

RESEARCH PROPOSAL – FELLOWSHIP ON ARISTOTLE’S PHILOSOPHY
DR JEAN-LOUIS HUDRY

1. Research topic: Aristotle on the Intellect

G. Matthews (2003) writes: “One thing we have to say about chapters 4 and 5 of *De Anima* III is that there is no generally shared understanding among scholars today as to what Aristotle may have had in mind in writing them.” (p. 222). This claim confirms the difficulty in interpreting Aristotle’s conception of the intellect (*nous*). The main problem lies in Chapter five, in which Aristotle distinguishes two kinds of intellect:

Since just as in all things in nature there is something which is, on the one hand, the matter (*hylē*) in each genus (and this is that which is potentially (*dunamei*) all these things) and, on the other hand, the cause and agent (*to aition kai poiētikon*) producing them all, as the art in relation to the matter, it is also necessary that these differences be found in the soul (*en tēi psuchēi*). And in fact there is the intellect (*nous*) by becoming all things [potentially], and the intellect by producing all things, as a sort of state (*hōs hexis tis*), such as light. For in a sense light produces colours in actuality (*energeiai chrōmata*) from colours in potentiality. And this intellect is separate, unmixed, and unaffected (*chōristos kai amigēs kai apathēs*), being in its substance in actuality (*tēi ousiai ōn energeia*). For that which acts (*to poioun*) is always more honourable than that which is acted upon (*tou paschontos*), and the principle (*hē archē*) [is more honourable] than the matter... But it is not the case that it [this intellect] sometimes thinks (*noei*) and sometimes does not think. When separated, it is only and precisely what it is (*hoper esti*), and this alone is immortal and eternal (*athanaton kai aidion*). But we do not remember, because this [intellect] is unaffected (*apathes*), whereas the affected intellect (*pathētos nous*) is destructible (*phthartos*), and without it, nothing thinks (*outhen noei*). (*De Anima*, Book III, 5, 430a10-19, a22-25, my translation)

Aristotle compares the affected (passive) intellect with the matter of a thing, and the unaffected (active) intellect with the productive cause of that thing. While the former is in potentiality (*dunamei*), the latter is in actuality (*energeia*). The analogy aims to show that the unaffected intellect is the principle or cause producing thoughts, in the same way that an artisan is the principle or cause producing artefacts. Yet, it is *only* an analogy. To say that the affected intellect is like matter does not mean that it contains material elements; indeed, the intellect is separate from the body, as it does not amount to the activation of a material organ (III, 4, 429b4-5). What we learn from the analogy is that the affected intellect is *somehow* in potentiality, as opposed to the unaffected intellect in actuality; and Aristotle uses light as a metaphor, since light enables all potential colours to be actualized through an act of seeing (III, 2, 426a13-14).

The difficulties of interpretation become manifest when Chapter five is connected with several other claims made in Book III of *De Anima*. For instance:

- a. “The intellect (*nous*) is that by which the soul discursively thinks (*dianoēitai*) and judges *hupolambanei*” (4, 429a23).
- b. “Thinking (*noein*) is different from perceiving (*aisthanesthai*), and is held to be in part imagination (*phantasia*), in part judgment (*hupolēpsis*)” (3, 427b27-28).
- c. “There are also differences in judgment itself: theoretical knowledge (*epistēmē*), opinion (*doxa*), practical knowledge (*phronēsis*), and their contraries” (3, 427b24-27).
- d. “To the thinking soul (*tēi dianoētikēi psuchēi*) images (*phantasmata*) serve as if they were contents of perception (*aisthēmata*)... That is why the soul never thinks (*oudepote noei*) without an image” (7, 431a14-15, 16-17).

These statements confirm that the intellect is in relation to the faculties of imagination and perception, and this explains why the intellect is correlated with the ensouled body. In this sense, how can we make sense of the view that the so-called active intellect is separate, unmixed, and unaffected? What does Aristotle mean when he says that, while the soul "is not separate from the body" (*ouk estin chōristê tou sōmatos*) (II, 1, 413a4), the intellect is separate from it, in such a way that it seems "to be another kind of soul" (*psuchês genos heteron einai*) (2, 413b24-27)?

2. Key objectives and methodology

The main objective of this research project will be to show that Aristotle does not support the view that the active intellect is an intellect on its own. The ultimate position will be to conclude that there is nothing odd or special about the active intellect, in the sense that this notion perfectly fits the biological considerations developed by Aristotle in *De Anima*. In other words, we should understand the passive and active intellects as two aspects of one intellect, in the same way that, by analogy, matter and form are two aspects of one physical object (understood as a compound of matter and form). The distinction between matter and form is found in the *Physics* (I, II) and the *Metaphysics* (VII, VIII, IX), and is once again reasserted at the beginning of Book II of *De Anima* (1, 412a6-11). If the distinction between the passive and active aspects of the intellect parallels the distinction between the material and formal aspects of an actual thing, we should then understand the intellect as a compound, accounting for an activity of thinking in the ensouled body.

We shall have to clarify the difference between the soul and the intellect. Both are said to be in actuality. The soul is a substance (*ousia*) in the sense of a form (*eidos*) in actuality (*entelecheia*) with respect to a material body in potentiality (II, 1, 412a19-22). More precisely, the soul is "the first actuality (*hê protê entelecheia*) of a physical body having life potentially in it" (412a27-28). It is certain that the so-called active intellect cannot be like the soul, since it is said to be separate from the body. It should, therefore, be regarded as another kind of substance. I would like to suggest that the active aspect of the intellect is a non-composite substance, which is in a second actuality (*energeia*) as opposed to the first actuality (*entelecheia*) of the soul. In contrast, the passive aspect of the intellect corresponds to a faculty of thought (*noetikon*), which has the potentiality to become all thoughts (III, 7, 431b2-12). As a faculty, the passive aspect of the intellect is in the soul, like the faculties of perception and imagination.

Accordingly, the intellect combines a faculty (passive aspect) with a non-composite substance (active aspect). Can we now explain why the so-called active intellect is said to be "immortal and eternal" (*athanaton kai aidion*) (cf. Chapter 5)? Aristotle's *Metaphysics* will help us answer this question. Along with Books VII and VIII, we shall concentrate our study on a passage of Book IX regarding the incomposites:

With respect to incomposites (*asuntheta*), what is being or not being, and truth or falsity? A thing of this sort is not composite, so as to exist when it is compounded, and not to exist if it is not compounded, like the white wood or the incommensurable diagonal; nor will truth and falsity be still present in the same way as in the previous cases. In fact, as truth is not the same in these cases, so being is also not the same; but truth or falsity is as follows: touch (*thigein*) and assertion (*phanai*) are truth (for affirmation (*kataphasis*) and assertion (*phasis*) are not the same), and ignorance (*agnoein*) is the absence of touch (for it is not possible to be in error regarding the what-it-is (*to ti estin*), except by accident). Likewise regarding non-composite substances (*tas mê sunthetas ousias*), for it is impossible to be in error about them. And they are all in actuality (*energeiai*), not potentially; for otherwise they would come to be and cease to be; but being itself (*to on auto*) does not come to be nor cease to be.

(*ou gignetai oude phtheiretai*); for if it did, it would have come out of some thing. Hence, about the things which are precisely what something is (*hoper einai ti*) and in actuality (*energeiai*), it is not possible to be in error, but only to think them or not (*ê noein ê mê*); but the inquiry about their what-it-is (*to ti esti*) consists in asking whether they are such or not. (*Metaphysics*, Book IX, 10, 1051b17-33, my translation)

We may find a similar passage in *De Anima*, when Aristotle says that thinking (*noien*) is the same as perceiving (*aisthanesthai*) and asserting (*phanai*) (III, 7, 431a8); that is, they are always true (6, 430b26-31). Indeed, non-composite perceptions (e.g. touch or sight) cannot be wrong, unless they are combined with false beliefs. Likewise, non-composite assertions (such as names or verbs) cannot be wrong, providing they are not combined with each other so as to constitute affirmations or denials, i.e. either true or false declarative sentences (cf. *De Interpretatione*, 1, 5). Nor can non-composite thoughts be wrong, as long as they are not combined with each other or divided into one another (cf. *De Interpretatione*, 1).

The essential claim in the above passage of the *Metaphysics* is that non-composite substances are in actuality (*energeia*), in the sense that they do not come to be nor cease to be. This means that they are immortal and eternal; yet, such terms do not designate anything divine, let alone a Platonic conception of intelligibility. The active aspect of the intellect cannot come to be and cease to be, in so far as it is separate from matter, unmixed with matter, and unaffected by matter. It is an incomposite in second actuality (*energeia*), independent of the soul, whereas the passive aspect in first actuality (*entelecheia*) is in the soul. The passive aspect is a faculty of thought belonging to the soul; as for the active aspect, it is an actual thinking which never stops. While a faculty is in first actuality as a capacity, an actual thinking is in second actuality as the exercise of this capacity; and Aristotle understands first actuality, with respect to second actuality, as being "somehow in potentiality" (*dunamei pōs*) (III, 4, 429b8). We shall then suggest that the active aspect of the intellect is the actualization of the passive aspect, i.e. the exercise of the faculty of thought. That is why the so-called active intellect amounts to thoughts which are incomposite, separate, unmixed, unaffected, eternal, and immortal; but these thoughts are about things which are none of that. For instance, we may think of mathematical objects as separate, and yet such objects are not separate (7, 431b12-19). Indeed, these objects are not Platonic Forms.

This research project will share a common methodology with two of my previous publications: 'Aristotle on Time, Plurality, and Continuity' in *Logical Analysis and History of Philosophy* (2009) and 'Aristotle on Meaning' in *Archiv für Geschichte der Philosophie* (forthcoming). The aim is to understand Aristotelian concepts on their own. It is often tempting to accuse Aristotle of confusion, in so far as his arguments rest on postulates that contemporary philosophy does not accept as standard; but such a move may lead to a distortion of Aristotle's own views. For instance, his mathematical concept of time (which is thought in the intellect) is based on a purely geometric (i.e. non-algebraic) model of lines and points. This model is nowadays viewed as irrelevant, since mathematics has "learnt" from the seventeenth century onwards that lines and points should be regarded as algebraic entities. Likewise, Aristotle's conception of meaning, attached to names and sentences, does not fit the distinction between syntax and semantics, which has become standard in the twentieth century. I have also submitted a paper ('Aristotle on True Contradictions'), explaining why Aristotle's principle of non-contradiction, which is both ontological and epistemic, cannot be reduced to any of the now-standard logical "laws of non-contradiction". Accordingly, Aristotle's philosophical positions should be analyzed in relation to the text itself, without being influenced by external views, as these views often constitute an easy escape from the intrinsic difficulties of the text. In this sense, we shall aim to show that the intellect can receive an Aristotelian interpretation, which does not have to be distorted or influenced by Neo-Platonism or Aristotelian Scholasticism.

3. Research schedule (list of expected publications)

During the two-year fellowship, I intend to submit four papers to international journals specialized in ancient philosophy or history of philosophy. Here are the sketches of these four potential papers.

3.1. *The Myth of a Divine Intellect in Aristotle's De Anima (III, 5)*

The difficulty in understanding Aristotle's notion of the intellect has been caused by external interpretations. I call them 'external', since they are related not so much to Aristotle's text as to influences from other philosophers. For instance, a well-known interpretation identifies the active intellect with the divine intellect, and connects it with the unmoved mover of *Metaphysics* XII (Chapter 9). This interpretation was first suggested by Alexander of Aphrodisias (cf. Sharples, 2004), and has been defended by some (e.g. Guthrie 1981, Caston 1999) and criticized by others (e.g. Wedin 1988, Gerson 2004). The Neo-Platonist influence of this interpretation (which Aristotelian Scholasticism was happy to endorse) prevents one from understanding Aristotle's analogy, in Chapter 5, with the matter and the cause of an actual thing; the aim of this analogy being to stress the two balancing aspects of the intellect, so that one complements the other.

3.2. *Aristotle on the Intelligibility of the Intellect*

Aristotle's claim that the intellect is separate of the body has led some commentators to look for Platonic arguments in the defence of Aristotelian views. For instance, Kahn (1992) suggests that both Plato and Aristotle use metaphoric arguments to grasp how the intellect works. While Plato resorts to the metaphor of recollection to explain the connection between a physical body and an intelligible soul, Aristotle applies the metaphor of incorporeality to show how the active intellect is separate from the ensouled body. This elaborate interpretation is ambiguous, as it tends to assume that Plato and Aristotle develop similar queries in relation to an equivalent notion of soul. However, that it is not the case. On the one hand, Plato thinks of the soul as being ontologically distinct from the body, leading him to divide the soul into parts and to distinguish sensible from intelligible parts (*Republic*, 436-444; *Timaeus*, 69c). On the other hand, *De Anima* (411a26-b19) rejects the view that the soul is divided into different parts, as any division of the soul would endanger its unity. Mainly, what is intelligible for Aristotle is never ontologically separate from the thing being defined. That is, the what-being-is (*to ti ên einai*) or the what-it-is (*to ti esti*) of an actual thing is ontologically the same as the thing itself (*Metaphysics*, Book VII). If not, it would be an intelligible Form ontologically distinct from an actual thing.

3.3. *Aristotle on the Active Intellect as Formal Substance*

Book VII of the *Metaphysics* tells us that primary substances are forms, and not compounds of form and matter. Some commentators have assumed that these formal substances are universals (e.g. Cohen 1978, Furth 1988, Loux 1991), whereas others have understood them as particulars, being numerically distinct (e.g. Leshner 1971, Frede 1988, Scaltsas 1994). With respect to the intellect, only the interpretation of a substantial form as a particular will make sense. Indeed, the active aspect of the intellect could not be a universal, as it relates to a passive aspect belonging to an individual soul.

3.4. *Aristotle on Entelecheia and Energeia: Soul vs. Intellect*

The (first) actuality of the soul is *entelecheia*, and rests on the potentiality of a material body, explaining why soul and body are inseparable. In contrast, the (second) actuality of the so-called active intellect is *energeia*, which amounts to the actualization of a faculty in its (first) actuality. The faculty of thought in the soul is the so-called passive intellect. *Energeia*, unlike *entelecheia*, does not require being combined with potential matter; that is why the so-called active intellect is said to be separate from the soul and the ensouled body.

4. Bibliography

- Ackrill, J.L. 1972-3, 'Aristotle's Definitions of *Psyché*', *Proc. of the Aristotelian Society* 73, 119-33.
- Barnes, J. 1971-2, 'Aristotle's Concept of Mind', *Proceedings of the Aristotelian Society* 75, 101-14.
- Bolton, R. 1978, 'Aristotle's Definitions of the Soul: *De Anima* II 1-3', *Phronesis* 23, 258-78.
- Brentano, F. 1977, *The Psychology of Aristotle*. R. George (trans.), Berkeley: U. of California Press.
- Brentano, F. 1992, '*Nous Poiêtikos*: Survey of Earlier Interpretations', in Nussbaum and Rorty, 313-41.
- Burnyeat, M.F. 1992, 'Is an Aristotelian Philosophy of Mind Still Credible? A Draft', in Nussbaum and Rorty, 15-26.
- Caston, V. 1999, 'Aristotle's Two Intellects: A Modest Proposal', *Phronesis* 44, 199-227.
- Charlton, W. 1980, 'Aristotle's Definition of Soul', *Phronesis* 25, 170-86.
- Cohen, S.M., 1978, 'Essentialism in Aristotle', *Review of Metaphysics* 31, 387-405.
- Cohen, S.M. 1992, 'Hylomorphism and Functionalism', in Nussbaum and Rorty, 57-73.
- Corte, M. de 1934, *La doctrine de l'intelligence chez Aristote*. Essai d'exégèse. Paris: Vrin.
- Frede, D. 1992, 'The Cognitive Role of *Phantasia* in Aristotle', in Nussbaum and Rorty, 279-95.
- Frede, M. 1992, 'On Aristotle's Conception of Soul', in Nussbaum and Rorty, 93-107.
- Frede, M. and G. Patzig 1988, *Aristoteles Metaphysik Z*. Munich: C.H. Beck.
- Furth, M. 1988, *Substance, Form and Psyche: an Aristotelian Metaphysics*. Cambridge: CUP.
- Gerson, L. 2004, 'The Unity of Intellect in Aristotle's *De Anima*', *Phronesis* 49, 348-73.
- Guthrie, W.K.C. 1981, *A History of Greek Philosophy, Vol. 6: Aristotle. An Encounter*. Cambridge: CUP.
- Hamelin, O. 1953, *La Théorie de l'intellect d'après Aristote et ses commentateurs*. Paris: Vrin.
- Hamlyn, D.W. 1993, *Aristotle's De Anima: Books II and III*. Oxford: Clarendon Press.
- Hardie, W.F.R. 1976, 'Concepts of Consciousness in Aristotle', *Mind* 85, 388-411.
- Irwin, T.H. 1991, 'Aristotle's Philosophy of Mind', in S. Everson (ed.), *Companions to Ancient Thought, Vol. 2: Psychology*. Cambridge: CUP.
- Kahn, C.H. 1966, 'Sensation and Consciousness in Aristotle's Psychology', *Archiv für Geschichte der Philosophie* 48, 43-81.
- Kahn, C.H. 1992, 'Aristotle on Thinking', in Nussbaum and Rorty, 359-79.
- Kosman, L.A. 1975, 'Perceiving that We Perceive: *On the Soul* III.2', *Philosophical Review* 84, 499-519.
- Kosman, L.A. 1992, 'What does the Maker Mind Make?', in Nussbaum and Rorty, 343-58.
- Leshner, J.H. 1971, 'Aristotle on Form, Substance, and Universals: a Dilemma', *Phronesis* 16, 169-78.
- Loux, M.J. 1991, *Primary Ousia: An Essay on Aristotle's Metaphysics Z and H*. Ithaca: Cornell UP.
- Lowe, M. 1983, 'Aristotle on Kinds of Thinking', *Phronesis* 28, 17-30.
- Mansion, A. 1953, 'L'immortalité de l'âme et de l'intellect selon Aristote', *Revue philosophique de Louvain* 51, 444-472.
- Matthews, G.B. 1992, '*De Anima* 2:2-4 and the Meaning of Life', in Nussbaum and Rorty, 185-93.
- Matthews, G.B. 2003, 'Aristotle: Psychology', in C. Shields (ed.), *The Blackwell Guide to Ancient Philosophy*. Oxford: Blackwell Publishing, 211-227.
- Modrak, D. 1987, 'Aristotle on Thinking', *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 2, 209-41.
- Nussbaum, M.C. & A.O. Rorty (eds.) 1992, *Essays on Aristotle's De Anima*. Oxford: Clarendon Press.
- Politis, V. 2001, 'Aristotle's Account of the Intellect as Pure Capacity', *Ancient Philosophy* 21, 375-402.
- Rist, J. 1966, 'Notes on *De Anima*, 3.5', *Classical Philology* 61, 8-20.
- Scaltsas, T. 1994, *Substances and Universals in Aristotle's Metaphysics*. Ithaca: Cornell University Press.
- Scaltsas, T. 1996, 'Biological Matter and Perceptual Powers in Aristotle's *De Anima*', *Topoi* 15, 25-37.
- Schofield, M. 1978, 'Aristotle on the Imagination', reprinted in Nussbaum and Rorty, 249-77.
- Sharples, R.M. (trans.) 2004, *Alexander of Aphrodisias: Supplement to On the Soul*. Ithaca: Cornell UP.
- Shields, C. 1988, 'Body and Soul in Aristotle', *Oxford Studies in Ancient Philosophy* 6, 103-38.
- Sorabji, R. 1974, 'Body and Soul in Aristotle', *Philosophy* 49, 63-89.
- Wedin, M. 1988, *Mind and Imagination in Aristotle*. New Haven: Yale University Press.
- Wedin, M. 1989, 'Aristotle on the Mechanics of Thought', *Ancient Philosophy* 9, 67-86.
- Wedin, M. 1993, 'Tracking Aristotle's *NOUS*', in M. Durrant (ed.), *Aristotle's De Anima*. London: Routledge, 128-161.
- Wilkes, K.V. 1992, '*Psyche* versus the Mind', in Nussbaum and Rorty, 109-27.

Jean-Louis HUDRY
October 2010

Department of Philosophy, University of Tartu
Lossi 3, Tartu 50090, Estonia
+372 5818 7517, hudry@ut.ee

EDUCATION

- 2006 PhD in Philosophy, University of Edinburgh (Scotland, UK)
(Dissertation Title: *Mathematical Continua and the Intuitive Idea of Continuity*)
2000 M.A. in History and Philosophy of Science, Indiana University at Bloomington (IN, USA)
1996 *Licence and Maîtrise* in Philosophy, Université Paris-Sorbonne (Paris IV) (France)

AREAS OF SPECIALIZATION: Ancient Philosophy

AREAS OF COMPETENCE: Philosophy of Logic, Philosophy of Mathematics, History of Philosophy

PUBLICATIONS

1. "Aristotle on Meaning", *Archiv für Geschichte der Philosophie*, forthcoming.
2. "Aristotle's *Organon*", "The Stoics", "Megarians", "Pascal", in *Key Terms in Logic*, Jon Williamson and Federico Russo (eds.), New York: Continuum Books, 2010.
3. "Aristotle on Time, Plurality, and Continuity", *Logical Analysis and History of Philosophy*, Vol. 12, 190-205, 2009.
4. "Kripke's Mathematical Theory of Truth", in *Dimensions of Logical Concepts*, Jean-Yves Béziau and Alexandre Costa-Leite (eds.), Coleção CLE, Vol. 54, UNICAMP, Campinas, Brazil, 35-47, 2009.
5. Review of Pavel Gregoric's *Aristotle on Common Sense* (Oxford: Oxford University Press, 2007), *British Journal for the History of Philosophy*, Vol. 16, 655-58, 2008.
6. Review of Richard Sorabji's *Self: Ancient and Modern Insights about Individuality, Life, and Death* (Oxford: Clarendon Press, 2006), *The Philosophical Quarterly*, Vol. 57, 686-88, 2007.
7. "Logic", in G. Sica (ed.), *The Language of Science*. Milan: Polimetria, 2007.
8. "True Axioms and Axiomatic Truth", in *The Logica Yearbook*, Academy of Sciences of the Czech Republic, Prague: Filosofia, 177-87, 2005.
9. "Peirce's Potential Continuity and Pure Geometry", *Transactions of the Charles S. Peirce Society*, Vol. XL, 2, 229-43, 2004. Referenced at the entry 'Peirce' in the *Stanford Encyclopedia of Philosophy*: <http://plato.stanford.edu/entries/peirce/>
10. "Smooth Infinitesimals and Arithmetic Continuity", *Proceedings of the Canadian Society for History and Philosophy of Mathematics*, Antonella Cupillari (ed.), Penn State Erie, 167-74, 2004.

CONFERENCE PAPERS

1. "Aristotle vs. Boethius: Two Distinct Squares of Opposition", *Congress on the Square of Opposition*, University of Corte, Corsica, 17-20 June 2010.
2. "Peirce on True Continuity (called Aristotelicity)", Invited Speaker, *Conference on Peirce The Mathematician*, International Summer School for Semiotic and Structural Studies, Imatra, Finland, 11-14 June 2010.
3. "Why is Time in Aristotle Both Continuous and Discontinuous?", *SOPHA 2009 (Société de Philosophie Analytique)*, University of Geneva, Switzerland, 2-5 September 2009.
4. "Aristotle's Principle of Non-Contradiction: Where are the Proofs?", Invited Speaker, *Philosophy Colloquium*, Trinity College Dublin, Ireland, 25 April 2008.
5. "Is There a Principle of Identity in Aristotle?", *Congress on Identity and Structure*, Vrije Universiteit Brussels, Belgium, 7-8 December 2007.
6. "Aristotle on the Concept of Time", Invited speaker, *Annual Conference of the Northern Association for Ancient Philosophy (NAAP)*, Leeds University, UK, 27-28 March 2007.
7. "Is Metamathematics Conventional?", *17th Novembertagung: Conference on the History and Philosophy of Mathematics*, University of Edinburgh, UK, 3-5 November 2006.
8. "A Defence of Arbitrariness in Foundational Mathematics", Invited Speaker, *Conference on the Novel Approaches in the Philosophies of the Mathematical and Natural Sciences*, University of Bristol, UK, 3-4 June 2005.
9. "Is Mathematics the Proper Language for Natural Science?", Invited Speaker, *Conference on the Philosophy of Natural Science*, London School of Economics (LSE), UK, 27-28 May 2005.
10. "Boundaries, Parts, and Wholes in Peirce's Ontology", *Conference on Identity: Ontological Perspectives*, Vrije Universiteit Amsterdam, Netherlands, 25-26 May 2005.
11. "Kripke's Mathematical Theory of Truth", *First World Congress on Universal Logic*, Montreux, Switzerland, 31 March-3 April 2005.
12. "Hilbert's Euclidean System and the Ontology of Geometric Objects", *Conference of The European Association for the Study of Science and Technology (EASST)*, Paris, France, 26-28 August 2004.
13. "From Geometric Divisibility to Algebraic Sequence: the Two Mathematical Structures of Zeno's Dichotomy Paradox", *Conference of the British Society for the History of Mathematics (BSHM)*, Clare College, Cambridge, UK, 9-11 July 2004.
14. "Is Time in Physics Discrete, Dense, or Continuous?", *First International Conference on the Ontology of Spacetime*, Concordia University, Montréal, Canada, 11-14 May 2004.
15. "What is Phenomenal Continuity?", *Joint Session of the Aristotelian Society and the Mind Association*, Queen's University, Belfast, UK, 18-21 July 2003.
16. "Why is Mathematical Continuity Intuitively Discontinuous?", *Annual Conference of the British Society for the Philosophy of Science*, University of Glasgow, UK, 4-5 July 2002.

EMPLOYMENT

- 2008-11 Research Fellow in Philosophy, *Estonian Science Foundation (ETF)*
Department of Philosophy, University of Tartu (Estonia)
Research on Aristotle's concepts of Time, Logic, and Language
Teaching: 1. Introduction to Aristotelian Physics and Biology
2. Aristotle on Logic (Reading of the *Prior Analytics*)
3. Aristotle on Epistemology (Reading of the *Posterior Analytics*)
4. Aristotle on Metaphysics (Reading of the *Metaphysics*)
5. Aristotle on Psychology (Reading of *De Anima*)
- 2007-08 Fixed-Term Lecturer, Trinity College Dublin (Ireland), Department of Philosophy
Teaching: 1. Introduction to Ancient Philosophy (first-year course)
2. Plato's *Meno* (second-year course)
3. The Soul in Ancient Philosophy (third-year course)
4. Plato & Aristotle on Space, Place, and Time (fourth-year course)
5. Philosophy of Science (second-year course)
6. Philosophy of Mind (first-year course)
- 2005-07 Teaching Fellow, University of Leeds (UK), Department of Philosophy
Teaching of a second-year course on Plato & Aristotle
- 2002-07 Tutor, University of Edinburgh (UK), Department of Philosophy
Tutoring in Ancient Philosophy, Philosophy of Science, Early Modern Philosophy

AWARD AND GRANTS

1. *Grant from the Faculty of Arts*, University of Edinburgh: 2003-05.
2. *Student Scholarship*, Academy of Sciences of the Czech Republic: 2004.
3. *Bruce of Grangehill Award* (£3,000), University of Edinburgh: 2002.
4. *Travel Grants for Conferences*, University of Edinburgh: 2001-06.

OTHER SKILLS

1. English (fluent), French (native), German (reading/writing), Italian (reading), Ancient Greek
2. Journal referee: *Transactions of the Charles S. Peirce Society*, *Studia Philosophica Estonica*
3. Co-organizer (with Dr Jeffrey Ketland) of the conference *Truth and Proof: Kurt Gödel and the Foundations of Mathematics* at the University of Edinburgh (UK) on 25-26 March 2006 to mark the centenary of Kurt Gödel's birth (1906).

The invited speakers were John Dawson (Pennsylvania State University), Hannes Leitgeb (University of Bristol), Panu Raatikainen (University of Helsinki), Stewart Shapiro (Ohio State University), Philip Welch (University of Bristol), and Richard Zach (University of Calgary). The conference was supported by Mind Association, London Mathematical Society, British Society for the Philosophy of Science, British Logic Colloquium, Analysis Trust, and Scots Philosophical Club.

Conference website: <http://homepages.ed.ac.uk/s0090199/conference.htm>

REFERENCE

Professor Theodore Scaltsas (former supervisor), Chair of Ancient Philosophy
University of Edinburgh (UK), Department of Philosophy (email: scaltsas@ed.ac.uk)