suffering and melancholic heart will be the unalterable essence of the *accursed artist*. Gérard de Nerval would speak about “the black sun of melancholy, while Victor Hugo said ironically that “melancholy is the happiness to be sad.”

[16] See K. Vereycken, *Comment la folie d'Erasme sauva la civilisation*, French language website : [www.solidariteetprogres.org](http://www.solidariteetprogres.org)

[17] **Johannes Reuchlin** met **Pico della Mirandola** in 1490. He exposed his cabbalistic ideas in *De Verbo Mirifico* and in *De Arte cabalistica* (1517).

[18] **Heinrich Cornelius Agrippa of Nettesheim** (1486-1536), jurisconsultus, doctor, astrologist, was an important transmitter of the neoplatonism of **Ficino, Pico della Mirandola** and Cie. Agrippa crisscrossed Europe, took position in defense of **Reuchlin** who's works he plundered and supported the humanist **Lefèvre d'Étaples**. Follower of Abbot **Trithemius**, as **Paracelsus** he founded in Paris the “Community of the Magicians”, a network engaged in the promotion of the occult, alchemy and other hermetic magic, all of it in service of his masters in Venice.

[19] **Johannes Heidenberg, or Johannes von Tritheim** (Thritemius) (1462-1516) became the head of the Benedictine cloister of Sponheim. There he organized a collection of over 2000 esoteric writings and operated an alchemist workshop, including a furnace. Agrippa inherited his library. Thritemius wrote also the *Steganographia* a method for the codification of secret messages, a work much appreciated by many secret intelligence agencies.

[20] See article of Christina Huth: *Venice, the methodology of Evil*, American Almanac, The New Federalist, May 30, 1994.

[21] See book of Claude Postel, *L'Homme Prophétique, Sciences et Magie à la Renaissance*, Les Belles Lettres, 1999, Paris.

[22] **H.C. Agrippa of Nettesheim**, *De occulta philosophia*, Chap. 60, “Of Madness, and Divinations which are made when men are awake, and of the power of a Melancholy humor, by which Spirits are sometimes induced into men's bodies”; “It happens also sometimes, that not only they that are asleep, but also they that are watchful do with a kind of instigation of mind, Divine, which Divination Aristotle calls ravishment, or a kind of madness, and teaches that it proceeds from a melancholy humor, saying in his *Treatise of divination: Melancholy men, by reason of their earnestness, do far better conjecture, and quickly conceive a habit, and most easily receive an impression of the Celestials.*”

[23] The blazon of the Dürer family features indeed a gate open to the nothing.

[24] A hypothesis developed by **David R. Finkelstein**, in « *The relativity of Albrecht Dürer* », April 24, 2005.

[25] Medical experts, examining Dürer's description of his being unwell, are convinced he contracted malaria when rushing into the quagmires of Zeeland in the Netherlands, looking for an allegedly giant whale thrown on the beaches.

[26] **Patrick Doorly**, *Durers Melencolia I: Plato's abandoned search for the beautiful*, The Art Bulletin, June 2004. Doorly, who establishes the similarities between the imagery of *Hippias Major* and *Melencolia I*, completely fails in his conclusions. He pretends that Dürer, as Socrates = Hippias, abandons the very idea that beauty can be known, supposedly "admitting" beauty is merely relative and subjective. In brief, he teams up with what **Immanuel Kant**, in his *Critique of the faculty of judgment* establishes as "party line" for modern scholars. To prove *his* case, Doorly lines up a series of out of context quotes from Dürer.

[27] Dürer writes on one of the preparatory sketches: purse=wealth; keys=power. One can note also that Ficino wrote a letter with the title *Quinque Platonicae Sapientiae Claves*, [The five keys of Platonic theology].

[28] One of the vanishing points of the polyhedron seems to join the same location as the ladder: heaven.

[29] See K. Vereycken, in *Quand l'ambiguïté devient science géométrique en peinture*, Fusion n°105, juin/juillet 2005, p. 42-43. Or, same author: *The egg without a shadow of Piero della Francesca*, Fidelio.

[30] **Jean Pélerin alias Viator**, former secretary of Louis XI, who printed the first perspective treatise north of the Alps, *De Artificiali Perspectiva*, in 1505, introduced a perspective system with *two* lateral vanishing points. This approach, known by Dürer, transforms legitimately a four angle (quadrangle) into a lozenge. Pascal's geometry teacher, Gerard Desargues, will elaborate his geometrical science on this subject. Dürer's engraving of the *Presentation at the temple*, uses the image of a room with colonnades taken out of Viator's treaty (fol. 21, v.).

[31] Many guesses exist concerning the "1". One often does not regard the little sign in between, some kind of "&". The title would then be: "melancholia and the one", the One being the obsessive subject of the neoplatonists, but also the Christian One, God, measure of all things, "*fons et origo numerorum*". After all, the origin of the word religion comes from the Latin *religare*, i.e. to link man (the multiple) with the divine (the One).

[32] **Jean Pélerin alias Viator** allegedly was in contact with **Alberti, Piero della Francesca** and could possibly be the "maestro Giovanni Francese" mentioned by **Leonardo** in his *Codex Atlanticus*. He was one of the driving forces of the *Collège Vosgien*, a meeting place for humanists and scientist in Saint-Dié.

[33] Following the despicable "placards" imposed by Charles V on May 8, 1521, any person printing, illustrating or merely reading the bible, was to be considered as a "*heretic*".

[34] Dürer wrote to **Pirckheimer**, on February 7, 1506 : "*I have amidst the Italians, good number of excellent friends that forewarn me not to eat or drink with the painters here. Many of these are hostile to me; they copy my works in the churches or elsewhere, and slander them otherwise, arguing that they are not done after the antique style, they can't be any good.*"

[35] While already mastering a good deal of perspective, he writes from Venice, on October 13, 1506 to **Pirckheimer** : “*Then I will travel to Bologna to learn the secret art of perspective that someone proposed me to teach to me. I will stay there eight to ten days before passing over Venice again.*”

[36] While Euclid’s method and pedagogy are nothing but a far distant shadow of the great living Greek science, the history of modern science will be the great battle to master and overturn Euclid and to rediscover the lost pre-Euclidean method.

[37] Excerpt of *La Géométrie de Dürer, un exercice pour la main et un entraînement pour l’œil* », in *Alliage*, nr.23, 1995. See also **Jeanne Peiffer**, *Dürer géomètre*, in *Albrecht Dürer, Géomètre*, Editions du Seuil, November 1995, Paris, and her contribution to the 2001 conference of Lille *La géométrie d’Albrecht Dürer et ses lecteurs* during the national day of the National Association of Mathematic teachers of the public education sector. Her contribution, which simply acknowledged Dürer’s contribution to the history of science, was violently criticized by nit picking Professor **André Cauty** of Bordeaux, scandalized that one could see in Dürer a forerunner of **Gaspard Monge**.

[38] Jeanne Peiffer, in a footnote, p. 324 of *Albrecht Dürer, Géométrie*, explains that the only manuscript that interchanged Athens for Delos, was the manuscript of cardinal **Bessarion**, a manuscript that became part of **Regiomontanus** library to which Dürer had access.

[39] The neoplatonics of Alexandria were also called *School of Athens*, since they operated simultaneously out of Alexandria in Egypt and Athens in Greece.

**Plotinus** (205-270 after B.C.), born and trained in Egypt, was its founder, though essentially active in Rome. His philosophy is seen as “a religiosity that objectifies spiritual realities”. Starting from Plato’s *Parmenides*, Plotinus develops an idea of the One that is not the many but engenders multiplicity. In the same time, he will be the great architect of a complementarity between Plato, Aristotle and the stoics. In a basically *interiorizing* approach, Plotinus abandons any commitment to ameliorate the earthly conditions of mankind, while concentrating on the individual will to “*penetrate the system, even the principle*”. Plotinus thinks that it is *in ourselves* that we have to learn to discover the spiritual world, since it is “*up to the Gods to come to us, and not to me to rise towards them*”. To this procession of the One towards the many responds the ascension towards the One, which operates by the work of the soul acting on the soul. This “*immanentism*” brings Plotinus to despise religious rituals which draw heavy focus on “*exteriority*”, including the Christian rites.

His follower, **Porphyry of Tyre** (234-310 BC) will go much further. Starting from an hysterically symbolical reading of Plato, he denounces Christianity. He was followed by **Iamblichus** (250-330 B.C.). This neoplatonism became so deliciously pagan that emperor **Julian l’Apostate** tried to use it to replace Christian religion.

The neoplatonic school found a new impulse during the fifth century B.C. with **Proclus** (412-485) in Athens, where the Academy will be closed by Emperor Justinian in 529. Very much studied by Nicholas of **Cusa**, translator of **Proclus**, one should admit that a “*melancholic*” reading of the neoplatonics became a source of inspiration for **Nietzsche**

(Zoroaster = Zarathoustra) , **Léo Strauss**, **Hannah Arendt** and **Heidegger**.

[40] Ficino, referring to Augustine, makes **Trismegistus** the first of all theologians: his teachings would have been transmitted successively to **Orpheus**, to **Aglaopheme**, to **Pythagoras**, to **Philolaus** and finally to **Plato**. Later, Ficino will place Zoroaster at the head of these *prisci theologia* [first theologians] . At the end he attributes an identical role to Zoroaster and Mercury for the genesis of antique wisdom: **Zoroaster** taught it to the Persians while **Mercury** taught it to the Egyptians.

Ficino underlined the prophetic character of **Trismegistus** writings. He would have predicted “*the ruin of ancient religion, the birth of a new faith, the coming of Christ, the Last Judgment, the Resurrection, the glory of the elected and the punishment of the evil*”.

Ficino’s translation of Trismegistus, printed as early as 1471, was the starting point of a real rebirth of philosophical hermeticism. Hence, it is with a quote of the *Asclepius* [another writing of Trismegistus] that Pico opens his famous *Oratio de hominis dignitate* [Oratio on Human Dignity]; and it is through this process, that in 1488, the image of Trismegistus was engraved on the tiles of the cathedral of Sienna, allegedly by **Giovanni di Stefano**.