

Scientific and Didactic Relation

Name: Martina Calderisi

University: University of Turin

Name of Tutor: Andrea Iacona

Cycle: XXXVI

Suggested name of the Supervisor (IF different from the tutor) (for 1st year students):

Vincenzo Crupi

(A) Didactics

1) List of institutional or curricular courses:

- a) November 2020 – April 2021: Common Core Teaching
(Academic Skills; Philosophical Reasoning and Methods; “Towards Horizon Europe”
– UPO Research Office and APRE)
- b) February – March 2021: Logic, prof. Andrea Iacona and prof. Pasquale Frascolla
- c) March – May 2021: WIP Seminar, prof. Tommaso Piazza
- d) March – May 2021: Classics in Analytic Philosophy
(Frege, prof. Carlo Penco; Russell, prof. Guido Bonino; Wittgenstein, prof. Diego Marconi)
- e) 5 – 6 July 2021: June Seminar

2) List of working papers written in those occasions:

- a) Logic Exam, passed with 9/10
- b) “Can we rationally believe that our own beliefs are irrational? How to defend the irrationalist explanation of polarization” (June Seminar)

PhD Program in Philosophy
North Western Italian Philosophy Consortium

c) Provisional title: “Should the game of chess be checkmated? Some considerations on two models of Wittgenstein’s logical atomism in the *Tractatus*” (Classics in Analytic Philosophy, prof. Diego Marconi)

3) List of other courses you have followed:

- a) Logica (corso avanzato), prof. Andrea Iacona
- b) Classici della Filosofia II (canale B), prof. Matteo Plebani
- c) Philosophy of Language, prof. Matteo Plebani
- d) History of Philosophy I, prof. Guido Bonino
- e) History of Philosophy II, prof. Paolo Tripodi
- f) LaTeX course, prof. Jan Sprenger

(B) *Research and diffusion*

1) List of seminars and conferences you have participated to:

a) LLC Webinars, for instance:

- “Identity and the cost of information”, prof. Daniele Pennesi (29 October 2020)
- “Williamson’s argument against KK does not work in a scientific context”, prof. Vincenzo Fano (11 February 2021)
- “How do adults and children reason from an incompatibility? False dilemma fallacies and content effects”, prof. Walter Schaeken (11 March 2021)
- “Reasoning with alternatives as a confirmation-theoretic process”, prof. Salvador Mascarenhas (27 May 2021)

b) Science & More Talks, for instance:

- “The subjective rational choice of scientific theories: Sen meets Bayes”, Cristina Sagrafena (7 October 2020)
- “On (not) being ad hoc: Use-novelty as an epistemic virtue in mathematics”, Michele Lubrano (11 November 2020)
- “A notion of relevance for rational decision modelling”, Malvina Ongaro (25 November 2020)
- “Relative validity”, prof. Andrea Iacona (3 March 2021)
- “A puzzle about reasons”, prof. Vincenzo Crupi (14 April 2021)
- “Truth and falsity in Buridan’s bridge”, prof. Paul Egré (19 May 2021)

c) Others:

- “Setacci di verità: può l’intelligenza artificiale aiutarci a combattere le fake news?”, prof. Vincenzo Crupi and prof. Fabiana Zollo (11 October 2020)
- “Una critica della scienza cognitiva bayesiana pura”, prof. Vincenzo Crupi (27 October 2020)
- “Foundations of two-component semantics”, prof. Francesco Berto (Mumble Talk – 27 October 2020)
- “Dot dot dot... Hidden rules and laws of nature”, prof. Achille Varzi (11 November 2020)
- “The morning stab and the evening death”, prof. Achille Varzi (27 November 2020)
- “Misinformation and intentional deception: A novel account of fake news”, Michel Croce and prof. Tommaso Piazza (4 December 2020)
- “Consuming fake news: Can we do any better?”, Michel Croce and prof. Tommaso Piazza (9 December 2020)
- “Paradossi: verità, vaghezza e oltre”, prof. Lorenzo Rossi (24 February 2021)
- “La (mancata) comprensione dei risultati dei test diagnostici e dell’efficacia dei vaccini”, prof. Katya Tentori (18 March 2021)
- “Why nudge? Two concepts of libertarian paternalism”, prof. Natalie Gold (9 April 2021)
- Logic of Conceivability Conference (7 – 9 June 2021)
- 3rd FINO Graduate Conference (Pavia, 22 – 23 June 2021)
- Munich Center for Mathematical Philosophy (MCMP) Summer School for Female Students (19 – 23 July 2021)

2) List of Talks (in some of the above-mentioned conferences):

a) “Can we rationally believe that our own beliefs are irrational? How to defend the irrationalist explanation of polarization”

- Science & More Talks, Turin, 9 June 2021
- June Seminar, 6 July 2021
- Munich Center for Mathematical Philosophy (MCMP) Summer School for Female Students, 19 – 23 July 2021 (poster presentation)

3) List of published or submitted papers

(C) *Project of the dissertation*

1) Update of the planning of your research program:

Presently, there is ongoing controversy about how to interpret and assess the responses given by most participants involved in a number of reasoning and decision-making tasks. It is well known as the “great rationality debate” (Tetlock & Mellers, 2002) or the “rationality wars” (Samuels, Stich & Bishop, 2002) in cognitive science, between those who maintain that deviations from principles of *standard rationality* (namely, principles of logic, probability theory and expected utility theory) are undesirable but pervasive and systematic under certain conditions, and those who argue on different grounds that this is not the case.

As shown by Crupi & Girotto (2014), both diagnoses of irrationality and attempts to rescue full rationality can be spelled out as logical arguments. This methodological framework has been fruitfully applied to address the apparent violation of the conjunction rule in probability theory (i.e., the conjunction fallacy) by the majority of people facing Linda’s problem (see Crupi, 2016), and the apparent violation of the principle of excluded middle in classical logic by the majority of people presented with the Married Person puzzle (see Vindrola & Crupi, 2020).

The very same conceptual tools could prove useful to shed some light on other alleged flaws in reasoning and decision-making under risk, such as so-called *base-rate neglect*, that is the tendency to underweight base rate or prior information when estimating probability of uncertain events, and the *framing effect*, that is the tendency exhibited by most people involved, for instance, in the Asian disease task to reverse their preferences depending on whether the available choice options are stated in positive or in negative terms, thereby violating the principle of description invariance in expected utility theory. In addition, it would be interesting to take into account the *hindsight bias* and the *outcome bias*, whose mutual connections are worth being investigated so as to contribute to progress in the controversy.

The development of the project could also motivate the further step of carrying out novel and independent empirical research with the relevant material, and to plan appropriate training and collaborations to this aim (possibly with professor Paul Egré and professor Salvador Mascarenhas who are based at the Institut Jean-Nicod, École Normale Supérieure – Paris, and with professor Katya Tentori and professor Stefania Pighin who are based at the Centre for Mind/Brain Sciences – Trento).