

Pythagoras Foundation



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This semi-annual Newsletter will give a summary of literature, book reviews and abstracts of recent publications concerning Pythagoras and Pythagoreans. Interesting internetsites, work in progress and conferences are included. We will be very pleased to receive information of books and (journal, internet) articles to keep our lists up to date.
Nico Bader - Chairman of the Pythagoras Foundation.

"I ask no praise, and I expect no benefit of any kind other than the inner feeling of satisfaction for having done my duty to my fellowmen."

J.H. Manas, Life's riddle solved, through the law of metempsychosis. 1944

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Introduction

It was in December 1974 that Han van der Meulen and Gerard van der Horst started the Pythagoras Foundation in the Netherlands. A lot of work was done by them: collecting books, doing research etc. We are very pleased that their initial efforts have been continued.

After thirty years their work has grown to a world-wide documentationcentre.

We would very much like to add a number of books to the library (see list below) !!!

We like to thank Lynn Nalven for her book donation.

The newsletter was a start for extending contacts between people interested in Pythagoras.

This is the third edition and covers a great variety of disciplines. Graham Pont writes about architecture and music, Rosala Garzuze about medicine and Jack Kenny about mathematics and education. We are very pleased with these contributions.

We like to thank everyone who did give a reaction on previous newsletters. An editorial / advisory board was a suggestion for coming newsletters. If you are interested to be a member of this board, please let us know.

It is fifty years ago that the first world congress of Pythagorean organizations commemorated the 2500th anniversary of the founding of the Pythagoras School on Samos. After that event more conferences have been held. Maybe it is time to meet again. If you are interested in this idea, do send us an email.

The next newsletter will be issued june 2005.

Contributions are very welcome, do use our email address!

Our best wishes for the new year,

Marie-Anne de Roode

Pythagoras Foundation Library Information.

The Library collects all publications concerning Pythagoras and Pythagoreans.

The library is a lending library; also copies of articles can be ordered.

Copy costs and postage will be calculated.

The Foundation is a non-profit organisation; our Newsletter is free of charge. Donations are welcome.

The Pythagoras Foundation

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The work on a bibliography of books and journal articles concerning Pythagoras and Pythagoreans is progressing. All our library books are listed in a database now.

We are working on a bibliographic database of all the articles in the library (this includes journal articles, conference papers, chapters or parts of books etc.),

The card index of books and articles, we do not have yet, is updated. L'Annee philologique was an important source. Some publications are very difficult to obtain (see our list). Included so far are the following Pythagoreans:

Alcmaeon

Apollonius of Tyana

Archytas

Empedocles

Philolaus

and the Pythagorean subjects:

Somnium Scipionis

Tabula Cebetis

We would very much like to add the following books to the Library:

Top ten mostly wanted!!!!!!!!!!

Alessio, L. Pitagora. 1940

Benson, B.A.S. Pythagorean aesthetics and the poetry of John Donne. 1972

Bohme, A. Die Lehre von der Seelenwanderung in der antiken griechischen und indischen Philosophie: ein Vergleich der philosophischen Grundlegung bei den Orphikern, bei Pythagoras, Empedokles und Platon mit den Upanishaden, dem Urbuddhismus und dem Jainismus. 1989

Brumbaugh, R. Aristotle's criticism of the "Pythagoreans". 1938

Galimard, P. Hippocrate et la tradition pythagoricienne. 1939

Haase, R. Geschichte des harmonikalen Pythagoreismus. 1969

Schavernoch, H. Die Harmonie der Sphären: die Geschichte der Idee des Welteneinklangs und der Seeleneinstimmung. 1981

Segl, R. Die Pythagorasrede im 15. Buch von Ovids Metamorphosen. 1970

Skovgaard Jensen, S. Dualism and demonology. The function of demonology in Pythagorean and Platonic thought. 1966

Teti, D. Alcmeone e Pitagora: scuola medica crotoniate e scuola pitagorica italiana. 1988

Acknowledgements

The Pythagoras Foundation thanks the following individuals for their contributions and generosity:

Theo Claasen

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Lynn Nalven

Christoph Riedweg

Jeanne Schouten

Correction

Our last Newsletter needs a correction.

p.10. Pythagoreans beware. "His discovery of the theorem concerning right angles..."

No reputable historian of mathematics today believes that Pythagoras himself discovered the theory to which history assigned his name.

Pythagoreans in Australia

By Graham Pont

The first Pythagoreans to arrive in Australia were Freemasons who came as explorers and colonists during the late 18th century and began to establish Lodges in Sydney and Hobart about 1820. Freemasonry flourished in the Antipodes and by the end of the 19th century there were Grand Lodges in most of the States that united to form the Commonwealth of Australia in 1901. Higher education began with the University of Sydney in 1852 but it was more than a century before Pythagorean ideas appeared in academic curricula as other than historical curiosities. Australia's first undergraduate course on 'Philosophy of Music' (University of New South Wales, 1974-1988) was devoted principally to the ideas of the early Pythagoreans.

Australia's first composer Isaac Nathan (1792-1864) was an English mason who had studied for the rabbinate. He was also a classical scholar, music theorist and cabbalist whose principal treatise, *Musurgia Vocalis* (1836), shows that he was well versed in the teachings of Pythagoras and particularly interested in the therapeutic powers of music. Pythagorean teachings were also disseminated through the Australian Theosophical Society which is still active in most States.

In 1911 a 'Pythagorean Music Society' was established at Sydney, specifically to investigate occultism in music. In February 1913 the Society published a booklet entitled 'Instruction No. 1. "Music of the Spheres"' and in the following April issued the first number of a short-lived quarterly magazine, *Crotona*. This contained articles on 'Music and Astrology', 'Harmony: Musical and Chemical', 'Native Australian chants and Mantras' and 'The Occultism of Music'. The Society was based at the premises of Korman Ltd, 15 Hunter Street (in Sydney's central business district). These also accommodated the 'Korman Guild of Art-Workers', presumably a kind of Pythagorean studio or workshop. A projected 'School of Pythagorean Music' may have eventuated (1) but all that now remains of these high hopes are the rare copies of the Society's two known publications held by the State Library of New South Wales.

By an extraordinary coincidence 1913 also saw the arrival in Australia of the American architect Walter Burley Griffin (1876-1937) who had just won the international competition for the design of Canberra, the new Federal Capital (1912). In 1914 he was joined by his wife Marion (also an architect) and the couple set up practice in Melbourne and Sydney. It has long been known that the Griffins had Theosophical connections and became members of the Sydney branch of the Anthroposophical Society in 1930-31; but only recently have they been revealed as esoteric Pythagoreans.

The Griffin plan for Canberra (1911) has a powerful symbolic geometry which includes the *Triad*, a set of three intersecting circles (2) which, for Pythagoreans, has very relevant connotations of proportion, harmony, marriage, peace, cross-roads (the Canberra plan is centred on a circle enclosing a St Andrew's Cross), good counsel, the mean between extremes, oneness of mind, friendship and so on (3). For their design of the Capitol Theatre (Melbourne, 1924), the Griffins attempted a novel but very Pythagorean synthesis of musical and architectural aesthetics, including an illuminated sign above the proscenium: the *Tetraktys*, the most important symbol of the Pythagorean world-view. (4)

On a beautiful site near Byron Bay, NSW, a new school is being established with a curriculum based on Pythagorean and Montessori principles. It has taken six years of legal action to overcome objections from local residents (who, so far, have not resorted to arson). The Pythagorean Guild has developed a number of teaching aids (e.g. Sacred Proportions, Numerology, Harmonic Healing) and also conducts courses by correspondence.



Capitol Theatre, Melbourne: View of auditorium ceiling. The added triangle encloses the ten lamps of the illuminated Tetraktys. From the photograph by Lyle Fowler (1950), Harold Paynting Collection, State Library of Victoria. Other views are available on-line at various web-sites.

- (1) In 1911 Korman Ltd. was listed in *Sand's Sydney Directory* as 'Publishers' but, from 1916-28, as a 'Religious Society'. The *Directory* for 1912 lists the 'Korman School of Art and Handicraft'.
- (2) 'Graham Pont & Peter Proudfoot, 'From Cosmic City to Esoteric Cinema: Pythagorean Mathematics and Design in Australia', in (ed.) José Rodrigues and Kim Williams, *Nexus IV; Architecture and Mathematics* (Kim Williams Books, Fucecchio, 2002), pp.195-206. See also 'Beyond Architecture' ('Compass', ABC Television, April 18, 2004): text of broadcast on-line at <http://www.abc.net.au/compass/s1089982.htm>
- (3) See K.S. Guthrie, *The Pythagorean Sourcebook and Library* (Phanes Press, 1987), pp.22 & 322.
- (4) Graham Pont, 'The Cinema as Secular Temple: Ethos, Form and Symbolism of the Capitol Theatre', *Nexus Network Journal*, Vol. 5, No..2 (Autumn 2003), pp.73-99.
- (5) Details available at <http://www.pythagorus.org.uk> and linked sites.

Graham Pont taught in the General Education programme at the University of New South Wales (Sydney, Australia) for thirty years. His last appointments were a visiting professorship to the School of Science and Technology Studies, UNSW (1995-8) and a visiting fellowship to Clare Hall, Cambridge (1996-7).

Pythagorean Medicine *

The medical knowledge of the School of Croton originates from two sources: the wisdom from the scientific and initiation centers in the countries that Pythagoras traveled to on his studies, and from the observation and experimentation realized by the Pythagorean doctors, of that time. That is why we find knowledge in the school with signs and vestiges from the Egyptian, Chaldean, Hindu and other cultures as well as the knowledge peculiar to the School itself.

The teaching of the ancient initiations was complete; and the Initiate was a spirit who possessed a general knowledge. These centers were the focal point of a superior integral culture, and being as such they needed to be familiar with Medicine, considering they cared for the body and spirit, properly dispensing norms for reaching a balance and progress. This alliance of the two principles is vital to the evolution of the human being, which is, in essence, one.

The observations, experiments and generalizations carried out by the Pythagoreans reveal that the Medical School of Croton further developed the fund of scientific knowledge guarded by the sages that went before them, many of which were the first carried out in the field of Medicine.

In Egypt, and in other centers of oriental culture, Medicine was a "sacred art", living within the temples in the shade of ancestral sanctuaries, exercised by the members of the sacerdotal class, who, at the same time were philosophers, artists, legislators and doctors, with specialists among them as well.

In Greece - on the continent and the islands- the spiritual daughter of Egypt, Medicine also lived in the shadow of the sacred temples and was exercised by the members of the sacerdotal class. The gods, as distributors of life, were invoked to give health to the sick.

But as time went on, Medicine gradually left the inside of the Temples as Medical Schools emerged.

And that is how the "sacred art" was transformed into science and a more secular profane art.

In the School of Croton this transformation was more accentuated, and the tendency of submitting morbid phenomena to safe laws became a growing concern for Pythagoras' disciples.

In Medicine the so-called "Pythagorean Regimen" became a classic and precious aid in therapeutics and hygiene. This Regimen is based on a set of precepts meant to preserve health or to make the organism return to the healthy state when, for any given circumstance, the vital balance is broken.

The agents of this regimen were: fresh and pure air, fresh and pure water, pure and simple food (mainly vegetables), physical exercise adapted for each individual, methodical work in proper proportions for the body and spirit. Such are the basic factors for the normal functioning of the organism.

The drink of the Pythagoreans was water: the only one suggested in the diet, the food had to be simple and natural, of vegetable origin, meat and meat by-products were excluded from this regimen.

Pythagoras condemned the immolation of animals and recommended a basic vegetarian diet.

Physical exercise, manual arts, intellectual work, dance, walks out in the fresh air, order, discipline, method, and harmony are some of the many factors for staying healthy. And when for some unexpected reason, sickness did occur, the Pythagoreans employed therapeutic resources that were mild, extracted from medicinal plants and physiotherapeutic procedures.

According to Dr. Cocchi, the Pythagoreans did not place much importance on drugs. They condemned them as a therapeutic agent, and only employed surgery and external medicine in extreme cases (Le Régime de Pythagore).

To show how much Pythagoras held an interest in the subject of medicine one only needs to cite the following phrase: "health is the foundation for human happiness". And Dr. Cocchi adds: "the Pythagoreans had clear notions about sickness and health".

Alcmaeon, a Pythagorean doctor, used to say that health could be attributed to the right measure of the constituents of the human body, or in his own words: "Healthiness requires an equal measure of wetness, heat, coldness, dryness, bitterness, sweetness and others; the predomination of only one produces sickness."

* First published: A Lâmpada, official magazine of the Instituto Neo Pitagórico (Neo Pythagorean Institut), Ano XVI, n. 46, march 1945, pp.14-16.

Hippocrates later repeated more or less the same idea, affiliating himself with the principles upheld at the School of Croton.

Pythagoras was the first to introduce the notion of "critical days" in the cyclical evolution of sickness in the field of medicine, having been led to this by his theory of the numbers.

Among the representatives of this School there were some who did dissections on cadavers. The notions of Anatomy, acquired in this way, were passed on to Hippocrates.

The influence of Pythagorean medicine was very great at the time (VI century B.C.) and even after, as we can conclude from the doctrines of Hippocrates, almost all of them were of Pythagorean origin. It was he - Hippocrates - the great apologist of vis medicatrix, the curative force of nature, that exists in each organism.

Among the most important representatives of the School of Croton, we can mention: Alcmaeon of Croton, Democedes of Croton, Empedocles of Agrigentum, Epicharmus of Cos.

Alcmaeon, as a doctor, is, according to some authors, the most important representative of the school. He carried out studies on human and animal anatomy, and he was the first to dissect cadavers, and therefore he could be considered the founder of Anatomy and Scientific Medicine, seeking to base his knowledge on logical processes - observation and experimentation – and by employing the method of dissection.

It was based on this methodology that Alcmaeon discovered the optic nerve, among other organs, and considered the brain to be the source of sensations, thereby founding the bases for Experimental Psychology twenty-six centuries ago, a field that is only recently being developed. "His fame is due to his studies as an anatomist and physiologist," having exercised a great influence over his contemporaries.

Democedes of Croton was another great Pythagorean doctor, who traveled a great deal and brought about many extraordinary cures in his time, to the extent that they were registered in History (Los Nueve Libros de la Historia, Libro III, CXXV, p.316. Barcelona: Editorial Iberia) by Herodotus himself (484 – 406 B.C. - V Century B.C.), who narrates the Democedes' achievements as a doctor assistant of Policrates of Samos, and later, of Dario the Great king of Persia. Like the other doctors of the Pythagorean School, Democedes sought to cure by means of mild and gentle processes, condemning all violent and aggressive medication.

It is believed that Epicharmus of Cos, a Pythagorean doctor, poet and philosopher, left a treatise on Medicine. He instituted the basis for Experimental Psychology with Alcmaeon, giving it a spiritualist-evolutionary quality. The following phrases belong to him: "It is the spirit that sees, it is the spirit that hears, all the rest is deaf and blind". And furthermore: "There is an uninterrupted chain between all living beings, whose links differ only in degree, not in essence, and men are tied on the one side to the animals and on the other to the gods".

Empedocles of Agrigentum was another renowned doctor of the time, having honored the traditions of the School of Croton, he promoted sanitation in the cities and other regions decimated by devastating endemic diseases, extinguishing them, channeling the swamps or diverting the air currents that caused the local disease. He was also considered to have performed miracles because of the benefits he disseminated; he was familiar with the philosophers' theory of the four elements - air, water, earth and fire - and was one of the great philosophers.

This is a general outline of the orientation of the Medical School of Croton, which indicates that in addition to it being the oldest, it maintained relations with others of its kind at that time.

Curitiba, February 4, 1945

Professor Dr. Rosala Garzuze

President of the Instituto Neo-Pitagórico, Brasil

The Times Educational Supplement. July 2, 2004

As **Pythagoras** Said Just The Other Day...

Jack Kenny

Pupils at a north London school really look forward to lessons, and that enthusiasm is mostly down to one man, as Jack Kenny found out

The corridor down to the maths room at Southgate School, north London, is lined with pictures, including copies of Josef Albers' "Homage to the Square" and artist Bridget Riley's optical images, bending black and white lines and teasing the retina. Enter the room and a PowerPoint presentation featuring Pythagoras is playing.

Out of the sculpted head of the noble Greek spout speech bubbles: "Hi, I'm Pythagoras. I was born about 569bc on the Greek island of Samos, just off the coast of what is now western Turkey. I died some 90 years later...

nearly 2,500 years ago. I travelled far and wide... visiting Egypt and old Babylon and, some say, even India... The Buddha was preaching and Confucius was alive and well in China." A map shows his journeys around the Mediterranean as arrows dash around the screen. The presentation goes on as the students enter and settle.

"Raphael Sanzio painted me and my mates for Pope Julius II in the early 1500s on a wall in the Vatican in Rome. You can still see me down there on the left with a beard and no hair!" The screen lights up with the picture from the Vatican with arrows racing in to indicate the great thinkers featured: Diogenes, Socrates, Plato.

Pythagoras goes on to explain: "I was a philosopher, a diplomat, a musician, a prisoner and, some say, even a murderer. But above all I was a mathematician in the secret society I founded at Croton in what is now south Italy." He describes his lifestyle, believing in vegetarianism and the equality of the sexes.

The sequence ends with Pythagoras admitting that what we call Pythagoras's theorem was already known: "the ancient Babylonians the Chinese the Egyptians and the mathematicians of India all knew that 'the square on the hypotenuse is equal to the sum of the squares on the opposite two sides'. I wasn't even born when they were using Pythagoras's theorem."

The students go on to discover that the unfortunate mathematician died a violent death in his commune when it was attacked.

They hardly have time to digest all of this when up on the screen comes a series of questions. Your starter for 10...

What is the square root of 121? What is 101 minus 91?

Excel generates the questions randomly: random numbers and random questions. "The starters are easy to put up on the screen. It gets them thinking right from the word go," says maths teacher David Whitfield.

"Every time you run something like this the questions are different. It is a front-loaded investment. There is a certain amount of work, a couple of hours initially, but after that you could use them for eternity and it will always bring up different questions.

"You do need lots and lots of questions and I find it quite hard to generate them. The computer doesn't. You can come up with the criteria that you want to test and the level of complexity, and once you have decided that and put it into the computer it will just keep coming up with questions. You can use Excel to either to hide or show the answers."

After this, David Whitfield uses his laptop and the software Geometer's Sketchpad to show how Pythagoras works. He puts squares on to each side of the triangle and changes the size of the

triangle. All the pupils can see that no matter what you do to the right-angled triangle, the theorem remains true. He says: "That ratio just stays fixed no matter what you do with the triangle. You can demonstrate a visual proof."

For another view, back to PowerPoint and Pythagoras. "Hi!" says the on-screen Pythagoras. "This is the theorem named after me." Sliding across the screen is a yellow right-angled triangle, $c^2 = a^2 + b^2$. Back comes Pythagoras. "Let's look at it this way," he says, and the yellow triangle returns on-screen to be joined by a red square that attaches itself to the hypotenuse. Soon a green square and then a blue square attach themselves to the other two sides. The red square moves, as do the other two to demonstrate the truth of the theorem. Everyone looks convinced.

Homework is set around the theorem and the pupils are referred to David Whitfield's website where they can get both assistance and inspiration.

He is never afraid to experiment. Recently in teaching maths he has explored the crimes of Al Capone, as well as looking at the mathematicians and code breakers of Baghdad, he has also explored the intricate geometry of the anonymous weavers of carpets in the Middle East.

Take a trip to his website to find out, and as David Whitfield himself writes on the site: "The greatest mathematicians could also be members of secret cults, alchemists, obsessive gamblers, neurotics, gentlemen scribblers, feminists and revolutionaries, US presidents, crowd-stirring orators, poverty-stricken aesthetes or lowly railway clerks and sometimes just shy and unassuming people who lived in the semi-detached at the end of the cul-de-sac."

David Whitfield was runner-up for the New to Teaching section (sponsored by The TES) of the Becta ICT in Practice Awards 2004.

Resources

Hardware

Laptop computer, projector, screen.

Software

PowerPoint; Excel

www.microsoft.com/office

Geometer's Sketchpad

www.keypress.com/sketchpad/

Autograph

www.autograph-math.com

Resources developed by David Whitfield can be downloaded from the teacher resources pages at: www.pifactory.co.uk and www.lgfl.net/lgfl/leas/enfield/schools/southgate/accounts/staff/dwhitfield/web/pages/teacher_resources_contents.html

Useful websites

Biographies pages of the MacTutor history of mathematics archive: <http://turnbull.mcs.st-and.ac.uk/history/BiogIndex.html>

Ron Knott's site for everything on the wonders of numbers: www.ronknott.com

Eric Weisstein's Mathworld site: <http://mathworld.wolfram.com>

Plus magazine (part of the Millennium Maths Project)

<http://plus.maths.org/index.html>

Nrich (from the Millennium Maths Project): <http://nrich.maths.org/public/index.php>

Centre for innovation in maths teaching, Exeter University: www.ex.ac.uk/cimt

Megamath from Los Alamos: www.c3.lanl.gov/mega-math/

Cut the knot (interactive maths): www.cut-the-knot.org/front.shtml

Math dot com (reference materials, games and "ask an expert"): www.math.com/index.aspx.

Books

Andreoli, Cristoforo La "politica totale" di Pitagora
Padova: Ed. di Ar, 2003. 95 p. Series: Paganitas: 10

Anonymus RAAbits: Impulse und Materialien für die kreative Unterrichtsgestaltung
Part: Mathematik, Sekundarstufe I und II, CD-ROM 15: Word-Dokument EL40: Potenzen, Baum des Pythagoras, Daumenkino, Kurvenscharen, Prozentrechnung, Rund ums "F".
Stuttgart: Raabe, 2004. 1 CD-ROM. ; 12 cm. Series: Nachschlagen – Finden. ISBN: 3-8183-0024-0

Anonymus. Etudes rabelaisiennes. Tome XLII [Texte imprimé]
Genève: Droz. 2003. 142 p. ISBN : 2-600-00869-1 (rel.)
Contains : On Sound Effects in Rabelais / François Cornilliat. - L'alter Sensus des turqueries de Panurge / Frédéric Tinguely. - "Ce que j'entends par ces symboles pythagoriques": Rabelais on meaning and intention / James Helgeson. - Rabelais lecteur de Castiglione et de Machiavel à Thélème (Gargantua, Chap. 52-57) / François Rouget. - Rabelais, son coq et ses gelines: la basse cour d'Ulrich Gallet / Stéphan Georget. - Index des oeuvres de Rabelais dans les quarante premiers volumes des études rabelaisiennes / Damien Dard

Armisen-Marchetti, M. Commentaire au Songe de Scipion / Macrobie Tome II: Livre II
Paris : Les Belles Lettres. 2003. Collection des universités de France. Série latine; 234 p.
ISBN: 2-251-01432-2

Betegh, G. The Derveni Papyrus. Cosmology, Theology and Interpretation
Cambridge University Press. 2004. 452 p. ISBN:0521801087
This is the first comprehensive study of the Derveni Papyrus. The papyrus, found in 1962 near Thessaloniki, is not only one of the oldest surviving Greek papyri but is also considered by scholars as a document of primary importance for a better understanding of the religious and philosophical developments in the fifth and fourth centuries BC. Gábor Betegh aims to reconstruct and systematically analyse the different strata of the text and their interrelation by exploring the archaeological context; the interpretation of rituals in the first columns of the text; the Orphic poem commented on by the author of the papyrus; and the cosmological and theological doctrines which emerge from the Derveni author's exegesis of the poem. Betegh discusses the place of the text in the context of late Presocratic philosophy and offers an important preliminary edition of the text of the papyrus with critical apparatus and English translation.

Bollack, J. Les purifications: Un projet de paix universelle
Ed-du-Seuil : Paris, 2003. ISBN: 2020569159
Les Purifications d'Empédocle: une quarantaine de fragments issus d'un grand poème énigmatique, d'une fraîcheur et d'une autorité étranges, entre philosophie et thaumaturgie poétique et politique. Jean Bollack, qui a travaillé autrefois sur l'autre grand poème d'Empédocle, Les Origines, dans la perspective d'une reconstitution du système physique, en propose une traduction et un commentaire adossés à une édition, la première en France à intégrer les récentes découvertes papyrologiques.

Brisson, L. How philosophers saved myths : allegorical interpretation and classical mythology
Sauver les mythes (English)
Chicago : University of Chicago Press. 2004. translated by Catherine Tihanyi. ISBN: 0-226-07535-4
Muthos and philosophia -- Plato's attitude toward myth -- Aristotle and the beginnings of allegorical exegesis -- Stoics, Epicureans, and the New Academy -- Pythagoreanism and Platonism --The Neoplatonic Athens school -- Byzantium and the pagan myths --The Western Middle Ages -- The Renaissance

Bruin, E. de Pythagoras in 90 minuten
Haarlem : Holland. 90 minutenreeks. 64 p. ISBN: 90-251-0932-2
Beknopte informatie over leven en het werk van de Oud-Griekse filosoof.

Brüngger, H. Von Pythagoras zu Pascal : fünf Lehrstücke der Mathematik als Bildungspfeiler im Gymnasium
Hochschulschrift: Marburg, Univ., Diss., 2004. 290 S.

Cebes Pseudo-Kebes. Zusatz zum Titel Allegorie des Lebens. Die Bildtafel des Kebes (Pinax)
Darmstadt Verlag Wissenschaftliche Buches. 2004. Hirsch-Luipold, R. 292 S.
Serientitel Sapere ; 8. ISBN 3-534-15574-2

Cerchiai, L. Die Griechen in Süditalien. Auf Spurensuche zwischen Neapel und Syrakus.
Stuttgart; Konrad Theiss Verlag GmbH. 2004. 288 p. ISBN 3 8062 1845 5

Chitwood, A. : Death by philosophy : the biographical tradition in the life and death of the archaic
philosophers Empedocles, Heraclitus, and Democritus
Ann Arbor, Mich : University of Michigan Press. 2004. 224 p. ISBN: 0-472-11388-7

Dijk, J. van Pascal. Wiskunde voor de basisvorming. Werkschriften.
Deel: 1: symetrie. 2: variabelen. 3: machten en wortels. 4: omtrek en oppervlakte. 5: lineaire
verbanden. 6: verhoudingen en procenten. 7: statistiek. 8: doorsnede en inhoud. 9: niet-lineaire
verbanden. 10; stelling van pythagoras
Utrecht: ThiemeMeulenhoff. 2003. 10 katernen à 44 p. ISBN: 90-06-28070-4

Dillon, J. Neoplatonic Philosophy: Introductory Readings
Hackett-Pub: Indianapolis, 2004. ISBN: 0872207072
The most comprehensive collection of Neoplatonic writings available in English, this volume provides
translations of the central texts of four major figures of the Neoplatonic tradition: Plotinus, Porphyry,
Iamblichus, and Proclus. The general Introduction gives an overview of the period and takes a brief but
revealing look at the history of ancient philosophy from the viewpoint of the Neoplatonists. Historical
background is provided in extensive footnotes, which also include cross-references to other works
relevant to particular passages.

Edmonds, R. Myths of the Underworld Journey. Plato, Aristophanes, and the 'Orphic' Gold Tablets.
Cambridge University Press, 2004. 276 p. ISBN 0-521-83434-1.
Plato, Aristophanes, and the creators of the 'Orphic' gold tablets employ the traditional tale of a
journey to the realm of the dead to redefine, within the mythic narrative, the boundaries of their
societies. Rather than being the relics of a faded ritual tradition or the products of Orphic influence,
these myths can only reveal their meanings through a close analysis of the specific ways in which
each author makes use of the tradition. For these authors, myth is an agonistic discourse, neither a
kind of sacred dogma nor a mere literary diversion, but rather a flexible tool that serves the wide
variety of uses to which it is put. The traditional tale of the journey to the Underworld in Greek
mythology is neither simple nor single, but each telling reveals a perspective on the cosmos, a
reflection of the order of this world through the image of the other.

Figari, J. La philosophie pythagoricienne de la musique [Texte imprimé]
Lille : Atelier national de Reproduction des Thèses. 2003. 3 microfiches. Dissertation : Thèse
doctorat : Philosophie : Paris 4 : 2002

Giebel, M. Tiere in der Antike. Von Fabelwesen, Opfertieren und treuen Begleitern
Konrad Theiss Verlag GmbH. Stuttgart. 2003. 236 p. ISBN 3 8062 1783 1
Aus dem Inhalt: Tiere und Götter. Das Tieropfer im Widerstreit – Vegetarismus statt Fleischverzehr
Aristoteles – der Vater der Zoologie. Plinius und seine Tierkunde. Das Pferd: Kamerad und
Kampfmaschine. Haus- und Lieblingstiere. Tiere in der römischen Landwirtschaft und in der Küche
Venatio: Jagd und Tierhetze. Ein Anwalt der Tiere: Plutarch

Gleim, J. W. L. [Übers.] Die goldnen Sprüche des Pythagoras / aus dem Griech. von Gleim
Reicheneck : Aldus-Press. 2003: 16 S. ... Ausgabe der Aldus-Press Reicheneck ; 103

Jacquemard, S. J. Pythagore et l'harmonie des sphères
Paris : Ed. du Seuil, 2004. 243 p. ISBN 202067887X

Nisticò, D. Thèano: una pitagorica attuale
Soveria Mannelli (Catanzaro) : Rubbettino, 2003. 65 p. Thesis. ISBN 8849806183

Nüsslein, P. J. "Der Satz des Pythagoras" - Ein Unterrichtsvorhaben in einer 9. Realschulklasse unter besonderer Berücksichtigung eigenverantwortlichen Arbeitens
2004. Thesis: Hamburg, Landesinstitut für Lehrerbildung und Schulentwicklung,
Hausarbeit, 2. Staatsprüfung, Lehramt an Volks- und Realschulen

O'Halloran, M. Revisiting the ancient musical scale and the paradox of Pythagoras
Goulburn, N.S.W. : Goulburn Brewery Publishers, 2004. 108p. ISBN: 0958126232 : Issued also on CD-ROM.

Problem areas in modern physics could be resolved by re-examining the musical scale in the light of new research into standards of measure and the ancient understanding of the 'music of the spheres'

Periago Lorente. L. Vida Pitagorica ; Protreptico / Jamblico ; introducciones, traducción y notas de Miguel.
Madrid : Gredos, c2003. 314 p. ISBN 8424923979

Porphyre, texte établi et trad. par J. Bouffartigue, De l'Abstinence [Texte imprimé]. Tome II, Livres II et III [Texte imprimé]
Paris : les Belles lettres. 2003. 256 p. ISBN : 2-251-00282-0
Serie(s) : Collection des universités de France, ISSN 0184-7155

Rammerstorfer, M. Pythagoras' Erkenntnisse
Hochschulschrift Wien, Univ., Dipl.-Arb., 2003

Sakonji, S. Nazo no tetsugakusha Pythagorasu
Kodansha sensho mechie. 2003. 280 p. ISBN 4062582805

Schibli, H.S. Hierocles of Alexandria
Oxford [etc.] : Oxford University Press, 2004. 419 p. ISBN 0199249210
Note: Titres conventionnels: Commentarius in aurea carmina ; De providentia
Contains: Commentary on the golden verses of the Pythagoreans ; On providence

Schmidt, H.J. Prof. Dr. Brian Teaser: Stationenlernen "Satz des Pythagoras"
Köln : Aulis-Verl. Deubner. 2004. Ed. 2., überarb. Aufl. 96 S.
Series: Kopiervorlagen Mathematik. ISBN: 3-7614-2540-6.

Segan, F. The Philosopher's Kitchen: Recipes from Ancient Greece and Rome for the Modern Cook
Random House Adult Trade Publishing Group. 2004. 272p. ISBN: 1400060990
....**Pythagoras**, a sixth-century B.C. mathematician and philosopher, ate no meat. His choice was based on reverence for animals and a belief in an afterlife for all creatures. He stressed the importance of a vegetarian diet as the way to maintain physical and mental health and attain longevity. By many accounts he lived to be well over 100 years old. **Pythagoras** did not eat beans, either. Some scholars speculate that this was because of their association with politics and bureaucracy. In those days, votes were cast with white and black beans, and bureaucrats counted the bean ballots to determine the outcome of the vote. This is the origin of the present-day expression "bean counter."....

Segonds, A-P. Vie de Pythagore: Lettre `a Marcella / Porphyre; texte établi et trad. par Edouard des Places, avec un appendices d'A.-Ph.Segonds
Paris : Les Belles Lettres, 2003. 200 S.
Series: Collection des Universités de France : Sér. grecque ; [285]. ISBN: 2-251-00361-4

Taschner, R. Der Zahlen gigantische Schatten
Wiesbaden, Vieweg. 2004. 210 p. ISBN 3528032111
Aus dem Inhalt: Pythagoras: Zahl und Symbol - Bach: Zahl und Musik - Hofmannsthal: Zahl und Zeit - Descartes: Zahl und Raum - Leibniz: Zahl und Logik - Laplace: Zahl und Politik - Bohr: Zahl und Materie - Pascal: Zahl und Geist

Taylor J. Pythagoreans and Essenes: Structural Parallels
Peters, Leuven. Series : Collection de la Revue des Études Juives. Series number : 32. 2004. 127 p. ISBN: 90-429-1482-3

This study attempts to answer the question of the origins of the non-biblical features of the Essenes' way of life. It is clear that their project was founded in biblical and Jewish realities. Whence came those elements that appear not to have been derived from these sources? That they have their origins in Greek, and specifically Pythagorean, customs is an idea that recurs regularly in the history of scholarship and has had some notable supporters in the 19th and first half of the 20th centuries, including Ed. Zeller, E. Schürer, I. Lévy, F.C. Cumont and M.J. Lagrange. Recent scholars seem more reluctant to accept such views. The inquiry will take the reader through the available sources, then a series of comparative studies with possible parallels in Greece and elsewhere, to see whether and in what terms the question of Pythagorean influences on Essenism can be answered.

Trépanier, S. Empedocles : an interpretation

New York: Routledge. 2004. Studies in classics ; vol. 2. 289 p. ISBN: 0-415-96700-7

Wall, B.E. Glimpses of reality : episodes in the history of science

Wall & Emerson, 2003. 500 p. ISBN 0921332521

Contents; Numbers and arithmetic -- First thoughts about nature -- Pythagoras and the magic of numbers -- Plato and the reality of ideas -- The task of the philosopher -- Aristotle and the world of experience -- Axioms and proofs -- Saving the heavens -- Copernicus chooses formal elegance over common sense -- Kepler's celestial harmony -- Galileo, the anti-anti-Copernican -- Galileo, founder of physics -- The res extensa of Descartes -- Let Newton be! -- The mathematical principles of natural philosophy -- Energy, a new form of being -- Electromagnetism and the Æther -- Invariance and relativity trade places -- Science isn't so sure -- The universe will go on forever - or it won't -- The earth and its inhabitants classified -- Evolution by natural selection -- Finding the units of life -- DNA, the key to the mystery.

Wihan, N. Die Pythagoreer. Darstellung ihrer Beiträge zur Entwicklung der Mathematik mit Vorschlägen zur Behandlung des Themas im Unterricht

Hochschulschrift Linz, Univ., Dipl.-Arb., 2003

Forthcoming books

Huffman, C. Archytas of Tarentum. Pythagorean, Philosopher and Mathematician King

Publication is planned for April 2005. 672 p. ISBN:0521837464

Archytas of Tarentum is one of the three most important philosophers in the Pythagorean tradition, a prominent mathematician, who gave the first solution to the famous problem of doubling the cube, an important music theorist, and the leader of a powerful Greek city-state. He is famous for sending a trireme to rescue Plato from the clutches of the tyrant of Syracuse, Dionysius II, in 361 BC. This is the first extensive study of Archytas' work in any language. It contains original texts, English translations and a full commentary for all the fragments of his writings and for all testimonia concerning his life and work. In addition there are introductory essays on Archytas' life and writings, his philosophy, and the question of authenticity. Carl A. Huffman presents a new interpretation of Archytas' significance both for the Pythagorean tradition and also for fourth-century Greek thought, including the philosophies of Plato and Aristotle.

Riedweg, C. Zum Ursprung des Wortes 'Philosophie' oder Pythagoras von Samos als Wortschöpfer, in: A. Bierl (Hg.), Festschrift für J. Latacz, München (im Druck).

Reviews

Albrecht, M. Jamblich, Pythagoras. Legende - Lehre - Lebensgestaltung. 2002.

Reviewed by: Schniewind, A. Museum helveticum. 2003. 60, 4, p. 232-233.

Fauvel, J. Music and Mathematics: From Pythagoras to Fractals.

Reviewed by: Campbell, P.J. Mathematics Magazine. 2004, 77, 2, p. 163-168

Reviewed by: Hewett, I. Music Magazine. July 01, 2004

Kahn, C. Pythagoras and the Pythagoreans. a brief history. 2001.

Reviewed by: Graham, D. Ancient Philosophy. 2003. 23, 2, p. 420-423.

Reviewed by: Machamer, G. The Classical Review. 2003. 53, 1, p. 43-44.

Reviewed by: Mourelatos, A.P.D. The Classical Journal. 2004, 99, 3, p. 353-357

Reviewed by: Peixoto, M. Síntese, 2003, vol. 30, n. 98, 419-420.

Reviewed by: Riedweg, C. Gnomon, 2004. 76, 2, p. 165-168.

Osborne, C. Presocratic Philosophy: A Very Short Introduction. 2004.

Collier, J. Scholia Reviews ns 14 (2005) 27. <http://www.classics.und.ac.za/reviews/05-27osb.htm>

Riedweg, C. Pythagoras, Leben -Lehre - Nachwirkung. eine Einführung. 2002.

Reviewed by: Anonymus. Erbe und Auftrag, 2003. 79, 1, p. 82.

Reviewed by: Boys-Stones, G. Greece & Rome. 2003, 50, 1, p. 123-133. (Reviews several books on philosophy)

Reviewed by: Braun, B. Anzeiger für die Altertumswissenschaft, 2003, bd. 56, n. 3-4, 223-224.

Reviewed by: Mann, C. Historische Zeitschrift. 2003. 276, 1 p. 127-128.

Reviewed by: O'Meara, D.J. The Classical Review. 2004, 54, 1, p. 84-85

Reviewed by: Sefrin-Weis, H. Journal of the History of Philosophy. 2003. 41, 3, p. 409-410.

Reviewed by: Stemich, M. Museum Helveticum. 2003. 60, 4, p. 222-223.

Reviewed by: Zhmud, L. Ancient Philosophy. 2003. 23, 2, p. 416-420.

Staab, G. Pythagoras in der Spätantike. Studien zu "de vita pythagorica" des Iamblichos von Chalkis. 2002.

Reviewed by: Männlein-Robert, I. 02.08.2004. <http://hsozkult.geschichte.huberlin.de/rezensionen/>

Reviewed by: Mejer, J. 2003.11.30. <http://ccat.sas.upenn.edu/bmcr/2003/2003-11-30.html>

Reviewed by: Schniewind, A. Museum Helveticum. 2003. 60, 4, p. 233.

Stratton, K.S. Miracle and Magic: A Study in the Acts of the Apostles and the Life of Apollonius of Tyana.

Reviewed by: Reimer, A.M. Journal of Biblical Literature. 2003, 122, 4, p. 767-772

Work in Progress

Universität Zürich. Klassisch-Philologisches Seminar. Philosophische Fakultät

Current Research Projects by Project Leaders

Prof. Dr. Christoph Riedweg

- Pythagoras and the Pythagoreans, as part of "The Presocratic Philosophers. The Text in their Translations, edited and translated" (W. de Gruyter, Berlin-New York)
- Cultural and literary transference-phenomena
- Porphyry on Christ and the Christians: "De philosophia ex oraculis haurienda" and "Adversus Christianos" in comparison.
- Pythagoras: Life - Doctrine - History of Ideas. An Introduction.

See: <http://www.research-projects.unizh.ch/phil/unit64500/area265/>

Journal articles

Ahn, M.H. Characterization of Pythagorean curves and Pythagoreanization using a rational transform
Journal of symbolic computation, 2004, 37, 3, p 377-389

In this paper, for Pythagorean hodograph (for short, PH) curves defined as polynomial/rational ones with a polynomial/rational speed function, we consider the following question: "can we reparametrize a plane polynomial curve so that the reparametrized curve is PH?" Our answer is as follows: "the reparametrized curve is PH only when the hodograph of the original curve is the product of a Pythagorean curve and a primary non-Pythagorean curve of degree 1 under the complex representation for plane curves".

Alberts, G. Interview - Pythagoras voor de Tweede Kamer
Nieuw archief voor wiskunde. 2004, 5, 3, p 212-217

Albinus, H.J. Pythagoras's oxen revisited
Mathematical Intelligencer 2003, 25, 3, 41-43

Alessandro, A. D' Itinerary of Cebete: Tradition and reception of the 'Tabula', 15th-centuries
Renaissance Quarterly, 2003, 56, 4, p 1162-1164

Anderson, J. Theory and paractice
Mathematics Teaching. 2004, 187, p 8-13
Shares insights on teaching and learning mathematics. Ways of painting six faces of the cube using red and blue color; Use of Pythagoras' theorem and equality of opposite sides of a rectangle in measuring the distance of units in a rectangle

Anonymus. Special - Rekenen en wiskunde - Van Pythagoras tot pergola
Didaktief & school : opinie en onderzoek voor de schoolpraktijk. 2004, 34, 7 p 10

Anonymus. Avoid the weasel
Harper's Magazine. 2004, 309, 1851, p 20-21
Presents an excerpt from a collection of Pythagorean acusmata compiled by Brian Blanchfield, which appeared in the eighth issue of the periodical "Jubilat

Anonymus. Natuurwetenschappen: stoeien met Pythagoras
Mens & wetenschap. 2004, 31, 6, p 13

Barbeau, E. Fallacies, flaws and flimflam
College Mathematics Journal. 2004, 35, 3, p 213-216
Presents several fallacies related to mathematics. Comparison between the automobile accident involvement rate between teenage males and females; Example of the process of eliminating surds in a surd equation that produce extraneous roots; Correction provided to an article about a pythagorean-like theorem published in the March 2003 issue of "The College Mathematics Journal

Barocelli, F. "Raffaello e la Tetractys di Pitagora" in Ratio et Superstitio: Essays in Honor of Graziella Federici Vescovini, Marchetti, Giancarlo; Rignani, Orsola; Sorge, Valeria (eds), 369-420
Fed-Inter-Inst-d'Etudes-Medievales : Louvain-La-Neuve, 2003

Beauregard, R.A. On a Three-Dimensional Generalization of Fermat's Area Theorem
College Mathematics Journal. 2004, 35, 4, p 289-292
Reports that a number theory states that the area of a Pythagorean triangle is never the square of an integer, proved by mathematician Pierre Fermat. Existence of a pair of positive integers for which both the sum and difference of their squares are also integer squares; Argument on the comparison of the triangle area to the square; Expression of the results as a system of Diophantine equations

Braza, P. Linear transformations on Pythagorean triples
International journal of mathematical education in science and technology. 2004, 35, 5, p 755-762

Carballo, R. Intellectual anguish and the quest for harmony in 'Empedocles on Etna':
Arnold's foregrounding of modern existentialism
Cahiers Victorians & Edouardiens. 2003, April, 57, p 23-32

Chandler, R.E. Eudoxus meets Cayley
American Mathematical Monthly, 2003, 110, 10, 912-927

Cornelli, G. As origens pitagóricas do método filosófico: o uso da *archai* como princípio metodológicos em Filolau
Hypnos-(Journal-of-Greco-Roman-Philosophy). 2003. 11, p 71-83
The history of the term *arche*, seems to point to a Platonic-Aristotelian redefinition of an archaic concept, initially related to the Ionic use of the term to express a chronological starting point. Aristotle gives a new sense to *archai*, which receive the meaning of principles to explain the real, and, in this sense, are equivalent to the term *aitiai*. This paper intends to demonstrate that, before Aristotle, this aspect can already be observed in the Hippocratic Corpus and the fragments of Philolaus.

Couprie, D.L. Fear of falling: Heaven and earth in ancient cosmology
Tijdschrift voor filosofie, 2003, 65, 2, p 227-247

Craven, J. Pythagorus in my sights at last
Times Educational Supplement. 2004, 4583, p 15
Relates the experience of Jill Craven in her efforts to learn mathematics. Decision of Craven to enroll as a distance learner of mathematics; Difficulty in her lessons; Efforts of Craven to improve her math skills

Crombie, D. Accessibility from scratch: How an open focus contributes to inclusive design
Computers helping people with special needs: Proceedings se lecture notes in computer science. 2004, 3118, p 96-113.
When attempting to solve the riddle of the planets, Pythagoras the mathematician applied his 'philosophy of numbers' to the available information on the dynamics of the solar system, Having also studied music as science, he called the unity he found the Harmony of the Spheres, believing that the divine could hear a hum created by the perfect harmonies in the oscillations caused by celestial bodies. This paper concerns the provision of music for people who are blind or otherwise print impaired. Our experience has shown that by considering accessibility from scratch we can establish some fundamental harmonies which can be achieved by taking a more 'openfocus' to inclusive design. No divine hum perhaps, but we can help people to whistle a good tune.

Curd, P. Myth and philosophy: From the Presocratics to Plato
Classical Philology. 2003, 98, 1. p 87- 92

Dell'Aversana, P. Debate - The mistake of Descartes - Paolo Dell'Aversana, R&D technical leader, Eni Exploration and Production Division, takes issue with Prof Peter Hubral's thesis in his article 'Pythagoras and the mystic Orient' published in May.
First break. 2004, 22, 7, 69-73

Foca, A. The Origin of Experimental Medicine in the School of Alcmaeon from Kroton and the Diffusion of His Philosophy within the Mediterranean Area
Skepsis. 2002-03. 13-14, p 242-253

Goehl, J.F. Pythagorean triples
Mathematics Teacher. 2004, 97, 3, p 163
Presents a letter to the editor in response to the article "Reader Reflection: More Patterns of Triple," by Dennis H. Alcock, published in the January 2003 issue of the periodical "Mathematics Teacher

Hankey, W.J. Philosophy as a way of life for Christians? Iamblichan and Porphyrian reflections on religion, virtue, and philosophy in Thomas Aquinas
Laval Theologique et philosophique, 2003, 59, 2, p 193-224
Pierre Hadot's purpose in developing the notion of ancient philosophy as *exercice spirituel* was to provide an alternative to religion. Within this framework Hadot blames the triumph of Christianity and medieval scholasticism as exemplified in Aquinas for the *perte de la philosophie comme maniere de*

vivre. In fact, however: for both, there is nothing abstract about the theory philosophy gives to the ascent of God: philosophy is a way of life which transforms us towards deiformity. Like its Neoplatonic predecessor, the medieval university contained philosophy as exercise spirituel within a Christian spirituality which also directed intellectuals towards a supernatural felicity.

Hechinger, T. Computerpraxis - Pythagoreische Tripel
PM : Praxis der Mathematik in der Schule. 2004, 46, 2, p 66-68

Heideman, N. Notes 88.31 to 88.51 - Escribed and inscribed circles of Pythagorean triangles
The mathematical gazette : the journal of the Mathematical Association. 2004, 88, 512, p 305-312

Henderson, I.H. Speech representation and religious rhetorics in Philostratus' 'Vita Apollonii'
Studies in religion-sciences religieuses, 2003, 32, 1-2, p 19-37
Philostratus' "Vita Apollonii" is structured by the stylistic distinction, older than Aristotle, between composed and improvisational rhetorics. Philostratus extends this bipolar theory of rhetorical styles to define for Apollonius a religious discourse beyond sophistic rhetoric, marked by silence and oracular speech. The "Vita" represents and evaluates speech in a variety of rhetorical modes and voices, especially those of Apollonius and the narrator. The whole continuum from vulgar lies, through sophistic rhetoric to Pythagorean or Delphic oracle is exemplified inside the range of Apollonius' own speech habits as Philostratus represents them. Whatever its merits as historical biography, Philostratus' narrative methodically interprets key possibilities of eccentric religious and political speech in the Roman Empire.

Hubral, P. Pythagoras and the mystic Orient - A personal essay
First break. 2004, 22, 5, p 75-80

Humble, M. Empedocles' shoe: Essays on Brecht's poetry
Modern language review. 2004, 99, 2, p 541-542

Iannone, P. Did I tell you my Pythagoras horror story?
Mathematics Teaching. 2004, 187, p 13-17
Focuses on the role of proof between pure and applied mathematics. Elimination of proof from the school mathematics curriculum in the Great Britain; Concerns regarding the inability of students to produce sentences in English of mathematical content; Difficulties in understanding the differences between evidence as proof and proof as evidence

Kamareddine, F. Flexible encoding of mathematics on the computer
Mathematical knowledge management, Proceedings se lecture notes in computer science. 2004, 3119, p 160-174
This paper reports on refinements and extensions to the MathLang framework that add substantial support for natural language text. We show how the extended framework supports multiple views of mathematical texts, including natural language views using the exact text that the mathematician wants to use. Thus, MathLang now supports the ability to capture the essential mathematical structure of mathematics written using natural language text. We show examples of how arbitrary mathematical text can be encoded in MathLang without needing to change any of the words or symbols of the texts or their order. In particular, we show the encoding of a theorem and its proof that has been used by Wiedijk for comparing many theorem prover representations of mathematics, namely the irrationality of $\sqrt{2}$ (originally due to Pythagoras). We encode a 1960 version by Hardy and Wright, and a more recent version by Barendregt.

Kemp, M.
Nature 428, 370 (25 Mar 2004)
(Summary): The idea that the golden section had a special place in Renaissance painting makes for fine fiction but rotten history....
(Context): ...century. Incommensurable ratios were regarded as special, but, in Renaissance design, the ratio 1:2, based on Pythagoras' theorem, was used far more widely, not least because it was a simple construction based on the diagonal of a.....

Koenig, C.S. Analogical transfer in the THOG task
Quarterly J. of exp. Psychology section - A Human Experimental Psychology. 2004, 57, 3, 557-570

The influences of surface and structural similarity on analogical transfer were examined with 318 undergraduate participants in four experiments using Needham and Amado's (1995) Pythagoras THOG problem as the source problem and Wason's standard abstract THOG task as the target problem. In Experiments 1-3, systematic changes in surface similarity between the source and target problems were introduced by changing the named exemplar, the dimensional values, and the dimensions, respectively, in the target problem. Significant transfer was obtained in all three experiments. In Experiment 4, we explored the basis of this transfer by examining three versions of the Pythagoras THOG problem, factorially combining its facilitating features as source problems. Results indicated that the inclusion of a hypothesis generation request was necessary for significant transfer. The implications of our findings for using transfer versus facilitation as the performance criterion for deductive reasoning are considered.

Levy-Leblond, J.M. N-dimensional variations on themes of Pythagoras, Euclid, and Archimedes *Mathematical Intelligencer*. 2004, 26, 3, p 43-53

Lozanne, A. de Music of the Spheres at the Atomic Scale
Science, 2004. Vol 305, Issue 5682, p. 348-349.

Atomic force microscopy is an established technique for studying surfaces at high resolution, but the surface-tip interaction can also be used to make detailed images of the atoms in the tip. In his Perspective, de Lozanne discusses results reported in the same issue by Hembacher et al., in which the higher harmonics observed in the interaction of a vibrating tungsten tip and a graphite surface were measured. These higher harmonics can be used to improve the spatial resolution of the scanned image, and in particular, allow precise mapping of the tungsten atoms in the tip itself.

Mansfeld, J. Presocratics (Brief Critical survey of recent publications on Presocratic philosophy) *Phronesis*. 2003, 48, 2, p 164-173.

Martin, M. La magie en Grèce. Le matin des Hommes-Dieux. Étude sur le chamanisme grec.
Folia Electronica Classica (Louvain-la-Neuve). 2004. Numéro 8 - juillet-décembre 2004.

I. Éléments chamaniques dans la mythologie grecque, par Michaël (142 K) (inédit)
<http://bcs.fltr.ucl.ac.be/FE/08/mytho.html>

II. Les « chamans grecs », par Michaël Martin (90 K) (inédit)
<http://bcs.fltr.ucl.ac.be/FE/08/chamans.html>

Melville, D.J. Poles and walls in Mesopotamia and Egypt
Historia Mathematica. 2004, 31, 2, p 148-162

The problem of a pole or reed leaning against a wall is an example of a mathematical "riddle," or exercise, that occurs in many cultures, among other "Pythagorean"-type problems. There are a few known instances of the problem in Mesopotamia and Egypt. We analyze the way the problem is treated in these cases, paying particular attention to the structure of the algorithms used to find the solutions.

Muller Sommer, H. Thementeil - Variationen zum Satz des Pythagoras
Der Mathematikunterricht : Beitrage zu seiner wissenschaftlichen und methodischen Gestaltung. 2004, 50, 4, p 57-65

Ne'eman, Y. Symmetry and "Magic" numbers or from the pythagoreans to Eugene Wigner
Acta Physica Hungarica New Series-Heavy ion physics. 2004, 19, 3-4, p 241-246
I trace the evolution of the scientific world view in general and of the variational approach specifically, including transformation groups I then review the impact of these ideas at the atomic, nuclear and particle levels.

Nouvel, B. On colorations induced by discrete rotations
Discrete geometry for computers imagery, Proceedings se lecture notes in computer science. 2004, 2886, p 174-183

We consider a non numerable family of colorations induced by discrete rotations. The symbolical dynamical system associated with the coloration is first explained. We introduce then a group that supports the dynamics of the system. The periodical cases are precised, they are induced by Pythagorean triples. Finally, a proof of the quasi-periodicity of the colorations, and a description of

asymmetrical colorations conclude this paper.

Pereira, I. Considerações sobre Empédocles e a ordem orfíco-pitagórica
Hypnos-(Journal-of-Greco-Roman-Philosophy). 2003. 11, p 98-111

This paper presents some considerations about the pre-Socratic philosopher Empédocles and his links with the Orphic-Pythagorean mystical doctrines, and, more specifically, his affiliation with the Pythagorean order. The initiated in the mysteries of that order has the command of his *prapides* and is a *theios aner*. This sacred man can reach the divine *sophia* by contemplation of the truth, becoming a *philosophos*. We aim to demonstrate that Empédocles was one of those men.

Perillie, J.P. The "summetria" of numbers in Plato's 'Republic'

Revue Philosophique de Louvain. 2004, 102, 1, p 35-58

The aim of this study is to proceed to associate the mathematical concept of *summetria*, introduced by Plato in Book VII of the *Republic*, and the puzzle of the Numbers of the generation of the gods and men in Book VIII. The emphasis of the Pythagorean origin of the concept of *summetria* makes it possible for us to understand better the cosmic-theological meaning of this rational communion of all beings, a meaning which Plato takes over within a new metaphysical perspective.

In brief, Plato proposes both a puzzle, a kind of mathematical game, in order to select the Guardians, and a new philosophical conception of cosmic-theological cycles. In the final analysis the interpretation proposed will lead to a new hypothesis concerning the perfect number of divine generations.

Phillips, J. Numenian psychology in Calcidius?

Phronesis. 2003, 48, 2, p 132-151

The 1962 publication of J.H. Waszink's edition of Calcidius' commentary on Plato's "Timaeus" focussed attention on the question of Calcidius' source for group of chapters where he presents an interpretation of Plato's account of the creation of soul. I discuss three attempts to answer this question: that of Waszink himself, who argues that the source is Porphyry who was influenced by the Neopythagorean /Platonist Numenius, that of J.M. Van Winden, who claims Numenius as the direct source, and that of Werner Deuze, who offers reasons for excluding Numenius as either directly or indirectly responsible. I show the weakness of Deuze's critique, but then argue that neither Waszink nor Van Winden has given sufficient consideration to the possibility that Plotinus, either alone or through Porphyry as intermediary, is behind Calcidius' interpretation, where the doctrines of the unity of the soul and of a higher soul that does not descend, both characteristic of Plotinus' psychology, are prominent. However, there is an important but uniformly overlooked feature of this exegesis that rules out both Plotinus and Porphyry as possible sources. This leaves Numenius as the only serious candidate. If, then, the origin of the doctrines of the unity of the soul and of the undescended higher soul can be traced to the work of Numenius, there is the strong possibility that in his formulation of these same doctrines Plotinus was indebted to Numenius

Polycarpou, C. The Eudoxean Biography of Pythagoras

Diotima. 2004. 32, p 60-64

With a view to shed light on the Eudoxean biography of Pythagoras, we maintain that Eudoxus was probably the first to imply that the Acousmatics invented the story of Pythagoras's Apollonian birth in order to argue for the deification of Pythagoras. Furthermore, we take into account that for Eudoxus Pythagoras's total abstinence from animal flesh was indissolubly linked to the ideals of a new way of life opposed to *phonevein*. In conclusion, we affirm that for Eudoxus, who emphasized the importance of Pythagoras's *eton gnorima epitedeumata*, there was a link between Pythagoras's conception of *taciturnity* and the Pythagorean pentagram.

Polycarpou, C. The Eudoxean Conception of Kairos

Diotima. 2004. 32, p 187-189

Taking into account that Eudoxus was a physician, we consider that for him the term *kairos* had a great deal to do not only with the foundations of Cnidian medicine but also with the foundations of the Hippocratic one. Moreover, keeping in mind that Eudoxus laid emphasis on Philolaus's precept *ta tou kairou metra dein eidenai*, we hold that Eudoxus disagreed with Gorgias, who maintained that *kairos* does not allow scientific treatment. Indeed, the number seven, which was a Pythagorean symbol used to represent *kairos*, *hygieia* and *hagneia*, is reminiscent of the structure of Eudoxus's Voyage 'round the World.

Ren, G. Classroom Capsules - The Pythagorean Theorem and Beyond : a Classification of Shapes and Triangles
The college mathematics journal. 2004, 35, 4, p 300

Saito, K. Phantom theories of pre-Eudoxean proportion
Science in Context. 2003, 16, 3, p 331-347

This paper proposes an alternative view to Becker's reconstruction of pre-Eudoxean theory of proportion. No extant document explicitly demonstrates the alleged alternation of theories of proportion before Book V of the Elements. Books V and VI of the Elements are not so complete as a theory of proportion in the abstract, and can be interpreted better as a collection of propositions useful in geometry. It follows then that older theories, if they existed at all, must have been less complete. Prevailing interest in geometry on the part of Greek mathematicians is also visible in some expressions in Book VI for specific ratio and proportion used only in definite geometric context. It is therefore more fruitful to consider the "theory" of proportion before Eudoxus as an aggregate of techniques about proportion that are useful in geometry, rather than as the result of a conscious effort to build a logically consistent set of propositions based on a definition.

Santoro-Brienza, L. "Art and Beauty in Antiquity and the Middle Ages"

In: Art and Essence, Praeger : Westport, 2003. Davies, S. (ed), p. 55-73

In Classical Antiquity and the Middle Ages the words which stood for 'art' and 'beauty' respectively, were semantically quite extensive and generic. However, the more specific concepts of 'artistic production', 'aesthetic value', 'aesthetic experience' were clearly elaborated and progressively refined. In particular, the thinkers of antiquity and the Middle Ages outlined a distinction between 'poetics': philosophy of art, and 'aesthetics': philosophy of beauty. Furthermore, they clarified the meaning of beauty by identifying its objective properties, and underlined the cognitive character of artistic processes and of aesthetic contemplation. The essay presents a reading of key texts by the Pythagoreans, the Sophists, Plato, Aristotle, Plotinus, Augustine, the Pseudo-Dionysius, Aquinas.

Savarese, G. Itineraries of Cebes. Tradition and reception of the 'Tabula Cebetis' in Italy from the 15th to the 18th century

Rassegna Della Letteratura Italiana. 2003, 107, 1, p 253-256

Schmitz, M. Eine mögliche Verallgemeinerung des Satzes des Pythagoras
PM : Praxis der Mathematik in der Schule. 2004, 46, 4, p 173-176

Schott, J.M. Founding Platonopolis: The Platonic "politeia" in Eusebius, Porphyry, and Iamblichus
Journal of Early Christian Studies. 2003, 1, 4, p 501-531

Seaford, R. Aeschylus and the unity of opposites

Journal of Hellenic Studies. 2003, 123, p 141-163

The idea of the 'unity of opposites' allows one to see important connections between phenomena normally treated separately: verbal style, ritual, tragic action and cosmology. The stylistic figure of 'Satzparallelismus' in lamentation and mystic ritual expresses the unity of opposites (particularly of life and death) as oxymora. Both rituals were factors in the genesis of tragedy, and continued to influence the style and action of mature tragedy. The author advances new readings of various passages of the "Oresteia", which is seen to advocate the replacement of a Herakleitean model of the unity of opposites with a Pythagorean model of their reconciliation.

Sims, J. Notes of a MathArtist (The Pythagorean Project, or teaching mathematics to art students)

International Review of African American Art. 2004, 19, 3, p 52-61

Explores the connections between mathematics, nature and the arts. Implications of the work and philosophy of Pythagoras and his school of modern mathematics from Italian Renaissance art to numerology; Role of mathematics in the visual arts; Combination of the approaches of mathematical art, visual mathematics and ethnomathematics

Sisko, J. Anaxagoras' Parmenidean Cosmology: Worlds within Worlds within the One

Apeiron. 2003. 36, 2, p 87-114

The aim of this paper is to suggest a limited solution to a long-standing puzzle regarding the history of pre-Socratic philosophical cosmology. The puzzle concerns the development of post-Parmenidean pluralism. Specifically, it concerns the relationship between Parmenides' account of existence and the

physical theories advanced by Democritus, Empedocles and Anaxagoras. (edited)

Steinhart, E. Pantheism and current ontology

Religious Studies. 2004, 40, 1, p 63-80

Pantheism claims: (1) there exists an all-inclusive unity; and (2) that unity is divine. I review three current and scientifically viable ontologies to see how pantheism can be developed in each. They are: (1) materialism; (2) Platonism; and (3) class-theoretic Pythagoreanism. I show how each ontology has an all-inclusive unity. I check the degree to which that unity is: eternal, infinite, complex, necessary, plentiful, self-representative, holy. I show how each ontology solves the problem of evil (its theodicy) and provides for salvation (its soteriology). I conclude that Platonism and Pythagoreanism have the most divine all-inclusive unities. They support sophisticated contemporary pantheisms.

Stratton, K.B. Miracle and magic: A study in the 'Acts of the Apostles' and the 'Life of Apollonius of Tyana'

Journal of Biblical Literature. 2003, 122, 4, p 767-771.

Sullins, K. Get more from Pythagorean ideas.

Mathematics Teacher. 2004, 98, 2, p 68-71

This article presents information on Pythagorean propositions and ideas. According to the author generating Pythagorean triple other than the tried-and-true 3,4,5 or 5, 12, 13 is as easy as A, B, C. This process gives a triple with a difference of 1 between the hypotenuse and the longer leg. The process is as follows: Pick an odd positive integer, 7, then square it 49 and then determine consecutive integers that have that sum, 24 and 25

Trepanier, S. 'We' and Empedocles' cosmic lottery: 'P. Strass. Gr. Inv. 1665-1666', Ensemble A Mnemosyne. 2003, 56, 4, p 385-419

This paper presents an alternative interpretation and reconstruction of ensemble a from the Strasbourg papyrus of Empedocles, "P. Strasb. gr. Inv. 1665-1666", first published by A. Martin and O. Primavesi in 1999. I claim the Martin and Primavesi's working hypothesis for the reconstruction of lines a (ii) 3-17, upon which most of their individual supplements rely, is wrong, and that the doctrinal implications they draw from it are unfounded. Against them, I propose an alternate reconstruction of the text. If correct, two consequences follow from my alternative. First, it presents further reasons to reject a controversial reading revealed by the papyrus, retained by the editors, and the "we" of my title. Second it provides new support for the role of chance in Empedocles' cosmic cycle, a theme largely ignored in modern scholarship on Empedocles.

Trepanier, S. "Empedocles on the Ultimate Symmetry of the World"

In: Oxford Studies in Ancient Philosophy, Volume XXIV, Summer 2003, Sedley, David (ed), 1-57
Oxford-Univ-Pr : Oxford, 2003

Welsh, C. Die Sirene und das Klavier. Vom Mythos der Sphärenharmonie zur experimentellen Sinnesphysiologie.

In: B. Dotzler, H. Schmidgen, C. Weber (Hg.): Parasiten und Sirenen: Zwei ZwischenRäume.

Preprint 253 des MPI f. Wissenschaftsgeschichte. Berlin, Januar 2004, S. 57-85.

<http://www2.hu-berlin.de/kulturtechnik/veranstaltungen.php?show=zwischen&go=pdf>

Wersinger, A. Empedocle et Homere. L'un et le multiple dans la repetition formulaire

Diotima. 2003. 31, p 11-20

Yavetz, I. On Simplicius' testimony regarding Eudoxan lunar theory

Science in Context. 2003, 16, 3, p 319-329

The past five years have seen revisions of what had been regarded as the single definitive reconstruction of Eudoxus' homocentric sphere theory. Crucial to these revisions, which present alternative constructions for the moon (Mendell 1998a, 1998b) and the five planets (Yavetz 1998), is a careful assessment of Simplicius' testimony regarding the Eudoxan theory. The purpose of this paper is to show that even though we can account for lunar motion by means of two distinct homocentric models, both models involve forced and ambiguous readings of Simplicius' account. Both constructions adequately accommodate the lunar month and the 18.5-year precession of the lunar nodes in a homocentric model that fits the general spirit of Eudoxus' approach to the problem. Both are also in full accord with Aristotle's short, general account of the Eudoxan system. However, since

neither of them can be naturally reconciled with Simplicius' text, and since we know of no other appropriate alternatives, it seems to follow that Simplicius' account may suffer from serious technical inadequacies, and that only limited historical weight can be given to his testimony regarding the details of the system.

Zhmud, L. Theophrastus against the Presocratics and Plato: Peripatetic dialectic in the 'De Sensibus'
Classical World. 2003, 97, 1, p 106-107

Zwarte, R. de Pythagoras' Inheritance at Paestum in South Italy - Number is the Substance of All Things

Babesch : bulletin antieke beschaving. 2004, 79, p 41-50

The discovery of Pythagoras' shrine at Paestum in South Italy will enrich our knowledge about geometry done with numbers of various geometrical and arithmetical progressions. The accuracy of the constructions is fabulous. The diagonal of a square with side 309 was found to be rational by measuring. A golden isosceles triangle has been laid off by using the telling numbers 618 and 1000. The Archimedean value for δ was already known in the 6th century BC. The Delian problem is older than the time of Plato. The Pythagoreans solved this problem as well as the quadrature of the circle.

Conferences

April 3, 2004. Early Modern Philosophy and the Scientific Imagination Seminar.

University of London. Institute of english studies. School of advanced study:

Autumn 2003 Programme. Saturday (Room 265)

Forshaw, P.J. (Birkbeck, University of London) 'Reducing the Binary to the Simplicity of the Monad: Neo-Pythagorean Symbolic Numbers in sixteenth-century Occult Philosophy'.

April 15-17, 2004. One Hundredth Annual Meeting of the Classical Association of the Middle West and South, in St. Louis, MO, USA.

Section C: Ovid's Metamorphoses

Rupp, W.L. Ovid's Never-Ending Metamorphoses

.....In this paper, I will examine previous scholarship that has dealt with the end of the Metamorphoses, the notion of the Metamorphoses as "carmen perpetuum," and Pythagoras' speech in Metamorphoses Bk. 15 such as G. Davis' "The Problem of Closure in a Carmen Perpetuum" and P. Hardie's "The Speech of Pythagoras in Ovid Metamorphoses 15: Empedoclean Epos." I will also use Ovid's poetry, in particular the Metamorphoses itself, to support my notion of Ovid's inability to bring his "greater work" to a conclusion and to serve as demonstrations of Ovid's wry sense of humor.

Adams, E. Fishing with Ovid

.... and, mirroring Ovid's own structure, Pythagoras begins and ends his didactic teachings with references to the deceptive craft of fishing. Thus at the beginning, middle, and end of the poem, Ovid baits his lines with fishermen.....

July 10-12, 2003. CongressCATH. The second CongressCATH, organised by the AHRB Centre for Cultural Analysis, Theory and History

Panel: Performance + Discussion about John Tilbury's Concert, Friday 9.00 - 10.30.

MacWilliam, S. Pythagoras' Screen

Pythagoras is reputed to have lectured from behind a screen and called his listening pupils acousmatics. The term now refers to a sound heard when its source is invisible or unseen, arguably any occasion of reproduced sound. The paper will explore the phenomena of body, voice and architecture that circulate around the screen and the acousmatic event. It will draw an analogy between Pythagoras' screen and a windshield screen used to reduce plosive wind sounds when recording a voice.....

July 26-31, 2004. VII Symposium Platonicum Gorgias – Menon

Würzburg/Germany. (Under the auspices of: Bayerische Akademie der Wissenschaften, Akademie der Wissenschaften und der Literatur Mainz, Universität Würzburg)

Monday (26 July) 13.00-15.00 Parallel Session

Fritz-Gregor H. Pythagoreisches in Platons Gorgias

Smith, N.D. The Myth of the Afterlife in Plato's Gorgias

October 15, 2004. Hamilton prize in mathematics. Royal Irish Academy
Gowers, T. Reflections on Pythagoras's Theorem
<http://www.ria.ie/committees/math/index.html>

Forthcoming conferences

2005 APA Annual Meeting. Abstracts for Papers.

http://www.apaclassics.org/AnnualMeeting/05mtg/abstracts/2005_apa_abstract_index.html

Inwood, B. Who do we think 'we' are?

Janko, R. A new reconstruction of the Strasbourg Empedocles

In 1992 Alain Martin recognized 52 small fragments of hexameters in the collection of papyri at Strasbourg as a book-roll of Empedocles. With Oliver Primavesi, he succeeded in assembling them into eleven 'ensembles', and showed that the first column of Ensemble a overlaps with fr. 17 Diels. The result of their joint editio princeps is that over 70 lines of text, lines 233-300 of Book I of Empedocles' Physics, can now be read in a fairly complete state.

The editors assigned the other large Ensemble, d, to Book II, on grounds of content. It appeared to discuss the punishment of the soul in the underworld for the crime of eating meat. The fact that the pieces appear to come from different Books seems to have reduced their impact on scholarship, since they are substantial pieces but overlap with those which we already had and do not allow us to form much of an impression of the larger organization of the whole.

However, the appearance of all the papyrus fragments is the same, and there is no solid evidence that they came from different Books or different rolls. Accordingly, in a new effort at reconstruction, I explored the hypothesis that all the pieces come from the shortest possible stretch of papyrus-roll. As a result of forcing all the pieces together into the fewest possible columns, it proved possible to propose a new join between Ensembles a and c (fr. 76 Diels), according to which this passage describes coming together and dissolution in our own world, as Jean Bollack proposed, rather than one of O'Brien's zoogonic cycles, as the editors thought. Further new joins between Ensembles d, f, b and e show that Ensemble d does not describe the gruesome punishment of the carnivore's soul in Hades, as the editors thought, but the creation of birds and animals from mixtures of the different elements. Ensemble e is part of a simile comparing this process to the making of bronze. Also, Ensemble g can be joined to three line-ends in Ensemble a column ii. Digital images of the papyrus will be projected to demonstrate that the papyrus-fibres, and the staining and darkening of the surfaces of the different ensembles match each other in most of the proposed joins (but not that between ensembles a and c, where the distance between is too great).

This combination results in a passage of about 130 lines in length, Book I lines 233-364, and of remarkable interest. Empedocles' style of argument turns out to be very like that of Lucretius, as David Sedley had suggested, as it is cumulative and recursive, with a lengthy digression on dissolution, promises and appeals and promises to the addressee, and a return to the main argument. It is also superb poetry.

Marshall, H.R. Reconstructing Plutarch's *Eis Empedoklea*

McGowan, M. Pythagoras and Numa: Exile at the beginning of Roman religion and law

This paper examines the figure of Pythagoras from the last book of Ovid's *Metamorphoses* as sage, exile, and teacher of Numa Pompilius, legendary second king of Rome and founder of the city's most sacred religious rites and public institutions. In *Met.* 15.1-478, Ovid has Pythagoras teach Numa about the nature of the universe, the ethics of vegetarianism, and the transmigration of souls. The present study focuses on how the figure of Pythagoras connects Numa's establishment of Roman religious practice and sacred law directly to Greece, notably to an Italian version of Greece. It considers, in particular, the problem of exile and suggests that the figure of Pythagoras provides a vital link, one of many, between Ovid's poetry of exile and the *Metamorphoses*.

Pythagoras' teaching on the immortal nature of the soul (*Met.* 15.153-75) is often read in relation to Ovid's own claim from the poem's coda to overcome death via the immortality of his verse (15.871-9). The *Tristia* and *Epistulae ex Ponto* can be said to validate this claim because they ensure that Ovid's voice survives in Rome even as the poet likens his exile to a kind of death (e.g. *Tr.* 3.11.25-6; *Pont.* 1.2.28, *et saepe*). But the lessons of Pythagoras hardly provide a source of solace for Ovid in exile, *Tr.* 3.3.59-64:

atque utinam pereant animae cum corpore nostrae,
effugiatque audios pars mihi nulla rogos.
nam si morte carens uacua uolat altus in aura
spiritus, et Samii sunt rata dicta senis

inter Sarmaticas Romana uagabitur umbras,
perque feros manes hospita semper erit.

In keeping with the poetic program of the *Tristia*, Pythagoras' teaching on the soul is cause for lament. And yet, the poem later restates Ovid's wish from the *Metamorphoses* for the enduring quality of his poetry, 77-80: etenim maiora libelli/ et diuturna magis sunt monimenta mihi,/ quos ego confido, quamuis nocuere, duros/ nomen et auctori tempora longa suo. The reader familiar with the *Metamorphoses* can recognize how Pythagorean doctrine furnishes Ovid with the philosophical apparatus to lament as he should and to hope as he can. In a sense, the *Tristia* and *Epistulae ex Ponto* continue the *carmen perpetuum* of the *Metamorphoses*. Now, however, the song's subject is not the changing shapes of being from the origins of the universe up to the present. Instead, the deification prophesied for Augustus at the end of the epic has come to pass, and the *uates exul* bears witness to the changing forms of Rome's most sacred institutions, as founded by Numa, that can turn men into gods by senatorial decree and send a poet to die in an inhospitable place on the margins of the empire. From those margins, Ovid gives voice to unremitting songs of lament with the same claim to immortality that Pythagoras had made about the soul.

Obbink, D. New Fragments of Empedocles on Papyrus

Schaefer, C. On the Pythagorean Youths in the *Phaedo*

August 1-7, 2005 International association for greek Philosophy

<http://www.hri.org/iagp>

17th International Conference of Philosophy.

The philosophy of culture in the age of globalisation

The Conference will take place at the beautiful Aegean islands of Samos (Pythagorion) and Patmos (Fourni). The general aim of the Conference is to examine the problem of culture (and of values in general) in the age of globalisation from a philosophical point of view.

Art

Location: High Tech Campus – Philips Semiconductors, Eindhoven.

Artist Jeanne Schouten.

Work of art - Tot & met 7. Vrij naar Pythagoras.

Argeloosheid, radicale vragen en nieuwe inzichten doen zich daar voor, waar het alledaagse en aangeleerde met andere ogen wordt bekeken. Van jongs af leren we te rekenen en maken we van dat vermogen als van een zelfsprekendheid gebruik. Maar in feite is het niets meer of minder dan een wonder dat de werkelijkheid aan die getallen gehoorzaamt en met ze in overeenstemming is.

Een manier om het wonder te verklaren werd door sommige filosofen in de oudheid beproefd, zoals door de geheimzinnige denker Pythagoras, een pionier in de wiskunde en de astronomie, maar ook een religieus mens met een strenge ethiek en een neiging tot mystiek. Hij draaide de gewone verhouding om. Het is niet de werkelijkheid die naar de getallen luistert, maar de getallen zijn de principes van de werkelijkheid, waarvan ze de patronen, de structuren en de dynamiek bepalen.

Dit is een gewaagde these, die misschien niet op elk moment en in elke tijd doordringt. De werkelijkheid neigt ernaar zich verbrokken te presenteren en komt overzichtelijk en met gebrek aan orde op ons over, zoals ook Pythagoras niet ontging. 's Nachts, wanneer alle menselijke stemmen slapen, waakte hij verlangend de harmonie der sferen te herkennen en tot zich te laten doordringen. Dan ervoer hij de kracht van de getallen, elk met een eigen betekenis, van de **een**, de samengebalde bron van creatieve kracht, tot en met de **tien**, het beginsel van de totaliteit dat het bijzondere omvat. In het voetspoor concentreerden zijn volgelingen zich vooral op de zeven, die een maat is van de ritmes van de natuur en aan de hemel en in het leven alle natuurlijke cycli begrenst.

7 Panelen. (A picture of the work of art can be mailed to you on request)

Anonymus. 'Bomen van Pythagoras' (Trees of Pythagoras)

The exhibition was in 'het Mondriaanhuis' Amersfoort, september 6th until november 23th 2003.

More than 35 artists from several European countries took part. 'ConcreteKunst'.

The catalogue of the exhibition can be ordered: info@arsetmathesis.nl

For more information: <http://www.arsetmathesis.nl/>