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THE MORAL TRIAL: ECONOMISTS AND THE SOCRATIC PROBLEM

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THE MORAL TRIAL: ECONOMISTS AND THE SOCRATIC PROBLEM

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ABSTRACT [100 words]. Most people believe economists are more selfish than non-economists. The reasons for such belief and for the related moral condemnation of economists remain confused. Both charges and evidence are insufficient to support substantial judgements. Further elaboration would be welcome before drawing implications from the current charge (i.e. economists are more selfish than non-economists), further investigations into the causes of this phenomenon (self-selection or training) are required for blaming economists and suggesting corrections, and further evidence needs be gathered to sustain the charges. Alternative explanations (beyond self-selection and training) are also suggested, which might lead to different implications, charges, and corrections.

JEL CLASSIFICATION: A2, A11, A13, C91, C93

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The discipline of economics is very young. If we accept the prevalent account by which it was born sometimes in the 18th Century – tentatively with the moral philosopher Adam Smith and the thinkers who inspired him – it is less than 300 years old, an age which by the standards of the development of human knowledge might confidently suggest that it is still in its infancy. (Yet very fast it has been growing.) A unique phenomenon, compared with other disciplines, is that economics is not an only child. It was born almost simultaneously with its nemesis: anti-economics.

Anti-economics, as defined by its historian William Coleman (2004, p. 7), is “one of the western world’s more prominent demonologies of the intellect” and “an anti-economist is whoever sees economics as a bane. To the anti-economist the offence of economics is that it is harmful, it is pernicious. The world would be much better without it.” Therefore the agenda “is not to criticise economics endlessly, *but to dispense with it altogether*” (Kanth 1997, quoted in Coleman 2004, p. 8n). Economic theory has been variously attacked as false, useless, or harmful; the practice of economics has been dubbed methodologically inadequate, conceited, biased, or bidden; and the subject of economics considered overstretched in scope or overemphasised in value. Despite some isolated reactions, economists largely ignored anti-economics. “It is an ocean whose wild swell has been shrugged off, and whose depths have been left unexplored,” Coleman (p. 5) forcefully comments.

Though the program of anti-economics, in all its varied forms, was perhaps set to a failure (ibid., ch.14), more pointed and constructive criticism has often succeeded in improving economics – a result anti-economists do not wish for. One recent chapter in the hopefully constructive criticism of economics dates around the early ’90s, when we started investigating whether economists are more selfish than non-economists. The prevailing belief is that we are. And that we are right from the beginning of our career because selfish people self-select themselves into Econ 101, though it is sometimes conceded that training in economics contributes to making us yet more selfish over time. We thus have one charge: economists are more selfish than non-economists; and two indicted: economists and economics.¹ We also often hear calls for correction: we must change the teaching of economics. In other words, this discussion resembles a trial.

¹ I only quickly touch upon the connection between the two below, because it mirrors the relationship between individual and collective (moral) responsibility, and the issue is problematic in a several ways.

On this matter I do not aspire to be the judge, nor an attorney on behalf of either side. As a young economics teacher, I am involved first-hand in the matter and I am probably biased. I shall then content myself with playing the devil's advocate and, in the light of the piecemeal and sometimes contradicting evidence gathered so far, I suggest the trial is inconclusive. I also propose that additional charges, additional evidence, and additional implications are worth investigating to obtain a more complete picture of the phenomenon before calling for correction.

1. A TRIAL IN ECONOMICS

Between 1979 and 1981, the psychologists Gerald Marwell, Ruth Ames and Geraldine Alfano published the results of their extensive experimental testing of the, back then fashionable, economic hypothesis of free riding. The idea (Olson 1965, Hardin 1968) is that, when faced with the choice to invest in a good or service whose benefits are available to everyone regardless of who actually contributes to it (i.e. a public good), people will not voluntarily open their wallet. The public good is thus not provided (strong free riding) or provided in suboptimal quantities (weak free riding). The economic rationale for this outcome is that self-interested agents find it more advantageous to let someone else pay the bill for a good they consume anyway. Marwell and Ames (1981, p. 1) believed such claim to rest "on the strength of theoretical argument [...] rather than rigorous empirical test."

Nobody was impressed by their experimental findings that there exists no strong free riding, but only some form of weak free riding. The criticism that our discipline is in conflict with empirical observations does not worry economists very much. In the 80's economists (believed we) knew how to respond to criticism of this kind. Since the times of the father of homo economicus, John Stuart Mill, it has been widely believed "seldom in our power to make experiments in [moral sciences]" (Mill 1844, p. 146) and to arrive at truth via observation of facts 'vain hope.' The method of economics had to be *a priori* abstract speculation with *a posteriori* verification of one's predictions. Invoking Milton Friedman's (1953, p. 31) super-influential methodological essay, we also believed that all criticism against rationally self-interested agency (i.e. *homo economicus*), which underpins the predictions of free-riding, "is based on supposedly directly perceived discrepancies between the 'assumptions' and the 'real world'."² Such criticism "is largely beside the

² For a criticism of resorting to Friedman (1953) to justify just about any methodological choice in economics, see Mäki (2003).

point unless supplemented by evidence that a hypothesis differing in one or another [respect ...] yields better predictions.” But Marwell and Ames (1981, p. 308) admit they “do not have a clear basis on which to suggest some alternative theoretical approach that might account for these results.”

The first and most apparent problem, namely that economics is at odds with empirical results, remains disregarded in the literature covered here.

1.1. THE TRIAL TURNS MORAL

It is another problem that made it to the headlines. An altogether different reaction was indeed reserved to the observation that not every free rider is equally weak. Among a large sample of students, those who behaved closest to the predictions of economic theory were graduate students of economics.

Thus, John Carter and Michael Irons (1991) set to investigate the robustness and the origins of the behavioural difference between economists and non-economists. They conclude that some students behave more selfishly than others, because they are particularly concerned with economic incentives to begin with, so they choose to study economics (i.e. the phenomenon is explained by self-selection). Robert Frank, Thomas Gilovich and Dennis Regan (1993) elaborated this point inquiring whether such difference is explained only by *a priori* self-selection of selfish people into economics or the exposure to economic ideas also plays some causal role, and found that studying economics has some influence (i.e. the phenomenon is explained by training).

These and other similar findings show that, when economists play game-theoretical experiments, we do not play like everyone else: our conduct is distinctively ‘economic,’ while the conduct of others is ‘non-economic.’ But are these findings part of our subject matter? Is this economics? Do such investigations clarify any aspect of the production, distribution, and consumption of goods and services? Or do they explore the ways in which rational individuals make decisions on the allocation of scarce resources that have alternative uses? They don’t. So, why bother?

Admittedly this can be regarded as a topic to be addressed under the rubric of Teaching of Economics or the A2 category in the JEL classification system.³ Unfortunately most contributions to the debate do not report their classification and do not provide useful

³ Some early papers on this theme (Scott and Roman 1975, Soper and Walstad 1983, Frey et al. 1993) were published in the Journal of Economic Education.

evidence. Bruno Frey and Stephen Meier (2000) do in fact mention A2, but they also refer to A13, namely the Relation of Economics to Social Values, which obviously calls to mind ethical concerns. And rightly so.

The issue at hand concerns the relationship between individual behaviour and collective consequences, a topic through which economics spun-off from moral philosophy three centuries ago. In the original formulations, selfish individual conduct resulted in social prosperity. One may find not many ethical troubles with such result. Game theoretical investigations of the kind employed in the experiments with economists, on the other hand, cover those situations in which individually sensible behaviour brings about collective failures. If economics cannot find the proper balance of incentives to overcome such failures, the theme legitimately falls back within the scope of ethics.

It is apparent that the ‘moral trial’ interpretation of these experiments is the most promising. And one does not even have to dig very deep to come across evidence supportive of such interpretation, but simply judge, so to speak, the paper by its title. Economists are known for exceptionally sober prose, betraying a determinate attempt at establishing ourselves as rigorous (capital-s) Scientists while distancing ourselves from the unscientific practices of the humanities. This attitude, or *ethos*, translates in the use of a stylistic device known as “*style indirect libre*” (McCloskey 1983, p. 9, 1994). This way, economists signal that we are merely uncovering some hidden truth in the natural world and humbly report it for the noble sake of contributing to humankind’s knowledge. Economists’ reference lists are filled with unexciting titles. Personal matters or opinions are not involved: economists do not talk about public schools or gender discrimination, but more soberly about “The Economics of Schooling: Production and Efficiency in Public Schools” (Hanushek 1986) and “Male-Female Wage Differentials in Urban Labor Market” (Oaxaca 1973).⁴ The titles of the papers involved in the debate about economists echo a quite different attitude. Marwell and Ames (1981) got it started with their paper “Economists free ride, does anyone else?” and Carter and Irons (1991) continued with “Are economists different, and if so, why?”. R. Frank, Gilovich, and Regan (1993) then discretely asked “Does studying economics inhibit cooperation?,” but after Yezer, Goldfarb and Poppen (1996) intervened with “Does studying economics discourage cooperation? Watch what we do, not what we say or how we play”, they reacted with “Do

⁴ Selected from the most downloaded articles from the LogEc internet site: <http://logec.repec.org/scripts/itemstat.pl?type=redif-article:sortby=3d> (accessed: May 2006).

economists make bad citizens?” (R. Frank et al. 1996). Reinhard Selten and Axel Ockenfels thus published a rather neutral “An experimental solidarity game” (1998), whereas Björn Frank and Günther Schulze wrote a working paper called: “How tempting is corruption? More bad news about economists” (1998), which was softened to “Does economics make citizens corrupt?” (2000) for publication. Another contribution is by Frey and Meier, first circulated as a working paper called “Political economists are neither selfish nor indoctrinated” (2000), and later published as “Are political economists selfish and indoctrinated? Evidence from a natural experiment” (2003), “Do business students make bad citizens?” (2004), and “Selfish and indoctrinated economists?” (2005). Another recent contribution is “A sceptic’s comment on studying economics” by Ariel Rubinstein (2006).

The titles (and texts) of the papers involved in the controversy, quite obviously, have a moral colour that is all but neutral. The authors are no longer Scientists soberly reporting natural truths, but men who have got something that troubles them. Moreover, while answering the question whether the claims of economic theory are empirically observable might seem like a relevant task for an economist, I remain sceptical that the same can be said about questions such as “are my colleagues and I selfish?” Economists disregarded empirical and experimental evidence for the largest part of the history of the discipline, chanting aloud repeatedly Mill’s and Friedman’s gospel. Why should we care, all of a sudden? And if we decide to react to provocations of this kind, while we are at it, why don’t we point out that the assumptions of economic theory are (almost) respected in practice in a clearly defined sample of subjects (namely: us)? If there were a general enthusiasm in favour of economics, we would all sit down together with economists teaching everyone else how to be like us! But economics and economists are not nearly as beloved as we might hope.

The very choice of a null hypotheses like $\langle H_0: \text{economists are corrupt} \rangle$ betrays the presumption that we deserve moral assessment, and that it is fine to treat us as guinea pigs in order to investigate how evil we are, really. That the problem rests with economists – and not more generally with professions or trainings – is indirectly evidenced by the absence of a similar treatment for other categories (except, perhaps unsurprisingly, business students). Though nobody seems to enjoy going to her dentist in anticipation of the pain dental treatments may cause, I couldn’t find any suggestion that cruel people self-select themselves into Dentistry, or that Catholics make poor students of Biology because

they are warned not to buy into the Darwinian evolutionist account, nor that students of Law are ignorant of basic Maths since attorneys sometimes bill their clients for many more hours they may possibly be alive. As for our subject, someone proclaims that immorality finds its “intellectual and theoretical justification in the name of economics” (Lux 1990, p. 129) and demand that this despicable discipline “simply be swept away” (Henderson 1981, quoted in Coleman 2004, p. 8n). These are sensitive issues, and thus Rubinstein (2006, p. C1n) thanks the many economists who reacted to his piece, confirming that his work “hit a nerve.” It is sometimes suggested that we are in the presence of a moral opinion when the reactions of the people involved pass a threshold on a so-called ‘emotional staircase.’ If we disagree about whether red wine goes with fish, the extent of our passion in defending our opinion against the opposing view is most likely milder than the passion involved in a disagreement on paedophilia. The latter is then a moral issue vs. the former (Blackburn 1998, p. 9ff.).

There is something else at stake beyond intellectual curiosity.

1.2. A DISPLAY OF CHARGES

What had started as a (disregarded) epistemological investigation later turned into a trial on the economics profession, and eventually resulted in a moral assessment of economists.⁵ A whole debate emerged around the selfishness of economics students in which it is suggested that – under numerous conditions, but not all – (1.) economics students display behaviour that is closer to the predictions of economic theory than other students; therefore (2.) all economists are more selfish people than non-economists. What makes (2.) into ‘bad news’ must be a belief that selfishness constitutes a violation of some social or moral norm. Therefore the charges are that (3.) economics students are immoral and (4.) we, their teachers, are selfish and immoral like them.⁶

The implications we may draw from the charges and the room for correction depend on the specific interpretation of the experimental findings. The self-selection explanation puts the burden of proof on the connection between selfishness and the predilection for Econ courses, which still needs to be advanced in a satisfactory manner. Should this connection be exposed, the discipline that proves so attractive to selfish people would then be under

⁵ Carter and Irons had interpreted their findings in terms of the correspondence of economic theory with empirical observations in an earlier unpublished manuscript, but later dropped the issue.

⁶ On the present occasion I do not question the equivalence between selfishness and immorality, but the equivalence can be denied in several ways.

some serious suspicion; though suspicion of *what* remains less obvious until the exact nature of such connection is understood. For the sake of speculation: if students chose their major by tossing a coin, and if by chance it happened that selfish people turn out head more often than tail, then it could be true that selfish people choose economics. But do they choose economics *because* they are selfish? And is this a bad thing?

The training explanation, on the other hand, locates the responsibility directly on us. It is us who teach our students, or give them reasons, to behave as they do. To uphold the impact of training, one needs not to posit (2.) and may simply make an inference from (1.) to (3.). At any rate, looking at the texts, the accusations of immorality are difficult to find in a straightforward sentence, and hardly ever it is possible to read clear allegations of selfishness or implications thereof. The most outspoken accusation sounds like this: “exposure to the self-interest model commonly used in economics alters the extent to which people behave in self-interested ways” (R. Frank et al. 1993, p. 159). So, where is the problem? Why the trial?

The way in which this literature was received and commented upon by the academic community seems well captured by Frey and Meier’s (2000, p. 2) observation that the statement “economists are more selfish than other persons” is believed to be “a fact beyond doubt” by professional economists and probably most other scholars.

How did everybody come to this belief?

2. EXPERIMENTAL EVIDENCE

Many feel there is more to people than just greed and don’t think of themselves as lightning calculators of pleasures and pains (*à la* Veblen, 1898, p. 73). Most of them are not economists, for one (or several) of the following reasons: they are uneasy with extreme selfishness, do not expect self-interest to be of great importance in human motives, or they are not sharp-minded enough to understand the logical structure of economic decision-making. Be that as it may, those who already believe men are selfish *aesthetes* pursuing the greatest satisfaction at all times or display a certain logical aptitude might be more likely to find their way in departments of economics (instead of, say, sociology or psychology) to begin with. On the other hand, there is a possibility that attending too many Econ classes will eventually result in increased selfishness.

Marwell and Ames report a total of twelve experiments aimed at assessing whether free riding hypotheses are a good description of the way the world works. The research is

roughly the following: subjects are provided with an amount of tokens, which they decide to assign to either of two possible investments. There is an individual investment, which is a private good: each investor receives a fixed amount of money as interest for each token so allocated. Alternatively there is a collective investment, which is a public good: now the interest is higher, but every subject receives an equal share of it, regardless of who actually invested and once a minimal amount of contributions is achieved. All the experiments are variants of the situation just described. While the collectively optimal result obtains when everybody contributes everything to the group exchange; each player is better off if everyone else does, except herself. Indeed, as mentioned, *homines economici* contribute zero. The authors come to reject the strong version of free riding (since people contribute non-negligible amounts of their initial amount of money to public goods), but suggest the soft version is respected (people contribute less than optimal amounts). Their results are that non-economics students contribute an average of 49% of their starting funds, economics ones only 24%.

Another milestone is Carter and Irons (1991, p. 171), where the authors find that “a behavioural difference [between economists and non-economists] does exist.” They randomly recruited a sample of freshmen and senior students, both majoring in economics and non-economics (and not enrolled in or ever taken any graduate economics course) and analysed their conduct in a ultimatum bargaining game. Here a proposer must divide a sum with a responder. After the proposer makes one part for himself and one for the other player, the responder either agrees to the split, and it occurs as proposed; or she refuses, and the sum is not assigned to anyone. Therefore, at the beginning of the game the experimenters asked the subjects what division of a sum of money each considered (un)acceptable if it were offered to them by the proposer, whence they determined each subject’s minimum amount acceptable as responder. Similarly they asked the subjects to propose a division, whence they determined each subject’s desired amount kept. Economic theory would expect proposers to offer the smallest positive amount to their co-players (e.g. 0.001%), so to keep the largest possible amount for themselves (e.g. 99.999%). On the other hand, responders would accept even that small share because it is still more than nothing. The actual findings are as follows: non-economists consider acceptable 24.4% of the original amount, and propose to keep 54.4%; economists’ figures

are 17% and 61.5%.⁷ We see neither amounts to the exact predictions of economic theory, but economists get closer. The reason appears to be that it is the most selfish students who choose to undergo training in economics, while less selfish ones find their way elsewhere, because freshmen majoring in economics are already more selfish than non-economists. “Economists are born, not made” (ibid., p. 174).

Elaborating on this point, R. Frank et al. (1993, R. Frank 2004) assembled groups of three students from different backgrounds and have them play two simultaneous one-shot prisoner dilemmas, with real money as payoff and confidentiality about their game conduct (enforced through the addition or subtraction of a random amount to/from actual payoffs). In such situation individuals face a decision where a choice always yields a higher payoff (i.e. it’s a dominant strategy), but which – when made by all players – results in a poorer outcome for each participant than she would have achieved if everybody chose otherwise. Although cooperation is advantageous for both parties, economic theory has it clear that every rational agent will defect in a one-shot prisoner’s dilemma. Defection rates are 60.4% for economists and 38.8% for non-economists. Once again it is the economics student who gets closest to the behaviour predicted by economic theorists.

The game, however, is about self only to some extent, because the payoff is also determined by the behaviour of others. It is likely that the choice to defect or cooperate depends on one’s expectations of the behaviour of one’s partner and, to be sure, the only way to confront a defector is to defect. The more one advances in economics training, the more one expects others to be dishonest and therefore, probably, to defect.⁸ The progress of non-economics education reveals a marked reduction in defection responses, by contrast “the trend towards lower defection rates is virtually absent from economics majors” (R. Frank et al. 1993, p. 168) suggesting that “the training in economics plays some causal role in the lower observed cooperation rates of economists.”

Altogether it appears that Steven Rhoads (1985, pp. 162-163) was correct in commenting, much earlier than these experiments were conducted, that “[p]eople who think [...] narrow self-interest makes sense are more likely to become economists. Through their training economists learn that they and their discipline can be more powerful if [...] self-interest

⁷ In this experiment the initial amount is 10\$ and “any division is permissible as long as the two amounts are in multiples of 0.50\$ and sum to 10\$” (Carter and Irons 1991, p. 172), so that the minimum positive amount offered is 5% of the total.

⁸ This is tested by asking whether the owner of a small firm would report a mistakenly smaller bill for the goods he bought, whether a person finding an addressed-envelope containing cash would return it, and what would the subjects do in the same situations (Frank et al. 1993, pp. 168ff.).

matter even more than they first thought.” But it could be expected that not everybody would react easily to the accusation of being a selfish person. Indeed some economists began to argue that the alleged selfishness of economics students was not granted, and conjured experimental evidence that contradicts earlier results. To be sure, economics students’ behaviour deviates from that of the others, but in ways that are not always consistent or easily predictable.

2.1. THE ECONOMIST AS EVERYONE ELSE

However nasty and indoctrinated economists might be supposed to be, there must be some principles in their nature, which interest them in the fortune of others. By surveying university professors in a range of disciplines R. Frank, Gilovich, and Regan (1993) investigated their donations to charity, their participation in presidential elections, and their contributions to voluntary work (i.e. public goods).⁹ R. Frank (2004, pp. 164-5) then made income estimates for professors in different disciplines and at different seniority levels, and calculated an average level of generosity for the sample. Professors of Economics contribute about 91% of the expected amount for their income, while Professors of Art, Architecture, and Music give 73%, and Professors of Natural Sciences give 119%. Economists even rank slightly above average in the number of hours spent in voluntary activities. In a vast investigation about the actual payment of Professional Associations membership fees, Laband and Beil (1999) notice how economists free ride less than sociologists or political scientists.¹⁰ Frey and Meier (2000) also demonstrate that students of (political and business) economics are about as selfish as students of law, but much less so than medical and veterinary students; the most selfish are students of business administration. Interestingly, they do so not with an experiment, but by evaluating actual spontaneous contributions to two social funds: the one granting cheap loans to needy students, the other supporting foreigners willing to study at the University of Zurich, where the data were gathered.

What seems to be the strongest defence of economists comes from a lost-letter experiment (Yezer et al. 1996). Cash-filled envelopes with an incomplete address were disseminated in classrooms right before courses took place. Half of the these were Econ, half non-Econ

⁹ The data reported here are from Frank (2004, ch.9) but they refer to the same source presented earlier, i.e. Frank et al. (1993).

¹⁰ Though they then interpret these results in a way that affords the conclusion that there is no real difference between economists, sociologists, and political scientists. See the discussion in Laband and Beil (1999, pp. 98ff)

courses. Therefore 64 randomly recruited and unaware subjects took part in the experiment. Surprisingly, almost 44% of the subjects managed to forward the envelopes to unknown recipients, and this often required substantial effort: in order to send the letter, the subjects had to look up for the complete address to which money had to be forwarded (corresponding, of course, to an associate of the authors). Of the successfully returned letters, 56% came from Econ classrooms, and only 31% from non-Econ ones.

Once again, the evidence is not interpreted as an indication that economic theory – which predicts a rational agent would not return the letter – is mistaken. The main result of the public goods and lost letter-experiments is that economics students are as selfish as others, or even *less* selfish than others. When put together with the findings discussed above, there appears to be enough evidence to deem economists selfish people and – incidentally – also enough to deem them not so. There is an apparent problem with this ambiguity. What do these experiments show?

3. EXPERIMENTAL LACK OF EVIDENCE

It surely has to be proved that the kind of evidence referred to in the literature represents the best (or even an appropriate) tool for investigating questions of human morality and decision making at large. Experimental design and response measurement vary, so that some are possibly better than others. On the whole, however, the main reason for arranging experiments is to stabilize certain variables in a replicable and context-independent manner (i.e. approximating *ceteris paribus* conditions) so that one or more other variables can be studied in isolation. In this way internal validity is established, or the guarantee that the choice context is essentially equal and constant for all subjects. The kind of control one may exercise on the observations, moreover, varies greatly depending on the procedure employed. Lab results, for instance, originate in “a highly controlled, very abstract, experimental situation” (Marwell and Ames 1981, p. 296). Precisely for this reason, Yezer et al. (1996) are very critical of certain experiments, while R. Frank et al. (1996, p. 189) praise them for the “opportunity to control incentives to a degree that cannot be matched in natural experiments” and because these incentives “closely mimic [those] found in naturally occurring social dilemmas.” If the main advantage of natural experiments is that subjects face the actual, and sometimes substantial, consequences of their choices, the main disadvantage is indeed that the experimenter does not select the type, degree, and extent of any treatment and she does not decide when and where the

treatment should occur (Harrison 2004). On the other hand, field experiments (Harrison and List 2003) complicate lab experiments with some elements from the settings in which economic decisions are naturally made (e.g. naturally occurring commodities instead of tokens or subjects from the field instead of students), but they also import additional noise from the outside. So it is not always straightforward in what ways different procedures affect the quality of experimental output, both in terms of its internal and its external validity.

In defence of their results, some experimenters underline that participants in lab experiments take their involvement “*very seriously*” (R. Frank et al. 1996, p. 189), whereas another traditional critique of experimental methods concerns surveys (Boulier and Goldfarb 1998, McCloskey 1983) and it suggests that people are sometimes unaware of their beliefs or do simply have no incentive to disclose them, so that they cannot or will not respond correctly. A seeming solution would be to introduce a relevant and salient reward, and of which experimental subjects wish to obtain as much as possible – typically money – in order to empower the experimenter to ‘induce value’ into experimental choices (V. Smith 1976). Because “subject’s behaviours are direct results of the instructions and reward systems,” induced valuations play out in such a way that “experiments were revealing a lot about [the experimenter’s] own beliefs and very little about [his] subjects’ properties other than obedience” (Starbuck 1993, p.76).

Other methodological concerns of experimental research at large also play a role in this context. Every experimental enterprise is subject to the problem of theory-ladenness of data, i.e. one’s theoretical priors affect the type of elicited observations (Kuhn 1962). By emphasising the common behaviour of economics students, for instance, these researches implicitly rule out the possibility that each individual is autonomous in his decision-making and that the higher or lower proportion of cooperators in a population might be entirely accidental. In a similar way, groups of economists are contrasted with rather heterogeneous and indistinct groups of non-economists, as if there were some pretence that these two types of groups compose the whole of society and that non-economists were all the same (R. Frank et al. 1996 complain against Yezer et al. 1996 that students of Biology are trained with principles of natural selection founded on self-regarding behaviour that do not distinguish them sufficiently from Economics students to serve as control group).¹¹

¹¹ Furthermore economics programs can be very different in content, teaching methods, and career prospects (more on this below), and many other Social Sciences programs may include classes in economics.

On the other hand, there is a related problem of under-determination of theories by data, i.e. data alone cannot prove a theory (Quine 1951). To mention one example, the results from R. Frank et al. (1993), because 60% of the economists defect, are enough to push the authors to answer the question whether economists make bad citizens. Depending on how one frames the issue – e.g. by saying that 40% of the economists cooperate – the results can also be taken as evidence that human beings are not very selfish. Laszlo Zsolnai (2004, pp. 40-41) indicates this experiment as one of five “famous studies [... suggesting] that people are *moral beings* in their economic actions.”

Another general problem with experiments is that different studies may have specific shortcomings (e.g. number and composition of subjects, control groups, statistical tests, assessment of relevance...).¹² It is also noteworthy that individual experimenters do affect the output of their studies. For instance, Marwell and Ames (1981, p. 304) interpret a datum closer to their hypothesis as “probably more accurate, as it reflects the responses of subjects interviewed by more experienced interviewers.” Whether this consideration casts a shadow on the reliability of the whole enterprise remains an open question. At any rate, results from different disciplines (economics, psychology, sociology) stem from fundamentally diverse ways to conceive, conduct, and interpret experiments. Because in each experimental design the conditions that are kept constant differ (often significantly), and each set-up elicits the observation of different variables, therefore, findings across experiments are not directly comparable and because experiments can be used in a variety of ways in the pursuit of a variety of goals, the interpretation of experimental results remains likely to stimulate debate and to be open to contrasting views. It seems therefore legitimate to put these experiments side by side because they all amount to advancing a portrait of economists. These portraits, however, are not uncontroversial, which brings us to the issue of external validity.

Nobody would go through the troubles of setting up an experiment, incur the effort and costs of analysing data from multiple pre-tests, and paying numerous subjects, if all he can claim at the end of the day is that twenty-three out of thirty of his subjects defect under such and such manipulation. Experimenters believe that their subjects are representative of some population and behave in a way roughly similar to everybody else, so that their

¹² For instance, Marwell and Ames compare the conduct of graduate students of economics with that of high school students. The two groups differ in many respects and it is plausible that many causes are accountable for differences in their behaviour.

results are externally valid and can be generalised to the whole of the target population. Is this the case of the moral trial as well?

In order to answer, one must first find out who or what is an economist.

3.1. WHO ARE THE INDICTED?

This much we know: economists are professionals, as witnessed for instance by a plurality of economic professional associations worldwide. Because the profession is not regulated like that of lawyers and engineers, for which there exist educational requirements and official licensing, it is much more difficult to establish when one officially joins its ranks. As professionals, economists possess specialised knowledge, and this knowledge could serve as the basis on which to separate us from other professionals and from the lay public. Though a coherent and comprehensive definition of the subject matter of our discipline may be very hard to come by, there are two acceptable approximations. The traditional one calls economics the science which studies the production, distribution, and consumption of goods and services, in other words what we roughly identify as the ‘economy.’ A more recent account is as “the science which studies human behaviour as a relationship between scarce means which have alternative uses” (Robbins 1932, p. 15), in other words decision-making. Since it may be very difficult to tinker about a professional description that revolves around the analysis of choice under scarcity, I will restrict myself to the first definition for the time being. But also to distinguish economists from non-economists based on our knowledge of the economy or of human choices is anywhere between a thankless task and a mockery. It is thankless because other social scientists also investigate what markets and the economy are, as all the people involved in the business world do, journalists as well have very well formed and often persuasive opinions, and lay people in general have a solid grasp of what Deirdre McCloskey (1990) calls ‘ersatz economics’ and Paul Rubin (2003) calls ‘folk economics’. And they all seem to disagree with economists, all the time.

The obvious reason why this is the case is that we know better than they, and one might try and tell economists apart based on our strongly held belief, indeed certitude, that we possess better knowledge of the economy than others... until one clashes with the boasts of entrepreneurs, consultants, and stockbrokers, whose skill to ‘read’ the economy makes their sixth senses tickle right before a certain bubble is about to pop or a certain stock go

through the roof, whereas economists had no clue about that. They obviously ought to believe *they* know better. Therefore, alas, this criterion fails as well.

What about *real* knowledge? Perhaps economists stand out thanks to the kind of stuff that big name professors write in the papers that pave their ways to the Nobel Committee. This criterion would work quite well if economists agreed on many fundamental facts and truths. But we don't. That by Arjo Klamer (2007) is an accurate description of the discipline as a bunch of ongoing, parallel and separate, conversations. For instance, several Keynesian, Post-Keynesian, and Monetarists made it to the top of the profession, and from those heights they kept disagreeing with each other (e.g. Klamer 1983). In truth one can be an influential and respected economist from a top-notch university and share nothing with another influential and respected economist from a top-notch university except the name of the Department they are affiliated with. It has even been suggested, and this has become a sadly well known joke, that economics is the only science in which two people can earn the Nobel Prize for saying opposite things or even share a Nobel Prize for saying opposite things – e.g. Gunnar Myrdal and Friedrich von Hayek in 1974, and more recently Daniel Kahneman and Vernon Smith. Not even profound knowledge is the right place in which to look.

Perhaps, more simply, it is the training we have undergone. Klamer calculates that American colleges count no less than a million undergraduates who take courses in economics every year and that 30,000 of them select it as their major. Moreover, there are 17,500 Economics Ph.D.'s around. Where should one set the threshold? A single introductory course, most of the times compulsory, seems hardly enough to make someone into an economist, especially if this person ends up majoring in a completely different subject. In some sectors of the American government it is enough to have taken four or more courses in economics to be considered an economist, but one can obtain the qualification through training in statistics, applied mathematics, or finance, so that the exact type of training one has received needs not be especially consistent or homogeneous. Majoring in economics, on the other hand, may make a relevant standard. An Econ major must undergo introductory and intermediate theory courses and several electives in applied or specialised fields, and this could just do the change from layperson into economist. Equipped with the right training and the right degree, these young men (and some women) walk out of college in their full capacity as economists. But this capacity does not seem to last very long.

After the growth in the ranks during the 70's, the numbers have been going steadily down, somewhere around 30% for majors and 18% for doctorates, and the Ph.D.'s rapidly leave the country after graduation, signalling that many of them are foreigners (Siegfried 1998). Fewer than half majors continue their education beyond the Bachelor, and only about 3% pursue an advanced degree in the same field, while many move on to Law or Business School, therefore becoming lawyers or business analysts. Very few graduates call themselves "economists" when they enter a job (Siegfried et al. 1991, p. 198). Quite soon, therefore, the majority of candidates for the label 'economist' do not qualify anymore. Furthermore the Econ-major criterion may seem inadequate because it would leave out many professionals employed as economists. The 2002 Survey of Earned Doctorates conducted by the National Opinion Research Center at the University of Chicago suggests that historically only just above 55% recipients of Ph.D.'s in Economics and Econometrics come from bachelors in the same field (it peaked at 62.2% in the early 80's). But even a doctorate does not necessarily make a crucial distinction since many economists, including several prominent ones, did not use to and to this day they often do not receive any formal training in economics.

TABLE 1. **Postdoctoral Plans**

	1960/64	1970/74	1980/84	1995/99	2000
<i>College/University</i>	59.4%	65.0%	56.5%	43.1%	42.5%
<i>Industry/Business</i>	6.0%	5.8%	10.8%	16.9%	18.6%
<i>Government</i>	9.0%	11.5%	13.6%	11.5%	12.8%
<i>Nonprofit</i>	4.0%	3.9%	3.3%	3.0%	4.2%
<i>Postdoctoral study</i>	-	3.8%	4.4%	7.0%	6.6%

Source: Scott and Siegfried (2002, selected entries)

Perhaps, therefore, one could look into occupations. The U.S. Bureau of Labour (2007) estimates 13,000 practitioners of economics are active in the U.S. alone. (The figure is not impressive for a country in which every year over 30,000 students major in the field.) Also, what exactly is the job of an economist? We variously work in the public administration, in politics, in international organizations, in public and private research institutes, in different types of teaching engagements, in consulting firms, in the media, ... (Coats 1981, 1986, 1989, Frey 2000, Mandel 1999). Most of the economists, however, still consider the academia as our privileged career (TABLE 1). After the graduation, some Economics doctors look at the government and not-for-profit, and more and more of us

seek employment in the private sector, but the majority still seeks a research and teaching position in a college or university. Although it is obviously a limited and biased sample, one could argue that academic economists are appropriately representative of the profession.

3.1.1. – ALL ECONOMISTS ARE NOT CREATED EQUAL

Now that some ground has been cleared towards an acceptable definition of the economists' target population, it is possible to proceed in the assessment of the Moral Trial, and more specifically of its indicted with respect to the incriminating evidence.

The whole idea of a Moral Trial must rest on the presumption that different people choose different professions because of individual differences of some kind. There is some evidence supporting this intuition: different personalities indeed help predict different study choices and different degrees of rationality in the choice process. This very evidence, however, poses an additional challenge to the trial against economists. Christopher Boone, Woody van Olffen, and Nadine Roijackers (2004, p. 67) found that different personalities are associated with four different educational choices: Economics, Business Administration, Business Education, and International Economics and Business Studies.¹³ These four could be presumed quite similar types of students, and one could easily group them together as economists-in-training, depending on which definition of the profession one embraces. One would not be surprised to see them labelled economists and contrasted with non-economists in experiments such as those reviewed above, although they are evidently heterogeneous. There are possibly yet larger differences between these groups and groups of students in disciplines such as Chemistry, Literature, Psychology, and Fine Arts, but such evidence is still missing.

The subject samples in the experiments mentioned above reflect the difficulties of satisfactorily define who is an economist. They included, for instance: first year graduate students of Economics (Marwell and Ames 1981); “freshmen economists, who had declared economics as their major and were enrolled in the first-semester macroeconomics course” (Carter and Irons 1991, p. 171) but were never taught microeconomics (p. 176); professors chosen at random from professional directories, economics majors and

¹³ As often is the case with studies of this kind, Boone et al. (2004) do not study whether people with a given personality choose business rather than economics. It tests whether people who have chosen it have a given personality. Different responses in personality tests may be at least in part a consequence of the major one has chosen, and not entirely pre-existing.

nonmajors, and students enrolled in an upper division public finance course at Cornell (Frank et al. 1993); “upper-level economics classes (that is, courses beyond the two-semester principle of economics sequence)” (Yezer et al. 1996, p. 180); “students of economics, and economic pedagogy or agricultural economics” (B. Frank and Schultze 2000, p. 105). Another paper, by Kahneman, Knetsch, and Thaler (1986) reports findings from a Ultimatum Game that commerce students (i.e. business students in the Canadian university system) were more likely than psychology students to make one-sided offers.

The choice of subjects sample is problematic also in terms of its heterogeneity: high school students self-select themselves into Econ majors, are thus trained in economics, then they self-select themselves into graduate students and are again trained, then some of these self-select themselves into teaching economics. The type of self-selection and the type of training should be different at each stage. It is not clear whether the contribution to social funds by graduate economics students can be immediately compared with the split proposed by freshmen in a Ultimatum Game and with self-reported participation in presidential elections by professors. Furthermore, R. Frank’s (2004) and Laband and Beil’s (1999) observations that actual professors of economics are no more selfish than professors of other subjects make it hard to purport that the experiments address economists’ morality at large. Regardless of the attempts to establish this conclusion, it is not economists and economics teachers who are selfish: it is our students. The implication that these students eventually become economics professors does not seem to be probable nor compelling enough to accuse us of selfishness, unless we also posit some sort of *ceteris paribus* clause. In other words we must imply that that people never change, so that there is no significant difference between twenty years old students and fifty years old professors. I doubt such assumption can be safely made, in the face of contrary evidence.

To be sure, it is questionable whether first year undergraduate students of economics behave in a way comparable to that of fifty years old economists. But it is also questionable whether older economists would make a better choice: being wealthier, they would not react to the promise of winning a few dollar bills and the arrangement of meaningful incentives for the sample would make the experiment much more expensive; or they might even refuse to waste their time taking part in an experiment. These are very much pragmatic concerns, whose importance must not be underestimated (especially in the light of the tight constraints of research grants and because economics journals reject *ipso facto* experimental papers without an adequate induced value). But they should not be

overemphasised either. A more severe problem would be that, being experienced, grown-up economists often assume a more nuanced stance towards the experiment and behave in a more sophisticated way, so that the results would be less obvious.¹⁴

Econ students, on the other hand, seem to be reasonably good subjects because they are informed to the economic way of thinking in a clear-cut fashion and still react to the incentives to behave accordingly. They are also less likely to be distracted by the attempt to understand the underlying goal of the experiment, but to simply focus on the task that is required of them and to thus respond in a way that is more sincere or at least less concerned with the implications that could be drawn from their responses (demand effects). All these remarks seem to boil down to one: economics students make better subjects to show economists selfish because actual economists would not behave selfishly enough for being accused of selfishness.

How bad would such failure be?

Absolutely indifferent, if one wants to explore an empirical phenomenon, but very bad, if one wants to advance a moral charge against the profession.

3.2. H_0 : <THE CHARGE IS UNCLEAR>

Another difficulty in assessing this literature is that claims such as: ‘economists are *more* selfish than non-economists’ are problematic. What does being *more* selfish than others mean?

First of all, in order to draw meaningful insights from experimental evidence, we must accept the conjecture that a selfishly motivated person will free-ride in the provision of a public good, make and accept stingy offers in ultimatum games, defect in prisoner’s dilemmas, be dishonest when he finds a cash-filled letter and avoid contributing to charity; conversely, we must accept that someone who behaves like this is motivated by self-interest.¹⁵ Though all these conducts are arguably *compatible* with self-interest, it does not follow that they are *motivated* (only) by self-interest. And useful though it is in certain theoretical settings to assume self-interest as the sole motivation of human behaviour, the assumption is inadequate to address empirical questions about individual behaviour across a range of only marginally similar circumstances. Under such assumption, the only question that could be meaningfully addressed is how many subjects behave irrationally.

¹⁴ For instance, practicing economists predicted the contributions in the Marwell and Ames experiment to be in the range of 30%.

¹⁵ I overlook these implications on the present occasion.

The authors involved in the moral trial, therefore, do not subscribe to the assumption, if only because it would deny the grounds for their very experiments, and for the whole debate.

Unqualified claims, also, make the concept of self-interest hard to pinpoint.¹⁶ From the ultimatum game experiment one can derive the following behavioural implications of self-interested motivation:

HIGH REQUEST: an economist pursues large individual gains (e.g. makes smaller offers);

LOW ACCEPTANCE: an economist pursues small individual gains (e.g. accepts smaller offers).¹⁷

Taken as general claims about self-interest, within a behaviourist framework where self-interest is the only motivation, the two are contradictory. If we observe someone who accepts a small offer, we must conclude that he wants little money; conversely, if we observe the same person making a small offer, we must posit that he wants a lot of money: these are their revealed preferences. I do not see any good reason to embrace such theoretical perspective on this occasion, because that would put a serious challenge on the attempt to suggest that economists are *more* selfish than others when they accept *less* money than others.

To be sure one can think about revealed preferences in connection with opportunity costs, so that accepting a small offer basically means wanting as much money as possible, because the only alternative available – rejection – equals zero payoff. And the two observed manifestations of self-interest can be made sense of simply noting that there is no contradiction in wanting a lot, but being willing to accept very little. One could argue that *HIGH REQUEST* comes first, but *LOW ACCEPTANCE* is better than nothing. But, if we are willing to walk away with very little, in a situation of sufficient uncertainty, we should also be prepared to offer a huge share of the initial amount, possibly up to 99% of it in order to keep at least 1%. I frankly doubt that this would in fact ever happen (or, for that matter, that on the present occasion it makes sense to employ a theoretical approach which admits such behaviour). It seems, therefore, that the ultimate challenge of the experimental findings presented above is to explain why an economics student behaves as a homo

¹⁶ On this occasion I do not elaborate on the different ways in which it is possible to conceive of self-interest (e.g. egoism, selfishness, non-tuism, etc.).

¹⁷ *HIGH REQUEST* and *LOW ACCEPTANCE* portray economists' conduct in the prisoner's dilemma and the public good games as well.

economicus, under the assumption that he is not one. It is thus puzzling how most commentators agree that best explanation is that he is a homo economicus, after all (self-selection).

The extent of self-interest is not the only aspect worth mentioning: its frequency is also a matter of investigation in the literature. Self-interested behaviour in ultimatum games and public goods investments can be of differing degrees. But in a prisoner dilemma a player cannot defect more than another, she can only defect more or less often. One way to cash out the 'more selfish' charge could thus be through a claim of

FREQUENCY: an economics student behaves selfishly more often than a non-economics one.

The *FREQUENCY* charge, however, is not addressed by the experiments and seems to be altogether un-testable. It is possible to design numerous experiments in which economists behave more selfishly than non-economists, but it is also possible to design numerous experiments wherein the vice versa is true. A frequency claim would be very difficult to ground in empirical observations. It is not enough to observe that, in the majority of a handful of experiments conducted to-date, economists and economics students of various kinds behave more selfishly than non-economics ones. Comparatively, to be sure, one may say that Sarah is more selfish than Michael, if Sarah behaves selfishly in certain situations in which Michael does not. The question is not strictly speaking one about the number of occasions in which one behaves selfishly, but about types of situations. There are situations in which it is morally acceptable to behave in a self-interested manner (e.g. market exchange). What matters is thus the subjective perception of a situation by the agent. To prove economics students more selfish, one must make the case that economics and non-economics students perceive a certain situation as *identical* and that yet they behave differently. This is a very strong hypothesis, even for money-rewarded experiments.

At any rate, one should not rush to conclude that any specific individual can be confidently expected to act in a way comparable to the aggregate behaviour of experimental subjects. A subject could answer A rather than B because he misunderstood the question, made a mistake, copied from his neighbour, was contacted by a more experienced interviewer.... Only at the aggregate level, the results of experiments appear to meaningfully uncover new phenomena inaccessible to theoretical analysis alone. Sentences like 'economists *are* more selfish' or 'economists *are* less cooperative,' which abound in the literature, are

catchphrases to convey the gist of the trial: they are somewhat correct, but quite inaccurate. We need a qualification:

LIKELIHOOD: economics students are more *likely* to behave selfishly than non-economics ones.

It can be proposed that a sentence like ‘economists are more selfish than non economists’ boils down to a statement about the likelihood that someone does something. Claims of this kind are very common in the literature. For instance, several commentators (B. Frank and Schulze 2000, p. 110; R. Frank 2004, p. 160 and p. 164; Yezer et al. 1996, pp. 184-5, italics added) suggests that economics students are “*more likely*” to make one-sided offers. But such claim does not go deep enough explaining *why* they make such offers to ensure predictive accuracy, nor to advance a serious moral charge.

The *LIKELIHOOD* qualification, however, is not a statistical statement proper: it does not mean that in one hundred repetitions of the same prisoner dilemma, an economics student defects 60% of the times. It makes a claim about individuals (and not about a population) by evoking concepts like dispositions, inclinations, tendencies.... Indeed, R. Frank (2004, p. 160, italics added) seems to produce a synonym to ‘more likely’ when he suggests that economics students “*tend to behave less cooperatively.*” Because the evidence we are discussing refers to groups, it prevents us from drawing conclusions about single subjects and it also undermines the possibility to address the morality of individual economists. On the grounds of the evidence, we are not entitled to translating the charge on the population into a charge on individual economics students, e.g. by saying that economists share a tendency to behave selfishly. The little-advertised observations that 40% of the economics students cooperate in the prisoner dilemma (R. Frank et al. 1996) and that 40% propose the 50-50 split in the Ultimatum Game (Carter and Irons 1991, p. 177) do not per se deny this inclination. One may have a disposition to conduct selfishly, but some other tendency may prevail and prevent one from pursuing a selfish act. For example, one may have the inclination to cooperate in social dilemmas except when one expects defection. If this person always expects defection, she will never cooperate despite a tendency to do so. There is no specific evidence suggesting economics students do have any peculiar tendency in the first place.

To advance a claim about individual tendencies from the existing evidence we need to test several additional hypotheses: for instance that individuals who make the same decision in a game are similarly motivated, and that similar motivation in a given context (assuming

again it is perceived to be identical by economics and non-economics students) is associated with the same personality – a selfish one, in this case. We then want to undergo at least a rough inquiry into what makes a selfish personality, maybe a character trait (i.e. selfishness) or some other psychological dimension (e.g. locus of control). All these reflections may suggest a different interpretation of the charge:

PREDOMINANCE: there is a higher number of selfish individuals among economics students than among non-economics ones.

The *PREDOMINANCE* connotation solves the problem of targeting a group instead of individuals and it captures the charges typically moved against economics – as the discipline towards which selfish people converge. The *PREDOMINANCE* proposition does not immediately follow from *LIKELIHOOD*, and it requires – at the very minimum – that people can be meaningfully called selfish. It seems to be taken for granted that they can. But do economics students have the trait of selfishness? Or, even, is it possible for them to have that trait?

3.2.1. – *ALL ECONOMISTS ARE NOT CREATED EQUAL (2)*

To have a character trait amounts to being disposed to act in a consistent and reliable manner in most (or even all) the circumstances that elicit the trait in question, “even if those circumstances vary widely in their particular situational details” (Miller 2003, p. 375). Character traits are therefore broad based, long-term, and stable dispositions to act in a distinctive way. They also have a causal/explanatory function in that we say that a selfish person behaves selfishly in a self-interest-eliciting situation precisely *because* she is selfish.

Several findings from social psychological research demonstrated that character traits alone do not explain all behaviour, also situational factors affect individual conduct to a large extent (e.g. Allport 1966, Bowers 1973). They even suggest that the common practice of attributing character traits to people is misguided.¹⁸ For instance, Darley and Batson (1973) designed an experiment to uncover the major moral characteristics underlying the behaviour of the Good Samaritan. The subjects were students at Princeton Theological Seminary instructed to go to another building to give a talk. On their way to give the talk, subjects encountered a ‘victim’ slumped in a doorway. Only one variable predicted whether the subjects stopped to help: how late they were. 63% of the subjects

¹⁸ Such allegation would be a Fundamental Attribution Error (Ross 1977).

who were in no hurry, 45% of those in a moderate hurry, and 10% of those who were in a great hurry stopped. (It did not matter whether they were asked to talk about the very parable of the Good Samaritan, nor which were their moral and religious orientations.) Another example is the famous study on obedience (Milgram 1974a) showing that 65% of the subjects, instructed to punish a person characterised as a ‘learner’ whenever he failed to answer correctly, went on administering powerful electric shocks that appeared to be lethal. One subject thus commented: “So he’s dead. I did my job!” (Milgram 1974b, p. 88).

Unless we are ready to believe that the majority of the population have the traits of a murderer, we must interpret social psychological experiments like the two reported above as evidence that behaviour is substantially influenced by environmental factors and that character traits do not exist. Whence two implications usually stem: they can still be employed for explanatory or predictive purposes or they should be eliminated as a misguided illusion. Neither would be enough to sustain a moral charge of any seriousness. On the other hand, it may be conceded (Miller 2003, pp. 381-388) that there exist ‘local character traits,’ which are activated in connection with *narrowly* defined situations of a certain kind. This leaves the open question of whether a narrowly defined situation might encompass both playing a prisoner dilemma and choosing a major. More specifically, it hinges on the presumption that defecting in a prisoner dilemma should be somehow associated with studying economics. It is admittedly the case that two distinct, narrowly defined, situations might activate the same local character trait. But such case has not been convincingly advanced as of yet.¹⁹

To make a significant case for self-selection in connection with the alleged selfishness of economists, one must assume that economics students have some disposition to be selfish and that they stick to such disposition across all situations. Alternatively, and more plausibly, one has to make the case that the conditions encountered in the experiments – e.g. ultimatum games – are to a large extent comparable to everyday situations, so that subjects’ behaviour in the experiments can be generalised to a broad range of human actions. A yet narrower, but still sufficient, basis would be to show that the game

¹⁹ Gandal and Roccas (2002) and Gandal et al. (2005) go in this direction by drawing a connection between individual and professional values.

theoretical settings reproduce the central features of the decision between economics and other majors.²⁰

This latter suggestion, however, calls for a spelling out of what self-selection amounts to. Why does a selfish person choose economics? Perhaps he expects to make a good investment on himself and eventually become wealthy. But such is hardly the case: doctors in economics are on average 32 years old and can expect to earn anywhere between U\$ 63,000 and U\$ 81,000, as (tenure or tenure-track) assistant professors. Moreover, the U.S. Department of Labour in its 2006/07 *Occupational Outlook Handbook* signals as the most noteworthy features of the profession the “slower than average job growth.” The real incomes, moreover, have declined by almost 5% between 1987 and 1995 (Siegfried and Stock 1999, p. 132). They have declined even more in comparison with the wages commanded by Law and Business school graduates. Upon graduating from one of the top-10 MBA programs in America, which happens on average at 27, one may expect to earn a yearly salary in excess of U\$ 130,000. The typical graduate walks out of one of the top-10 American Law schools to earn U\$ 125,000 per year.²¹ According to Ronald Ehrenberg (1999, p. 137ff.), the relative income of economists has also declined in comparison with professionals in fields such as entertainment and sports. Put bluntly, if we are in Economics for the money, we certainly possess a large degree of idiocy to top up our greed.

Perhaps, there are alternative perks that make the choice of an academic career more appealing than better paying alternatives. One can think of intellectual stimulation (in economics?) or individual freedom to pursue one’s interests (at some distant stage down the career path), but these are present (possibly in greater supply) in other fields as well. Maybe a selfish person would feel more at ease in a discipline that does not condemn selfishness (but there exist other fields in which selfish people are not necessarily disparaged.) Maybe such a person would find it easier to learn economics.

Is it for some other reason? For more than one reason?

²⁰ The classical interpretation of game theory is precisely that games capture the physical and institutional features of real world situations. But this is not what happens in practice. Instead, the theorist invents the rules of the game as he sees fit (Janssen 1998, p. 23). A game is thus *not* a full description of the elements of a situation, but rather a description of “the relevant factors involved in a specific situation as perceived by the players” (Rubinstein 1991, p. 917). Even in a strictly controlled lab experiment, the payoff cannot capture all the relevant factors for all players.

²¹ MBA data from Financial Times: <http://rankings.ft.com/global-mba-rankings> (accessed: july 2007). Law School figure is from <http://www.ilrg.com/rankings/law/median.php/1/desc/MSPPrivate08> (accessed: july 2007). Economics data are from Scott and Siegfried (2007).

In spite of the broad empirical support for the self-selection explanation, any deepening or in fact any description of whatever self-selection amounts to or of however it plays out is lacking. Moreover, what would be the moral implications (both about the person and about the discipline at large) of each reason?

At any rate, even the identification of a more punctual self-selection effect would not entirely solve the issue. Would we still be entitled to believing economics students more selfish than others, if non-economics students selfishly chose law or biology because they expect to make a better career out of these majors, or because they believe these majors require less effort of them?

After showing that economics students behave more selfishly than non-economics ones in a given experimental setting, the 'accuse' suggests that this difference is constant and that economists are by nature more selfish. But some experiments cast reasonable doubts on such conclusion. In certain settings, economists behave like others or even less selfishly. The 'defence' thus calls economists innocent. What they could further claim, however, is that much of the trial is (as of yet) ungrounded.

4. A SOCRATIC PROBLEM IN ECONOMICS

Self-selection has been so far identified as the soundest explanation for economics students' behaviour. Carter and Irons say this is all there is. Frey and Meier find indications of self-selection in business students, who emerge as the selfish people in their experiment. Also R. Frank and his colleagues recognize strong indications of self-selection, while claiming a role for training as well. Training, on the other hand, is more contested. Carter and Irons find no conclusive traces of it, nor do Frey and Meier. But the existence of a training effect is crucial to make a case against economics. If we do not have any impact on our students, why bother us? What are we guilty of? And what are we supposed to do to change the situation?

From the observation that (1.) economics students display behaviour that is closer to the predictions of economic theory than other students it has been inferred that (2.) economists are selfish people. As discussed above, this claim has to face the burden of social psychological research that questions the existence of character traits like selfishness and the soundness of an inference of selfish personality from observed behaviour. Also very weak is the suggestion that (3.) economics students are immoral, until one makes a compelling case that defection in a Prisoner's Dilemma is coextensive with immorality

(i.e. that under all possible understandings of the payoff structure, defection always violates the tenets of morality and that it is always morally inferior to cooperation). And the further implication that economists are (4.) immoral like them since we used to be students would also be speculative. It is not based on empirical observations, and it is actually at odds with several findings. Perhaps there is a ‘temporary’ divergence in the behaviour of those students who major in economics. But they eventually, as it were, go back on track. Economics professors are largely like professors in other disciplines.

Economists may be like everyone else because we know how abstract the assumptions of our theory are, and we know that the world is very complex instead. We know that assuming strangers to cooperate with us in prisoner dilemmas is unlikely to make us fit for a competitive world.²² We also know that our lives require acts of generosity and altruism (though we believe that such acts make no difference in the definition of market prices). Maybe it would be a good teaching technique to share all the qualifications with our students, but we prefer to pass on neat, rigorous, and clear-cut lessons. This is not without reasons; nor without consequences. Even if we resist the charges (1.)-(4.), therefore, there may still be room to complain that (5.) we are dangerous because we make our students selfish, and consequently that (6.) we are immoral for the danger we represent, so that economics becomes the stage for a case of what we may call a Socratic Problem.²³

One of the accusations that lead Socrates to his death sentence was that of being a corruptor of the young because his most prominent students – Critias and Alcibiades – became a violent oligarch and a traitor of the *polis* respectively. The extent to which the Socratic Problem involves the teacher-student relationship in economics is thus dependent on the extent to which the social disapproval of students’ behaviour follows from the doctrines economists teach and from the social disapproval of the content of these doctrines.

Do we economists, too, corrupt our students?

Among a variety of accusations against Socrates, Eric Schliesser identifies some arguments that easily transfer to the moral trial against economists: Socrates’ teachings and example potentially threatened the state’s constitutional order, and he taught his students methods and doctrines that did not respect the established social and constitutional practices. These methods and doctrines, in immoderate hands, can lead to immoral

²² But this might be, at least in part, economics’ own fault (e.g. Ferraro et al. 2005).

²³ I appropriate the terminology of Socratic Problem from Eric Schliesser (personal communication, but also e.g. 2006a, 2006b).

practices. We can rewrite these reflections as follows: economists' teachings and example potentially threaten the state's constitutional order (which often requires cooperative behaviour and mutual trust), and we teach our students methods and doctrines that do not respect the established social and constitutional practices (because selfishness violates some social norms). These methods and doctrines, in immoderate hands, can lead to immoral practices (e.g. the case of the so-called 'Chicago Boys,' those Chilean graduates from Chicago who became economic advisers to the Pinochet regime, see Schliesser 2006b). The conclusion is that "Socrates' impact on his students endangers the polity" (Schliesser 2006a, p. 5). Again, replace Socrates with economists to appreciate the conclusion. Elinor Ostrom (1998, p. 18) presages that "we are producing generations of cynical citizens with little trust in one another, much less in their government. Given the central role of trust in solving social dilemmas, we may be creating the very conditions that undermine our democratic ways of life." This is not only worrisome: it is *scary*.

Our students might blindly and faithfully submit to economic knowledge, and develop 'economic intuition.' They might then employ such intuition naïvely, without due judgement. They might try to imitate the smart homo economicus, without realising that he is just a fiction, a representative description of the sufficient individual conditions for achieving a certain equilibrium, which in practice is instead attained by a bunch of non-necessarily-selfish, imperfectly rational human beings. But our students are not taught this, or not clearly enough. Our students are taught highly formalised techniques for explaining 'why what they predicted did not happen,' as the joke goes.

Robert Solow has been quoted as commenting that "[t]o say something is wrong with graduate education is to say that something is wrong with the economics profession" (Klamer and Colander 1990, p. 18). He was referring to the results of the extensive investigation of graduate education in economics at the top American universities conducted by David Colander and Arjo Klamer (1987). That research focused on the content of economics training, and revealed a growing separation of economics from the real world. 'Having a thorough knowledge of the economy' was considered the least important factor in guaranteeing one's success as an economist. The top-3 ones up one's sleeve were believed to be 'being smart in the sense of being good at problem solving,' 'excellence in mathematics,' 'being very knowledgeable about one particular field.'

The situation does not seem to have changed much (Colander 2003). To see its practical consequences, we may turn to a recent experiment by Rubinstein (2006). The subjects

wear the shoes of a Vice-President of a company facing a recession and must decide the number of workers to be laid off. Rubinstein shows that economics students aim for profit maximisation more decidedly than non-economics ones. In an alternative treatment he also shows that, when the problem is presented mathematically (i.e. as a function to be maximised), students majoring in economics, business, and mathematics all make almost identical choices – i.e. they maximise profits. For the economics students the difference between the two treatments is small. It is almost as if, even in the absence of the formula, economics students did construct the problem mathematically, as a somewhat abstract cost-benefit calculation. Rubinstein (*ibid.*, p. C8) thus proposes a warning about the risk that “presenting a problem mathematically, as we often do in economics, conceals the real-life complexity of the situation.” His research was indeed “motivated by [his] concern about the way economics is currently being taught” (p. C1). Our students do not “study economics,” instead they become “experts in mathematical manipulations.”²⁴ And he does nothing to hide his intent to “encourage [the readers] to consider changing [economists’] teaching methods” (p. C9). The encouragement is not solitary: a related suggestion – to change the content of economics teaching – came from R. Frank and colleagues (1996, p. 191).

I’m afraid we do not yet have a thorough enough understanding of the differences between economists and non-economists, and of the reasons for such differences, for us to change economics in a significant way, because, persuaded though I am that the methods and content of economics teaching are ripe for improvement, I must also recognize that Hirschleifer (1994) and Yezer and colleagues (1996) have a point when they emphasise that economics already includes crucial lessons on the importance of mutual satisfaction and voluntary exchanges. Nonetheless, the methodological, psychological, and logical complaints I advanced are not nearly enough (nor do they try) to call economists innocent. More evidence is required to resolve the present hypotheses, and several additional hypotheses need testing. From these, one may find reasons to sustain different charges and to thus make more accurate prescriptions for correction (or not).

²⁴ Rubinstein (2006, p. C1) also suspects that our students’ views on economic issues are ‘influenced by the way we teach, perhaps without them even realising it.’ But Klammer and Colander (1990, p. 59ff.) interviewed many students who revealed they were perfectly aware of what was going on at graduate schools.

4.1. IS THERE A SOCRATIC PROBLEM? (AND, IF SO, IS IT A PROBLEM?)

It is not conclusively clear – though there are some indications – that economics training is responsible for changing behaviour. Our classes may indeed make our students behave selfishly in certain situations in which other students do not. One way in which this effect seems to manifest itself is by inducing ‘cynical’ expectations about others (R. Frank et al. 1993). When we play a game, or when we make a real-life decision, our expectations of other people’s conduct matter very much. For instance, when we expect our partners to defect we defect, too. On this specific type of training effect, however, we should suspend our judgement. Firstly, because it is yet to be demonstrated that cynical expectations make economics students ‘bad citizens.’ Secondly, because this is a phenomenon observed elsewhere. For one instance, the majority of Dutch taxpayers say they pay taxes as a contribution to the common good. They believe, however, that the majority of others pay taxes only to avoid legal troubles (Andreoni et al. 1998). Cynical expectations may be a prerogative of Econ students when it comes to game-theoretical experiments, but not on more mundane occasions.

The observed behavioural differences between economists and non economists remain a riddle that eludes our understanding for which several explanations can be proposed.²⁵ One explanation is that Econ classes generate *cynical expectations* about others (R. Frank et al. 1993). When we play a game, or when we make a real-life decision, our expectations of other people’s conduct matter very much. When we expect our partners to defect we defect, too. Beside the beliefs about who and how others are, also our self-image, or who and how we think we are, matters a great deal in decision-making. For instance, graduate students in economics do not consider employment in a private company (Stigler 1959) and those available to teach at some good liberal arts college or to take up a position in a governmental agency do not openly admit to it (Klamer and Colander 1990). This is not to deny the virtues of private enterprise and civil service. Simply, econ PhD’s (ought to) want to do research at high profile universities. In a quite similar way the imaginary vice-presidents in Rubinstein’s experiment responded differently from the way they would have (presumably) responded in a scenario in which they wear the shoes of Labour Union representatives.²⁶ Another effect of Economics might thus come about by means of

²⁵ One possibility on which I do not elaborate is that the least selfish students of economics pursue an academic career.

²⁶ This may be an example of how certain institutions modify individual perceptions of meaning and appropriateness, and therefore tastes (Danzon and North 1994, Hodgson 2003).

altering our self-image, and this may occur very fast. There exists consistent evidence that the mere wording of experimental instructions alter the subjects' dispositions towards someone, towards some choice, or towards the process of making a decision; and they remain largely unaware that this happens. Because the descriptions are not given in advance, they modify players' conduct in a very short time. Upon enrolling, therefore, one may be instantly changed: first-week Econ students are indeed already different from non-Econ ones, if only to the extent that they are... well, Econ students. Being an Econ student comes together with a stereotypical image of a selfish person.²⁷ Besides the rather intuitive remark that stereotypes cannot do full justice to actual individuals, they nonetheless shape expectations, because institutions also affect the perceptions that others have about their members. If you always defect with me because I am an economist – and I know that you do – I defect in return. When I play with another economist, I again defect, just as you would. There may thus exist an *identity* effect that explains why Econ students behave much like economists from the very first days of their enrolment, by means of imitating some stereotypical image they hold (Lanteri and Rizzello 2007).²⁸ The larger the identity effect, it seems, the less the need to invoke self-selection (though the two are not incompatible explanations).

Afterwards, with the beginning of courses, a *priming* effect might enter the picture, connected with the repeated exposure to economics concepts, but this eventually fades away after graduation.

Over the course of more formal training, moreover, there should arise a specific way in which economists understand and interpret situations – what we may call a *framing* effect (Lanteri 2007). Several textbooks of microeconomics (e.g. Frank's *Microeconomic and Behaviour*, 2005, back cover, emphasis mine) try to “help students develop *economic intuition*.” How do they accomplish that? By encouraging “the reader to develop the distinctive mindset known as *thinking like an economist*.” Therefore, they routinely feature a Section or an entire Chapter devoted to *the economic way of thinking*. In an extensive commentary on the economics major in American universities, John Siegfried and his colleagues (1991, p. 199) confirm that “broad consensus exists among economics faculty that enabling students to ‘think like an economist’ is the overarching goal of

²⁷ The moral trial, by means of reinforcing the image of the economist as a selfish person, might actually *worsen* this problem instead of solving it.

²⁸ This is the reverse of R. Frank and colleague's training effect: it refers to the cynical expectations other people have about economists.

economics education.”²⁹ Recently, an economics textbook (Arnold 2004) even took the title of *How to Think like an Economist*.

But how does an economist think?

The European edition of Robert Frank and Ben Bernanke’s introductory textbook, *Principles of Economics*, is more explicit. The book engages the students “to see *each* feature of their economic landscape as the reflection of an *implicit or explicit cost-benefit calculation*” (McDowell et al. 2006, back cover, emphasis mine).

When we reason in terms of cost-benefit, trade-offs, or relative prices it is both more likely and more socially accepted to enact self-serving behaviour.³⁰ This would not make us different from others in terms of *how* we behave strictly speaking, but in terms of *how do we think of a situation*.³¹ Our behaviour is then properly attuned to such perception.

Both the priming and the framing effects mentioned above are outcomes of economics training. Priming seems to be temporary – that is, to last as long as the priming is repeated. This might explain why economists return ‘normal’ after they complete their training. If this is the case, long-term risks associated with the exposure to self-interest rhetoric in Econ classes might be negligible. The framing effect instead can be presumed to be long-lasting.³² But there is nothing unique about this phenomenon: it is part and parcel of the functioning of human brain and it is a consequence of training, learning, and expertise acquisition (e.g. Chase and Simon 1973 on chess players, Moss et al. 2006 on engineering students and references therein). The acquisition of expertise in a domain is associated with specific ‘knowledge structures:’ both the content of expertise and its structure are characteristic of each particular domain, and it influences “how things in the world are perceived and categorized” (Moss et al. 2006, p. 66). In other words, it produces the economist’s way of thinking. Alternatively, it could have produced the engineer’s or the historian’s way of thinking. It is also likely that such way of thinking reflects both on the self-image of and the stereotypes held about economists. Is our way of thinking worse? Is

²⁹ “All other virtues follow,” they further remark.

³⁰ But even if behaving selfishly in market-like situations is acceptable, it might be not acceptable to always treat a situation as being market-like (Lanteri 2006).

³¹ When one thinks of a situation as market-like, one presumably also believes, in that situation, pricing to be an adequate and fair allocation system. For an investigation of whether economics students like pricing more than non-economics ones, see Frey et al. (1993).

³² A repetition of Rubinstein’s (2006) experiment with the readers of a business magazine shows that readers with an economics background differ from those with a non-economics one, but their tendency to maximisation is much weaker than in the students’ sample.

it morally inferior to others? Though speculations on this matter are not lacking, convincing evidence is yet to be produced.

Even if economics training had no effect whatsoever on our students and selfish people were simply born that way, one must also question whether for these selfish people to choose economics is a morally condemnable choice. What would be the risks of having economists do something else? What makes a selfish person a good citizen: that he becomes an economist or a social worker, a nurse, a civil servant...? Maybe, by luring these people into economics, we are serving a larger social goal.

I do not think, in the face of the existing evidence, that the moral trial should have major consequences on the economics profession as a whole, nor on economics teaching. Or, more specifically, not yet. It may be true that we induce selfish behaviour (with a huge list of qualifications due) in our students. But this effect appears to largely wear off with time. In the meanwhile, to be sure, they may earn a reputation of nastiness, which would harm them forever, but I doubt that this case can be seriously advanced.

Neither do I think that everything is fine with economics and economics teaching. Far from it. My feeling is that we should worry, but not too much, about how bad citizens our graduates turn out to be. What seems to me much more shameful and ethically troublesome is the massive investment in technical expertise that shields our students from the exploration and the understanding of real-world phenomena. In my opinion, the moral trial suggests that, as a by-product of econ education, we induce them to endorse a line of conduct that they will (hopefully) abandon later on. Hardly a worthy accomplishment.

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