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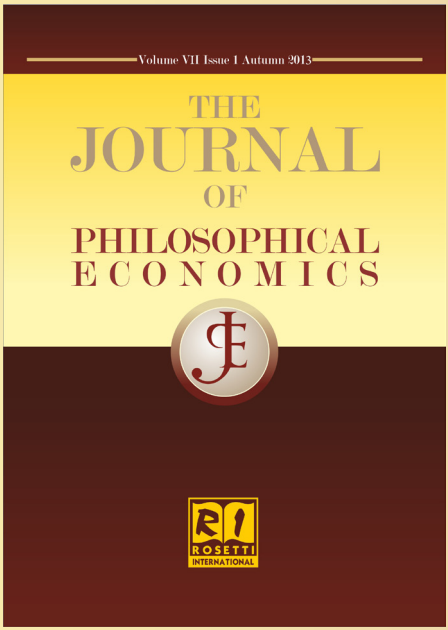

The ethics of New Development Economics: is the Experimental Approach to Development Economics morally wrong?

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The ethics of New Development Economics: is the Experimental Approach to Development Economics morally wrong?

Stéphane J. Baele

Abstract: The 2000s have witnessed the arrival and growing popularity of randomized controlled experiments (RCTs) in Development Economics. Whilst this new way of conducting research on development has unfolded important insights, the ethical challenge it provokes has not yet been systematically examined. The present article aims at filling this gap by providing the first *ad hoc* discussion of the moral issues that accompany the use of RCTs in Development Economics. Claiming that this new research agenda needs its own, specific set of ethical guidelines, we expose the six ethical problems that these experiments potentially provoke and that should therefore be carefully assessed by ethics committees before an RCT is launched and by scholarly journals before its results are published.

Keywords: Development Economics, ethics, RCTs, experiments

Introduction

In 2009, Jenny Aker, Paul Collier and Pedro Vicente, three scholars from the UK and the US, travelled to Mozambique little before the presidential and parliamentary elections and 1) initiated the printing and secured the dissemination of ten thousand leaflets providing information about the elections, 2) set up an interactive hotline system through which a number of Mozambican citizens were invited to exchange by text messages their information about the electoral process, and 3) extended the range of distribution of a local newspaper, asking its journalists

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to offer neutral report on the candidates. This action was carried out in one hundred and sixty-one locations across the country, and led to significant changes in voters' attitudes (Aker, Collier & Vicente 2010).

Also in 2009, another academic team arrived in Tangiers, Morocco, and offered to a certain number of low-income households their help for going through the procedure to obtain a water connection at home, and for securing the zero-interest loan provided, in principle, by the local (private) water supplier to help poor people to finance the installation. Originally, these families had to go to public taps to get water. The facilitation process was successful: many people secured the loan and obtained a home connection. The scholars measured that families which acquired the connection mainly used the time gained for leisure, and tended to consume much more water than previously (with a subsequent increase of their bills); no diminution of water-related diseases was observed – the water of the public taps was exactly the same as the water provided by the household connections (Devoto, Duflo, Dupas, Parienté & Pons 2011).

These two events are typical illustrations of a recent trend in Development Economics, whose principle is to actively experiment, in real-life situations, theoretical hypotheses in order to test their validity and produce more useful knowledge (than that provided by non-experimental research) for policy-makers of all sorts (governments, NGOs, philanthropists, international organisations, etc.). Field experiments are carried out after an extensive baseline survey (whose role is to gain accurate knowledge of the various aspects of the population under scrutiny) and take the form of randomized controlled trials (RCTs) in which similar – that is, comparable – individuals or groups are randomly assigned to the various arms of the trial. For example, in the experiment conducted in Tangiers, a given number n of households were randomly selected from a larger pool of N similar households to benefit from the facilitation process. The Jameel Poverty Action Laboratory (J-PAL), the MIT-based network pushing this agenda, makes his the 'mission to reduce poverty by ensuring that policy is based on scientific evidence' (J-PAL website). In a programmatic paper, Banerjee and Duflo (2009b) label this sub-field the 'Experimental Approach in Development Economics'; Banerjee, in another paradigmatic paper, calls it 'New Development Economics' (Banerjee 2005); Karlan and Appel (2011) offer the very straightforward label of 'New Economics'. From now on we make ours the most explicit of these names – the first one – and will therefore refer to this research programme with its acronym 'EADE'.

This picture looks very fine; the overall objectives of reducing poverty and increasing democratic participation by sound knowledge and local intervention are noble. However, and besides the vivid methodological debate that it has already provoked, EADE unfolds a challenge that should not be neglected: its characteristics bring it, with no ambiguity, within the scope of ethical questioning. Both the Mozambican and the Moroccan examples provoke a certain ethical discomfort, as do many other case-studies partaking to the EADE agenda discussed below. Among the moral problems at stake here figure a series of emblematic ethical issues, such as lying, the production of collateral damages for a greater good, or the instrumentalization of people. More subtle concerns also arise, for example from the use of randomization. These ethical issues have not yet received sufficient attention. Apart from Barrett and Carter's (2010) insightful but succinct and methodologically-oriented discussion, no scholarly paper has so far offered a systematic investigation of the moral challenge provoked by EADE. The aim of the present article is to provide such a focused discussion, by examining the six ethical issues raised by this research programme, in order to assess under which circumstances and with which precautions it could be thought of as an ethical practice.

We do not claim that EADE studies have so far escaped ethical scrutiny. To be sure, some sort of ethical screening did most of the time take place. However, ethical control appears to have three weaknesses. First, ethical assessments only depend on the requirements of their home institutions' Institutional Review Boards (IRB), and can therefore vary considerably. Second, they usually rely on the general principles exposed by various protocols that were initially drafted for experiments conducted in other disciplines; most of the time, intended EADE studies are reviewed by the same IRBs that assess experiments involving human subjects in Medicine and Psychology [1], which may explain the fact that these boards have so far been rather compliant [2]. Third, more pragmatically, the contestable characteristics of some studies prove that these protocols have been loosely applied on several occasions [3]. For these reasons, a discussion on the specific ethical issues of EADE is needed.

Our analysis proceeds in two steps. First, we spend some time to go back at the main characteristics of EADE in order to show why it is pertinent to bring this research programme within the scrutiny of moral theory; taking note of the lack of reflection on the moral side of EADE in the literature, we show how typical features of EADE case-studies cause ethical discomfort. The second and more fleshed-out part

of the article builds on both deontological and consequentialist moral doctrines to examine the six ethical problems that are potentially present in EADE case-studies: the *randomization*, the *consent*, the *instrumentalization*, the *hazardous calculus*, the *disappearance*, the *accountability*, and the *foreign intervention* problems. We illustrate our claims with examples of existing EADE studies. Rather than dogmatically rejecting or accepting EADE, we contribute to establishing a framework that would enhance the morality of RCTs in Development Economics. Additionally, we hold the belief that stricter ethical assessments would benefit the overall scientific value of the research agenda, as it has been the case in Medicine and Psychology; whilst the presence of unanswered ethical concerns in EADE already 'commonly lead subjects, implementers or both to actively circumvent the research design, thereby undercutting the statistical raison d'être of the initial randomization' (Barrett & Carter 2010, p. 7), the existence of rigid and specific ethical guidelines should encourage EADE researchers to build hypotheses and experimental designs more carefully.

EADE: The ethical issue

Economics is connected with Philosophy in many ways. Looking at works from prominent thinkers like A. Smith, J. Keynes or A. Sen, these two disciplines seem to be intertwined in an entangled fashion, either because research in Economics might be used in a more or less moral way by policy makers and industry executives, or because the axioms that are necessary of any economic theory convey, inevitably, a particular philosophical meaning. To be sure, there is a longstanding tradition of exploring the philosophical underpinnings of Economics. What's more, as Cooper recalls, 'most of the celebrated nineteenth-century economists, from Thomas Malthus through John Stuart Mill to Francis Edgeworth and Alfred Marshall, took moral considerations seriously and made important contributions to the subject' (Cooper 2000).

Given these close ties, it is surprising to note the absence of a thorough discussion on the ethical dimension of research practices in Economics, and thereby of an established framework for evaluating whether or not particular studies are morally acceptable. The 'Philosophy of Economics' entry in the *Stanford Encyclopedia of Philosophy* (Hausman 2008) illustrates this neglect, by exclusively dedicating its "Ethics" section to the political use of economic findings, that is, by assimilating the ethics of Economics to the normative/positive tension in the field. In their compact

handbook of social and economic ethics, Arnsperger and Van Parijs (2003) take another point of view – that of providing ethical theories for assessing the morality of an action related to a socio-economic issue – but are similarly silent on the ethics of conducting research in Economics. Both stances are pertinent and belong to the way Philosophy and Economics have traditionally been connected, but both omit to address the ethics of economic research programmes and practices [4]. To be sure, this missing element might, at first sight, be considered to be a detail: is there indeed any real need for that kind of reflection, since Economics mainly occupies scholars in their university offices, harming no-one? Perhaps this neglect was justifiable in the recent past. We argue, however, that it could no longer be the case, precisely because of the arrival of RCTs in the discipline.

The reason why we should take the ethics of research practices in Economics seriously is indeed the change in methods that occurred in the last ten-fifteen years. In particular, Development Economics has witnessed in the past decade or so the emergence of EADE, based on the use of randomized field experiments instead of pure data-gathering and processing techniques. Experiments have been conducted for quite a while in the subfield of Labour Economics (on this heritage, read Heckman 1991), but have recently 'gone from being a rarity to a standard toolkit of academic Development Economics' (Kremer & Holla 2008). Banerjee and Duflo, two leading scholars in this trend, confirm that 'the past few years have seen a veritable explosion of randomized experiments in development economics' (Banerjee & Duflo 2009b). This use of experiments brings about significant ethical issues.

In this context, some labels are telling. For example, Prof. Duflo is affiliated with the Abdul Latif Jamaal Poverty *Action Lab* (and not, say, *Centre* or *Institute*) at the MIT [5]; Yale professor Dean Karlan, another prominent figure of this trend, has titled one of his books *More than Good Intentions: How a New Economics is Helping to Solve Global Poverty* (Karlan & Appel, 2011). These two sets of words give us a hint at the double particularity of EADE. The first characteristic relates to the overall aim of this research programme: its clear ambition to reduce poverty and to address situations of economic hardship. EADE scholars claim to produce sound and rigorous, useful and applicable, but also original and unexpected results for conducting poverty-reduction policies. Scholars in the field are driven by a genuine concern vis-à-vis the enduring situation of precariousness and frailty that has plagued the developing countries for too long. In this, EADE partakes to 'a line of pragmatic idealism, where you must first believe that there's something to be done about poverty— not all economists would agree— and then you try to do

it' (Parker 2010). However, what is new and unfolds the ethical question is not this objective as such, but rather its expression through a specific method, which constitutes the second key element of EADE. The principle here is to blur the traditional delineation between theory and action, between research and practice, through ambitious field experiments. EADE is indeed committed to provoke results, ideally in association with local organisations (NGOs, small businesses, local administrations, and the like). The research practice becomes, in a way, a *policy.* Well-designed experiments are indeed supposed to ground the action of these organisations on firmer, more rational and empirically sound bases. As Banerjee and Duflo claim, 'from the point of view of the organizations, it became clear that there was value in setting up relatively long-term relationships with researchers, so that the experimentation could constitute a process of ongoing learning and multiple experiments of mutual interests could be designed'. (Banerjee & Duflo 2009b, p. 155). By carrying this 'productive interplay of theory and experimental work [... which ...] successfully integrates theoretical thinking and empirical testing' (Banerjee & Duflo 2010, p. 51), EADE researchers aim at producing a 'better integration between theory and empirical practice'. (Banerjee & Duflo 2010, p. 78). EADE case-studies share a common experimental design. Heckman (1991) sums up this design as follows:

> '[The principle is to] randomly assign persons to a program [6] and compare target responses of participants to those of randomized-out nonparticipants. The mean difference between participants and randomized-out nonparticipants is defined to be the effect of the program' (Heckman 1991, p.3)

Studies of this sort have already tackled all major dimensions of poverty and underdevelopment: governance and corruption, health and food scarcity, education, wages and access to liquidity (microcredit mainly), and more recently environmental issues. With this specific configuration of (1) a conjunction of political objectives and scientific enquiry, and (2) a resolutely interventionist, experimental method, Development Economics as a social science enters the same scope of ethically problematic [7] practices. As the psychologist Philip Zimbardo wrote – somehow improbably – in an article reflecting on his famous Stanford Prison Experiment (to which we will come back in a few paragraphs), 'every act of intervention in the life of an individual, a group or an environment is a matter of ethics' (Zimbardo 1973, p.247). In this regard, Banerjee and Duflo recognise that the experiments not only *aim* to affect their participants (directly by the experiment and indirectly via research-inspired policies), but also *do* actually affect most of them (Banerjee & Duflo 2009b, p.158). Scholars such as Dingwall (2008) consider ethical assessments

to be yet another bureaucratic control and have subsequently argued that the social sciences should not be submitted to ethical evaluations, mainly because their direct impact on people is too negligible to be truly ethically problematic, and because these evaluations bring about, every now and then, absurd constraints. EADE studies, however, sometimes provoke a significant impact on populations, and cannot therefore be considered under this line of thought, especially since it is claimed that they very often disclose surprising and unexpected results – a pattern which is presented as holding great potential for unfolding innovative policies. To be sure, the ethical significance of EADE case-studies is variable. A case-study which randomly separates students in two groups in order to test the efficiency of two different remedial education programmes [8] (Banerjee, Cole, Duflo & Linden 2007) clearly provokes less ethical discomfort than an experiment which assigns various prices to the same health device in (random) function of the person who buys it (Ashraf, Berry & Shapiro 2007), or a study that investigates corruption by providing a randomized subpopulation with extra money before they conduct an administrative task (Bertrand, Djankov, Hanna & Mullainathan 2007). The challenge is to understand why.

In this context, what strikes the political philosopher is the lack of reflection on this issue in the literature. As Barrett and Carter unambiguously state, '[ethical dilemmas] get distressingly little attention in graduate training and in the literature' (Barrett & Carter 2010, p.7). Several critics of the use of RCTs in Economics have acknowledged the ethical problem, but have only done so succinctly. For example, Deaton only spends three lines of his long critique of EADE to warn Economists about some 'practical difficulties' that plague RCTs in other scientific fields, especially the 'ethical (human subjects) questions surrounding RCTs [... which...] have become sufficiently severe to seriously limit what can be undertaken' (Deaton 2009, p.40). Humphreys and Weinstein's (2009) review of experimental Development Economics from a Political Science point of view identify 'ethical concerns' among the five 'limitations, challenges, and new frontiers' of the research agenda, but only to acknowledge that even though 'in the field of the political economy of development [...] interventions can have life-or-death consequences [...] at present, there are no clear guidelines for political scientists to follow' (Humphreys & Weinstein 2009, p.375). A more detailed account of 'non-random reflections' related to the ethics of EADE is provided by Barrett and Carter (2010), but it remains part of a broader methodological discussion and does not cover the full width of ethical issues at stakes. Although methodological concerns do actually

play a role in the morality of the research programme, they do not provide, in themselves, a sufficient account of the properly ethical issue at stake – far from it.

In part because of this absence of a specific ethical reflection on RCTs in Development Economics, EADE researchers have sometimes crossed significant moral lines. Even if the overall aim of EADE is unquestionably noble, the specific ethical issues raised by the implementation of its case-studies have so far been taken too lightly. In the various programmatic texts aimed at explaining what EADE is, what its advantages are, and which important results have already been produced, the ethical question is reduced to its most lapidary expression. Karlan and Appel's (2011) book-length presentation of EADE only refer to ethics when explaining that we have a moral obligation to do more for development. In one of the key papers introducing EADE, the sole reference to the ethical issue appears in a footnote, where ethics looks assimilated to a *constraint*:

> 'This flexibility [of experiments] is, of course, not boundless. Ethical concerns (supervised by universities' internal review boards) and the constraint of working with an implementing organization do limit the set of questions you can ask, relative to what one can do in a lab experiment. Not everything can be tested, and not everyone wants to be experimented on' (Banerjee & Duflo 2009b, p.156)

Whether the control exerted by the 'internal review boards' is strict and systematic, whether it obeys to a fixed and precise set of moral guidelines and criteria, whether it is carried out by philosophers or fellow economists, all this is left unexplained. At most, the authors note that researchers in EADE should be careful not to provoke 'bad feeling' among the participants when conducting a randomised trial, but judge, in an amazingly detached and naïve fashion, that these participants 'are often used to such arbitrariness and so randomization appears both transparent and legitimate' (Banerjee & Duflo 2009b, p.166). Ethical reflexions of that sort appear too limited and hence unsatisfying. The specificities of EADE studies need to be recognised.

Once again, it must be clear that we do not question here the overall objective of EADE, nor do we put into doubt the moral integrity of its researchers or their willingness to eventually face the moral question; rather, we want to expose why in some cases EADE brings about, for the philosopher, a vivid ethical discomfort. As we will see at the end of our argument, such a critical stance might actually help strengthen EADE by allowing its scholars to conduct studies whose experimental design is irreproachable on both methodological *and ethical* aspects. To construct, promote and enforce strict ethical guidelines adapted to a specific sort of research

does not impede the quality of the results; in Medicine, it might safely be argued that the progressive implementation of more and more inflexible ethical frameworks [9], from the late 1950s until now, has actually helped research to produce more valid results [10]. At the cross of social and medical sciences, Psychology has also a significant tradition of ethical reflexivity. As Baumrind already noted in the mid-1960s, 'certain problems in psychological research require the experimenter to balance his career and scientific interests against the interests of his prospective subjects' (Baumrind 1964, p.421). With these words, she was targeting two of the most (in)famous psychological experiments, Milgram's 'obedience experiment' and Zimbardo's 'prison experiment', whose moral problems are comparable – but not identical – to those conveyed by EADE (see below). Medical and psychological researches have evolved in a positive direction [11] since the conduct and critique of these morally (and scientifically) contestable experiments, and have not abandoned the crucial research questions that initially prompted their scholars to conduct experiments without proper ethical reflexion. In this sense, Economics, we argue, currently witnesses the same development that Medicine and Psychology have experienced during the second half of the last century, when moral consciousness slowly emerged among researchers in the wake of highly contentious studies whose experimental designs indeed aimed at solving fundamental questions (life and death in Medicine, extreme obedience in Psychology; now enduring poverty in Economics). For us, both EADE case-studies summed up in the opening paragraphs of this paper should be ranked among these "triggering" experiments, and other ones are further off-limits. Moreover, whereas psychological experiments such as those conducted by Milgram and Zimbardo directly impacted, together, no more than a few hundred people, in contrast, individual EADE case-studies sometimes involve several hundred or even several thousand individuals at once. Hence, and better late than never, the time is ripe for putting forward a specific ethical discussion that overcomes intuitive judgements – whether favourable or adverse – on the stimulating and provocative agenda of EADE.

The six ethical problems of EADE

Two major traditions of moral philosophy are necessary to identify the ethical issues that accompany EADE: deontology and consequentialism. These moral theories are usually presented as fundamentally opposed, and it is precisely their very contrasting perspectives on what constitutes a morally reprehensible action that are enriching for conducting our analysis. The tension between the deontological

and consequentialist axioms, forces, and weaknesses, will allow us to unfold the six ethical issues that are potentially present in any EADE case-study, and to avoid a dogmatic, rigid point of view.

In a nutshell, whereas deontological ethics judge the morality of an action by examining the characteristics of the action itself and by comparing these characteristics to a definite set of compulsory rules (the Greek word *deon* means *duty*), consequentialist ethics reject any such attempt at assigning a moral value to an action on an *a priori* basis, that is, without considering its context and consequences. For a deontologist, an act – say, a lie, or an aggression – is morally reprehensible because it goes against a rule which formally bans this category of actions. For a consequentialist, these rules do not pre-exist and are impossible to edict collectively or by the sole use of reason (as does Kant), which means that no action is *per se* morally wrong. The morality of a practice can therefore only be assessed with regards to its consequences: does the action – say, a lie, or an aggression – harm somebody? Does it provoke more beneficial outputs than prejudicial consequences? Does it restrain other people's choices or on the contrary does it operate an optimal situation considering people's individual preferences? It immediately appears that the axiomatic absence of universal moral laws makes consequentialism a particularly disturbing moral philosophy: some harmful actions may indeed become acceptable as soon as they participate to a greater good. For deontologists, this assumption is irresponsible, since 'some choices cannot be justified by their effects — that no matter how morally good their consequences, some choices are morally forbidden. [...] what makes a choice right is its conformity with a moral norm. Such norms are to be simply obeyed by each moral agent' (Alexander & Moore 2007). Utilitarianism is no easy doctrine though, since an action is moral if and only if it provokes the *maximisation* of pleasures on pains, if it produces the 'greatest happiness for the greatest number'. If the individual engages in an action that fails to obey this principle of maximisation – in other words, if another possible action would have reached the same goal and in doing so produced a bigger difference between pleasures and pains – then his action is amoral. Through their maximising principle, utilitarians still neglect some pressing issues of social justice, among which is extreme poverty. By reaching maximisation among a given population without differentiating within this population between various subgroups, consequentialist utilitarians may well produce actions that are actually be very prejudicial for the weakest sub-populations. This problem has given birth to a particular consequentialist school of thought – prioritarianism – which argues that 'a given benefit, such as a unit of utility, has greater moral value

to the extent that its recipient is worse off' (Porter 2011, p.197). A second problem is brought about by the very project of a moral calculus. It is easily demonstrated how practically complicated, if not theoretically impossible it is to quantify and predict the consequences of our actions, whichever the criteria (pleasure, pain, or satisfaction of individual preferences).

The combination of these two philosophical traditions allows us to unfold six major ethical issues with EADE studies and to provide a complex position for each one. We first expose the 'hazardous calculus problem' since it seems that many EADE scholars are "folk consequentialists"; we show that several considerations cast into doubt the possibility, in some cases, to evoke the desirable consequences of EADE case-studies in order to justify deontological moral misconducts. The next five problems mostly emerge from deontological moral rules. Three of them are closely intertwined: the 'randomization problem' brings the issue of treating unequally equal people, the 'consent problem' relates to the obligation of respecting individual autonomy, and the corollary 'instrumentalization problem' is the actualisation of Kant's deontological interdiction to treat persons merely as means. The corollary issue of both the hazardous calculus problem and the three initial deontological issues is the 'accountability problem', which raises the question of the responsibility of EADE researchers in case their experiments have damaging consequences. Finally, the 'foreign intervention problem' is that of foreign intervention in the domestic affairs of an underdeveloped (and therefore weak) country.

The 'hazardous calculus problem'

Schlenker and Forsyth (1977) – confirmed in their observations by recent studies in cognitive science (e.g. Tanner, Medin & Iliev 2008) – suggested that individuals tend to adhere, behaviourally (that is, in practice), to *either* consequentialist *or* deontological ethical principle. In other words, people are either 'folk consequentialists' or 'folk deontologists'. Whilst folk deontologists would reject the very idea of balancing the costs and benefits of EADE case-studies [12], most EADE scholars would agree that at least some dose of ethical misconduct may be justified by the potentially useful scientific findings it permits. However, as we will now show, this costs-benefits balance does not go without problems.

A good way to appreciate this is to make the detour via biomedical research. Psychologist Philip Zimbardo repeatedly justified his prison experiment, which crossed all deontological thresholds, by highlighting its positive effects. He

distinguished between *direct* and *indirect* effects (Zimbardo 1973). Among the former, he identified the physical and psychological harm immediately caused to the participants, but also insisted on the enriching insights that participants gained about themselves and interpersonal relations, both during the experiment itself and from the numerous debriefing sessions. Among the indirect effects, he underlined the benefits of his findings on society in general, both because the effects are important and innovative as such (scientifically speaking) but moreover because the memorable experimental design makes these findings hardly forgettable and easily spread as a *cas d'école* throughout society. The American psychologist concluded that his experiment was therefore ethically justifiable, since it did more good than harm.

Just like Zimbardo, EADE scholars very often adopt a consequentialist position and stress the indirect positive effects of their research agenda, which is supposed to cast a brand new light on poverty and may help renew political perspectives and actions at a global level. The input of EADE on Development Economics and hence policies is undoubtedly real, but only to a certain, limited extent. Just as Blass (1991) showed for Milgram's obedience experiments, the extrapolative power of EADE case-studies is uncertain – and is honestly recognized by its most enthusiastic advocates. Most EADE case-studies bring conclusions that are highly context-dependent and cannot be easily extrapolated from a local tactic to a global strategy against the particular problem at stake in the study (say, the absenteeism of teachers, the distribution of medicines, or the attribution of loans). The point is that EADE case studies are better seen as pieces of research/practice with strong positive local impacts and not as possibly groundbreaking experiments. Consequently, a big positive indirect effect such as the one which, as Zimabardo and (very) few philosophers argue, ethically "save" the Stanford prison experiment or Milgram's obedience experiment [13], does not seem to be present in any EADE case study. As Barrett and Carter plainly put it in their note on EADE case-studies, 'while it would be unfair to single out individual papers, most readers of the development economics literature can easily recall papers that, in their zealous quest for exogenous variation, prove points utterly obvious to laypersons' (Barrett & Carter 2010, p.20). To us, results like those offered by Banerjee, Duflo, Glennerster and Kothari in 2010 are of that latter sort: to conclude that 'offering modest incentives [for immunisation] to families in resource poor settings can significantly increase uptake of immunisation services, when reliable services are available' (Banerjee, Duflo, Glennerster & Kothari 2010, p.6) is hardly a ground-breaking insight.

In sum, it seems that many EADE studies cannot claim to have a sufficiently big positive impact on science to justify doing harm. This said, no consequentialist would quarrel the conduct of a RCT with limited scientific value if no harm is done (e.g. Glewwe, Kremer & Moulin 2007). It is reasonable to claim, however, that quite a few EADE studies have had a negative impact on a fraction of their participants. Devoto et al.'s (2011) RCT in Tangiers that offered the possibility to acquire private water-taps is a first example. The authors measured that the installation of a private tap increased the time dedicated to leisure, but also raised significantly – sometimes doubled – the household's budget for water, which is not insignificant given that the population under study is poor. In this case, the calculus of potential costs and benefits could have led the scholars not to implement their experiment: the possible problems (an increase of the water budget, and hence a decrease of other parts of the budget) were predictable and were not clearly overridden by the expected gains in science, which were not particularly significant.

Even put together (in an attempt to justify the ethical violations of one case-study by the positive impact of the research agenda to which it belongs) [14], consonant EADE case-studies are, according to Deaton, 'unlikely to discover the elusive keys to development, nor to be the basis for a cumulative research program that might progressively lead to a better understanding of development' (Deaton 2009, p. 3). Of course this is a strong claim and reality is more nuanced. Our view is that RCTs have participated in the 'effort to cumulatively elaborate our understanding of economic issues relevant to poor countries and poor people', as Banerjee and Duflo claim (2010, p.61), but that even this sort of cumulative knowledge is not of the very high calibre that justifies noteworthy ethical misconducts. For example, several EADE case-studies truly tend, together, to produce a robust, coherent picture of the relationships between the price, usage, and demand of a medical item (say, a condom, an anti-mosquito net, or a water-cleaning solution) [15]. This is arguably one of the most significant extrapolated results of EADE short history. It is a valuable result, but few would argue that it is similar in shock, in scope, and in profound philosophical, theoretical, and practical implications to Zimbardo's and Milgram's experiments. For this sole reason, the consequentialist moral calculus already appears to be endangered from the outset.

With this in mind, it is pertinent to step back and recall a core trait of most consequentialist moral theories: they are very demanding because they call for maximisation. The question is thereby not only to know whether EADE is a good method to produce pertinent and useful results for reducing poverty, but moreover

to demonstrate that for each research question it is the best of all available methods. In this regard, a consequentialist would argue that before an RCT can be conducted it has to be proven that all other alternative routes to the desired result involve a less advantageous ratio of pains and pleasures. Almost by definition indeed, experiments produce more harm [16] than less intrusive methods such as surveys, simply because they impact on people's lives in a direct way. But EADE scholars look quite convinced (and spend some time and energy to convince their readers and sponsors) that the experimental method brings results that could not be obtained by conventional Economics. As Banerjee and Duflo claim, 'the most important element of the experimental approach may lie in the power (when working with a friendly implementing partner) to vary individual elements of the treatment in a way that helps us answer conceptual questions (albeit policy relevant ones) that could never be reliably answered in any other way' (Banerjee & Duflo 2009b, p.156). The special status given to experiments compared to other methods is arguably the first argument made by EADE scholars when they defend their practices (Banerjee & Duflo 2009a; 2010; 2011). However, many economists and statisticians refute this unconditional preference. Deaton, for example, insists that randomized trials 'do not occupy any special place in some hierarchy of evidence' (Deaton 2009, p.4); experiments have, according to him, 'no special ability to produce more credible knowledge than other methods' and are not likely to 'recover quantities that are useful for policy or understanding' (Deaton 2009, p.1). A more focused analysis made by Heckman attacked the idea that randomization was always the best experimental principle, arguing that 'it is by no means the only way or even the best way to achieve the desired variation' (Heckman 1991, p.1), echoing Royall's fear that randomization may receive an unmerited privileged status with the potential to provoke ethical misconducts in the name of methodology (Royall 1991). To be sure, randomization is the safest and quickest route to robust conclusions, but it is only so by a matter of degree of confidence.

But what makes the consequentialist justification of EADE really hazardous is less its foreseeable impact than its claim to disclose *unexpected* results. EADE scholars are usually enthusiastic for original hypotheses with the potential to reveal surprising results, since these innovative hypotheses precisely implement the counter-intuitive ideas that make EADE an innovative research agenda (e.g. Banerjee & Duflo 2009a, p.693; Banerjee & Duflo 2009b, p.154). Banerjee and Duflo admit that EADE case-studies are 'processes of "creative experimentation", where policymakers and researchers work together to think out of the box and learn from successes and failures' (Banerjee & Duflo 2009b, p.174). This claim unfolds a

clear ethical dilemma. One the one hand, if hypotheses are really counter-intuitive and hold great potential for finding innovative ways to fight poverty, then they condemn any effort to ethically justify in a consequentialist way the experiment before it begins, because the balance between the possible positive outcomes and the potential harms caused to the population is too hard to estimate. Surprising effects can harm the participants; for example, Gugerty and Kremer (2008), studying the impact of external funding on the organisation of community associations, observed that such an input of money was detrimental to the least-educated women of these associations. On the other hand, if hypotheses are less radical given the existing literature, then results are more foreseeable and may therefore serve as the basis of a prospective cost-benefit analysis, but the potential gain in insight from the experiments is then too low to justify any potential harm and therefore any RCT. In this light, we would not suggest to drop the idea of original hypotheses, but rather to ban RCTs from the domains where the risk of unexpected effects is too high, most remarkably policies related to serious health conditions. In this field, unexpected results might quickly lead to disaster, as several case-studies demonstrate. An experiment led by Duflo, Dupas and Kremer that analysed 'whether and how the two [information and formation] programs affected teenage fertility and the risk of sexually transmitted infection' (Duflo, Dupas & Kremer 2011, p.3) may well have produced confusion and misunderstanding in several individuals' minds, leading to the opposite of the objective, i.e. risky sexual practices; in a field such as sexuality and family planning, Cartesian rationality is never as pregnant as one would think. RCTs on HIV transmission (e.g. Thornton 2008) are more condemnable and constitute the most paradigmatic examples of the dangerousness of unexpected (negative) results. Even though a RCT on the impact of financial rewards on sexually transmitted diseases ran by De Walque and colleagues (2012) had previously concluded that conditional cash transfers are a promising tool in the fight against these illnesses, Gong observed with a similar experiment that individuals surprised by a HIV-positive status then adopted a more risky sexual behavior, 'an unintended consequence of testing' (Gong 2012, p.4). Similarly, Kohler and Thornton (2012) 'find no effect of offered incentives on HIV status or on reported sexual behavior. However, shortly after receiving the reward, men who received the cash transfer were 9 percentage points more likely and women were 6.7 percentage points less likely to engage in risky sex' (Kohler & Thornton 2012, p.165). Put simply, the experiments played a role in producing HIV contaminations. As Zimbardo rightly stated, 'a study which presents results that are not surprising to the scientific research community is not justified in subjecting volunteers to

harm' (Zimbardo 1973, p.245). We would add that that a study which is based on too original hypotheses is also unjustifiable when it comes to serious health conditions.

In sum, several factors make the project of ethically justifying the use of RCTs in Development Economics with a consequentialist calculus rather hazardous. EADE would therefore be inspired to fulfil as much as possible the deontological rules governing randomization, consent/deception, instrumentalization, accountability, and foreign intervention that we put forward below. The predicable cost-benefits balance of many EADE case-studies, which should include the possibility of harmful unexpected results, is less favourable than that of less intrusive methods. Risks of social experiments are indeed very often unforeseeable, which is why several issues – most prominently serious health conditions – should not be investigated by RCTs. EADE should therefore lean towards studies like that conducted in by Banerjee, Cole, Duflo and Linden (2007) – which tested the respective efficiencies of two different school remedial education programmes – rather than the aforementioned studies on HIV.

The 'randomization problem'

Because justifying EADE case-studies with a consequentialist calculus proves hazardous, one should pay attention to deontological rules. The most significant deontological moral problem comes from randomization. Randomization is a morally contentious practice since it seems to be a fair procedure that produces unfair outcomes: by randomly assigning participants to various treatments, EADE scholars advantage some people and disadvantage others even though they are considered to be equal. EADE scholars have never considered the moral dimension of this methodological choice seriously, despite the fact that the ethics of randomization in scientific trials has expansively been discussed in the most prominent journals of biomedical sciences (e.g. Edwards et al. 1999).

Several philosophers have claimed that taking a decision on the basis of chance is morally justifiable, and even sometimes preferable to other logics of choice. Most notably, Stone (2011) has argued that lotteries are the most ethical logic of selection when alternative criteria for allocation are plagued by litigious underpinnings such as prejudice. Broome (1984) stressed that randomization is not a morally neutral decision. Arguing that selecting randomly is not a way of neutrally avoiding selection, since 'it commits us to one particular judgement between people: that they have more or less equal claims to the treatment' (Broome 1984, p.52), he concluded

that randomizing is not morally compatible with stating that some people have more justifiable claims for the treatment than others. In case we endorse the idea that all people potentially affected by randomization have equal claims, we may claim that randomization is a fair option, even though it produces unfairness.

The rich discussion on applied bioethics suggests, however, that the morality of randomization in experiments cannot be established in such a straightforward manner. Because medical trials are very often ran by medical doctors who are committed to the absolute deontological rule of therapeutic beneficence to their patients, what matters is the precise way randomization is designed: the experimental design cannot lead the physician to offer a sub-optimal treatment for his/her patients/participants:

> 'Clinicians and ethics committees are concerned with two sorts of obligations: the obligation to safeguard the rights of individual trial participants and the obligation to society to facilitate research aimed at improving medical treatment. Does randomization, as such, create a tension between these two obligations? The individual obligation requires that each patient is offered one or more treatments deemed to be appropriate for that particular person. Under randomization, treatment is assigned according to the imperatives of the experimental design' (Lilford & Jackson 1995, p.552)

This conflation in clinical RCTs of the two seemingly incompatible practices (and their correlated moral obligations) of individual care on the one hand and beneficial social consequences on the other hand (read Gifford 1986 on this opposition), has led several ethical committees to severely constrain the realm of acceptable clinical trials by requiring 'equipoise'[17], which means that researchers 'must be indifferent to the therapeutic value of the experimental and control treatments evaluated in the trial' (Miller & Brody 2003, p.23), 'in a genuine uncertainty about the relative merits of the various arms of the trial' (Lantos 1994, p.2653). Only under equipoise is the physician able to both at once conduct a socially useful research and provide the best possible treatment for each patient. A direct consequence of equipoise is the interdiction to set up a RCT in which one of the arms might prove harmful: all treatments are thought to be more beneficial than an absence of action. The use of placebo is therefore severely restricted. Echoing Freedman's 1987 original position, Angell recalls that 'only when there is no known effective treatment is it ethical to compare a potential new treatment with a placebo. When effective treatment exists, a placebo may not be used. Instead, subjects in the

control group of the study must receive the best known treatment' (Angell 1997, p.847).

The principle of equipoise has, however, been hotly contested. Miller and Brody (2003), most notably, have claimed that the concept is 'flawed' and 'should be abandoned' because the ethics of research and of therapy are 'fundamentally different'; noting that 'clinical research involved an inherent tension between pursuing rigorous science and protecting research participants from harm' (Miller & Brody 2003, p.21), they suggested that this tension cannot be solved, as no physician would ever decide of a treatment by flipping a coin, even in a honest state of doubt as regards the respective merits of the various treatments at hand. The idea of equipoise is based, they argue, on the false belief that 'patients' interests and not science's are being served by participation in randomized clinical trials' (Miller & Brody 2003, p.23). In this view, research and care should be considered to be completely different practices, each obeying to a specific set of ethical guidelines. The ethics of research should, in their view, only be governed by careful risk assessments. From a different angle, Fried and Krishnan (2004) similarly argue that research and therapeutic care (and their respective ethics) should be sharply distinguished. Having shown that equipoise, albeit theoretical attractive, is almost systematically ignored in practice, they suggest that research should be guided by the alternative principle of 'positive expected value', necessarily accompanied by more rigorous requirements of informed consent and protection of the participant during the trial (Fried & Krishnan 2004).

This discussion on randomization and equipoise cannot be ignored by development economists. A first way to look at this issue is to understand it at the abstract philosophical level of people like Broome and Stone, and to consider each RCT as a political action. In this context, randomization seems hardly defensible since neither Stone's nor Broome's principles are met. Randomization also violates the prioritarian moral principle of ensuring a certain level of well-being to the worse-off sub-population before thinking of either maximising in absolute terms the wealth of the population (consequentialist version) or ensuring individual freedom (liberal version). By operating a random logic, EADE scholars are blind to the effects of their experiments on fragile individuals in highly precarious situations: 'by explicitly refusing to exploit private information held by study participants, randomized interventions routinely treat individuals known not to need the intervention instead of those known to be in need, thereby predictably wasting scarce resources' (Barrett & Carter 2010, p.11). Prioritarians would argue

that experimental designs should be less 'hardship-blind'; instead of sticking to randomness they might consider taking account of the vulnerability of their 'participants' [18].

A second way to look at randomization in EADE is to acknowledge its scientific dimension and to observe that several RCTs depart from equipoise, in the way that their experimenters have chosen *not* to provide the best treatment to one or several subgroups, in other words decided *not to help* a certain number of individuals in need in the most appropriate manner possible. Karlan and Zinman's (2010) randomization of credit attribution, Ashraf, Berry and Shapiro's (2007) randomization of the price of water-cleaning solutions, or Banerjee, Duflo, Glennerster and Kothari's (2010) RCT on immunisation incentives are problematic cases in this respect. Even if development economists have officially no duty to care comparable to that of Hippocrates's oath, they would gain in considering that they fictionally have one and that they are thereby subjected to the principle of equipoise.

The lack of equipoise in the RCT occasionally leads the local organizations who co-conduct the RCT to 'exploit local information to improve the targeting of interventions to reach intended beneficiaries, [...] hence exploiting precisely the asymmetric information that randomization seeks to overcome' (Barrett & Carter 2010, p.10):

> 'Field partners less concerned with statistical purity than with practical development impacts commonly deem it unethical to deny a "control group" the benefits of an intervention strongly believed to have salutary effects or to knowingly "treat" one household instead of another when the latter is strongly believed likely to gain and the former not. Well-meaning field implementers thus quietly contravene the experimental design, compromising the internal validity of the research and reintroducing precisely the unobserved heterogeneity that randomization was meant to overcome' (Barrett & Carter 2010, p.11)

If we chose ignore this practical challenge and adopt instead either Fried and Krishnan's or Miller and Brody's alternatives to equipoise, the design of experiments in which one arm is expected to bring more benefits to the participants is not necessarily ethically problematic. It would depend on either their potential risks (Miller & Brody) or on the strength of the participants' consent and protection (Fried & Krishnan). We would nonetheless advocate equipoise in EADE experimental designs, not quite because development economics would not have (together with their scientific duties) some sort of duty of care towards the people

they investigate, or because having two arms of different force creates contestations in the field, but rather because the three requirements required by Miller and Brody and Fried and Krishnan – risks, consent, protection – are very often uncertain in EADE RCTs, as our other paragraphs show.

The 'consent problem'

Some scholars may be tempted to claim that the ethical problem of randomization dissolves as soon as participants engage in the trial with 'informed consent', in other words if they have not been deceived in one way or another. As we have seen, those who propose to depart from equipoise stress the need to enhance the standards of what is usually thought of as 'informed consent'. In a paper that compared experimental practices in Economics and Psychology, Hertwig and Ortmann made the statement that 'economists virtually never deceive participants' (Hertwig & Ortmann 2001, p.383); twelve years later, we are forced to acknowledge that this observation has been made false by the rise of EADE during the 2000s. Given the above discussion on randomization in EADE, informed consent and deception need to be seriously addressed.

Consent could be defined as the 'autonomous authorisation by one person to permit another person to carry out an agreed procedure which affects the subject' (Hewlett 1996, p.232). Conversely, deception in scientific research could be defined as the situation in which the researcher voluntarily fails to reach a state of informed consent through 'an explicit misstatement of fact: stating a false purpose for an experiment, giving incorrect information about stimulus material, providing false feedback to participants about their or someone else's performance, or the use of confederates' (Nicks, Korn & Mainieri 1997, p.70). This definition let us easily imagine what a deontological point of view on the issue would be. Since deception is, essentially, a lie, any coherent deontologists would agree to ban the use of deception. [19] The case has already been pleaded in psychology:

> 'For Kant, any form of deception in psychological research would be a priori immoral if it either provided subjects with untruthful information or treated them merely as means to a goal rather than as ends in themselves'[20] (Schlenker & Forsyth 1977, p.372)

This deontological opposition to deception is based on the absolute interdiction to violate the autonomy of the subject and its individual rights. This interdiction implies a serious interpretation of what the participant's informed consent really

is. Hewlett (1996) considers that consent is genuine and therefore ethically acceptable only when four elements are met. First, the subject has to be mentally, intellectually and emotionally competent to understand the full scope of the experiment. This excludes several classes of people, such as children, of the vast majority of trials. Second, sufficient and unbiased information has to be provided to the subject; consent has to be fully informed, that is, the physician is not only required to explain to the participant the specific arm of the RCT in which he/she is enrolled, but he is more generally obliged to make sure the participant knows the various arms of the trial and understands its experimental design. Third, the subject's understanding of this information has to be perfect, which means that the researcher has to formally assess this understanding in some way or another. Fourth, participation has to be unambiguously voluntary; this is stressed because participants are sometimes so vulnerable that consent is not genuine: 'many patient invited to participate in clinical research will have an illness and the experience of illness [...] and the accompanying psychological response [...] may well reduce autonomy' (Hewlett 1996, p.233). For this same reason of voluntariness, pregnant women are not allowed to participate in trials, because the baby, who has no agency, is impacted by the experiment.

Besides the deontological argument in terms of individual autonomy and its ensuing ethical restrictions, deception is actually also a problem for consequentialists. Reflecting on the methodological reasons that would encourage psychologists to abandon deception, Bonetti saw no point to drop the practice, but still recognised that in some cases 'deception is ethically unacceptable because it may cause serious harm to the subjects' (Bonetti 1998, p.390). Such a consequentialist stance on deception – according to which the practice could be authorised only when a) its consequences are negligible, b) the scientific enquiry unambiguously requires it, and c) the probable discovery is particularly important – has been endorsed by the American Psychological Association since the 1970s [21]. Consequently, whilst 'between the 1950s and the 1970s the use of deception increased significantly, [...] since 1980 there appears to have been a decrease in the use of deception as compared to previous decades, which is related to changes in theory, methods, ethical standards, and federal regulation of research' (Nicks, Korn & Mainieri 1997, p.69).

For both consequentialist and deontological reasons, the use of deception has therefore been severely restricted in biomedical research; fully informed consent is almost always needed. We see no reason why EADE studies would escape these guidelines; so far the matter has been taken very lightly. As Banerjee and Duflo

explain in a candid way, 'when it is necessary for the evaluation that individuals not be aware that they are excluded from the program, ethics committees typically grant an exemption from full disclosure until the end-line survey is completed, at least when the fact of being studied in the control group does not present any risk to the subject. In these cases, participants at the ground level are not told that randomization was involved' (Banerjee & Duflo 2009b, p.167). Most case-studies did not thereby meet the principles of informed consent and non-deception seriously understood. As regards Hewlett's first component, the competence of the subject, cases abound in which children have been included in the trial, and in several cases it is doubtful that the public has always had sufficient education to understand all the stakes of the experiment. In an equipoise research design, however, this first component is not highly problematic. More contentious is the second component, that of full information. Most of the time, individuals learn that there is a study going on but are not further informed of the full scope, aims, and methodological design of the RCT, as required in medical research. Several studies go further in the non-observance of the informed consent principle. For instance, Ashraf, Bery and Shapiro, randomizing in Zambia the price of water-cleaning solutions, told their door-to-door surveyors to give a false explanation if a client questioned the especially low/high price (Ashraf, Berry & Shapiro 2006). In their recent EADE study of micro-credit screening procedures, conducted in South Africa, Karlan and Zinman lied to both credit applicants (their "participants") and the bank managers who practically implemented their experiment (Karlan & Zinman 2010). The aforementioned experiment carried out in Tangiers by Devoto and colleagues went a step further, employing a survey team who was not informed of the whole project (Devoto et al. 2011). As previously explained, this ignorance is meant to prevent changes in the participants' behaviours that could threaten the scientific outcome (Hawthorne / John Henry effects). In this context, the third component of consent, that of the assurance of perfect understanding, is quite logically never met. To us, the fourth component, non-vulnerability, is of foremost importance in EADE since in many cases the poverty of the individuals under study makes them vulnerable. Consequently, it could be advised to avoid experiments on people who are in a situation of severe hardship or already exposed to a serious problem. Very poor people and individuals who could be enrolled in an experiment by virtue of doing something else *precisely because they are vulnerable* (e.g. individuals who are enrolled in a RCT while they go to the hospital for health reasons) should not take part in RCTs, as it has already been the case. Barrett and Carter (2010) adequately stressed this point by taking the example of the individuals who take part in an experiment as they ask for a credit (like in Field & Rohini 2008):

> '[these experiments] created real debt for the randomly de-rationed, exposing them to not only the benefits of liquidity but also to the penalties of default. Given that the lender's scoring model predicted repayment difficulties for the de-rationed, ethical concerns appear important here. From a human subjects protection perspective, implementation of such experiments would thus require full disclosure to the de-rationed and an ability to compensate them for any harm caused for the sake of experimental learning' (Barrett & Carter 2010, p.36)

We have seen that consequentialists do not provide such rigorous rules for consent, and focus instead on the risky consequences of deception. Because most EADE scholars would argue that ensuring full consent would ruin the scientificity of RCTs, the requirements put forward by this alternative approach have to be considered. The problem is that all three requirements – negligible consequences, unambiguous scientific need for the study and its experimental design, and particular importance of the results – are not usually met. First, whilst the consequences of many RCTs in Development Economics are negligible, foreseeing the possible consequences of a large-scale social intervention is an impossible task (see above). Second, scientific enquiry does not unambiguously requires RCTs and even deception, as most of the times alternative approaches or experimental designs could be set up that are compatible with more consent. Third, and as argued above, it is hard to argue that a significant number of crucial discoveries have so far been disclosed by single EADE case-studies; to be sure, EADE as a broad research programme has already unfolded important and useful knowledge, but the requirement stands for individual case-studies, not for the RCT technique itself. Should these consequentialist requirements be met in the future, EADE scholars would nevertheless have the obligation, like their colleagues in Psychology, to provide a full head-to-head debriefing to all deceived participants [22].

Whilst these requirements should be followed as closely as possible in EADE case-studies randomizing *individuals*, they are not transposable to those conducted *at the group level,* which form a significant proportion of EADE RCTs. Randomizing groups might therefore appear to be a convenient way to escape the constraints of individual consent, since they become practically unfeasible, and from this to secure better statistics: 'many prominent studies randomize treatments in group cluster designs such that individuals are unaware that they are (or are not) part of an experiment' (Barrett & Carter 2010, p.9). To be sure, informed consent is impossible in vast experiments such as those investigating electoral campaigns (e.g. Vicente and Wantchekon 2009; Aker, Collier & Vicente 2010; Vicente 2010; Fafchamps & Vicente 2012). Is such cluster randomization necessarily unethical?

Should we abandon informed consent in EADE because they are not reasonably doable? There is no reason why informed consent should, in principle, be neglected. Put differently, there is no way an important ethical principle should be neglected for a methodological reason – rather, it should be adapted. We put forward the suggestion that consent should still necessarily be granted, but by the groups' leaders and not necessarily at the individual level of the subjects who take part in the experiment. It may indeed be argued, in line with the ethics of discussion of Apel and Habermas, or perhaps in line with Rortyan pragmatics [23], that morally right rules and actions emerge from collective, rational deliberative processes between all stakeholders or stakeholders' elected representatives. What this line of thought suggests, is that the rules of a game (say a RCT) are only legitimate and ethically valid if they have gone through a transparent process of informed dialogue exempt of power intimidations. The problem here is that many previous EADE studies have not fulfilled this procedure, either because not all major stakeholders' representatives have agreed, or because the leaders who gave their consent cannot be considered to be, according to democratic standards, the legitimate representatives of the individuals who will take part in the experiment.

In sum, we may therefore suggest that RCTs that operate randomization at the group level should strive to reach an indirect consent as legitimate and wide as possible. EADE case studies that randomize individuals should seek to stand as closely as possible to the four requirements of informed consent, and not rely on the consequentialist justification of deception, which is too rarely effective. EADE case-studies must indeed actually avoid deception on an *a priori* basis, rather than adopting the consequentialist stance according to which deception is allowed given its benefits. Does the acceptance of such a rigorous position on deception bring a monkey on the EADE scholar's back? Methodologically speaking, it is certainly not impossible to design an interesting, useful and valid experiment without recurring to deception.

The 'instrumentalization problem'

The 'randomization' and the 'consent' problems are actually closely related. Indeed both can be considered to be the emerging parts of a more fundamental ethical issue – that of using people as means towards an end, a moral wrong (according to the deontological doctrine) commonly referred to as 'instrumentalization'. All EADE case-studies manipulate people in order to reveal a scientific result which might be useful to policy-makers willing to reduce poverty; in this, one could argue

that EADE indeed *instrumentalizes* individuals. Generally speaking, however, it seems that any experimental design implies to use human beings as means towards a specific end – that of testing the hypotheses and reaching scientific conclusions. According to Lantos though, 'physicians (and, by Kantian arguments, all rational people) are ethically obliged to treat other people as ends in themselves, rather than as means' (Lantos 1994, p.2653). How is this possible in the context of a RCT?

According to Kaufmann, the deontological interdiction of instrumentalization has to be understood in a realistic way. He identifies three conditions for considering that someone really *uses* someone and hence acts immorally:

> 'I only use a person if I interact with that person. This condition should be understood to imply that an act of mine has some foreseeable effect on that other person'
> 'A does not use a person B if in interacting with him she is finally aiming at a state that is supposed to be good or even at a state that is supposed to be bad for B. [...] 'For A to use B, A must pursue a goal that does not essentially refer to B'
> 'A only uses a person B if A believes that B can contribute to his goal'
> 'To summarize these results I would say that A uses B if and only if A interacts with B because he believes that B's presence or participation can contribute to the realization of his goal but that this goal does not essentially refer to B' (all these citations from Kaufmann 2011)

With such an argument, it may appear that EADE case-studies do not instrumentalize people. Whilst the first and third condition are usually met in the case of EADE, the second condition seems to be unmet: EADE scholars indeed believe that the goal of their case-studies refer to their participants: the aim is not solely to reveal a scientific truth (if this is the case, then the three conditions are met and EADE case-studies treat people *merely* as means), but also to improve their situation, i.e. to fight against a clearly identified social problem experienced by the participants themselves by a better knowledge of human behaviours. In this case, since EADE scholars pursue a goal which is related to their participants, they seem to instrumentalize no-one (like in Miguel & Kremer 2001 an 2004).

This statement unfortunately suffers several exceptions. Various EADE studies seem to be only pursuing a scientific goal with no project of being beneficial to their participants. For example, the study of corruption in Bertrand, Djankov, Hanna & Mullainathan 2007, in which individuals were encouraged to bribe, did clearly not aim at improving their participant's state: it only aimed at producing a scientific discovery. Almost all experiments related to credit lending present this problem.

This problem is very closely related to that of deception: it can be argued that there is no instrumentalization as soon as all participants are fully aware of the procedure they are in. As Kaufmann indeed further details, instrumentalization is avoided when 'the person I use gives his consent that we have an interaction at all and agrees about what kind of interaction we have' (Kaufman 2011, p.62). More specifically, Hawlett argues that 'by consenting, the patient knowingly agrees to this goal [of the experiment] and makes it his own, becoming an active participant in the research so that it cannot be said that the patient is being used as a means to an end' (Hewlett 1996, p.232). Through this lens, informed consent takes an even bigger importance as it can, if effective, be a key criterion for judging whether or not the researcher uses the participants as mere means.

The 'accountability problem'

The problem of the negative effects of experiments, exposed in our explanation of the 'hazardous calculus' problem, opens up the issue of researchers' accountability. In their very succinct presentation of the ethical dimension of RCTs in Development Economics, Humphreys and Weinstein asked: 'to what extent are researchers responsible for outcomes that result from manipulations implemented by third parties?' (Humphreys & Weinstein 2009, p.375). The question is highly pertinent and could be reformulated in an even more straightforward way: are researchers accountable for the harmful effects of their RCTs? Our point here is that the problem of accountability has not yet been firmly handled in EADE.

In the biomedical sciences it is widely accepted that 'investigators are responsible for all subjects enrolled in a trial, not just some of them, and the goals of the research are always secondary to the well-being of the participants' (Angell 1997, p.847). In these fields, researchers know that they play for high stakes: ill-designed experiments that provoke harm may cause them life bans from the academia or might even bring them to a court of justice if a well-informed participant decides so. Since moral responsibility without legal accountability is likely to be taken too lightly, experiments are always accompanied by accountability agreements.

In contrast, five characteristics of EADE make the accountability of their scholars unsure and therefore ethically problematic. First, there is no compulsory ethical framework which fixes the rules of justifiable, well-designed experiments. Such a system would not only restrain EADE scholars' manoeuvre in a way that negative outcomes would be rare, it could also at the same time state clear accountability

rules when unexpected and unforeseeable negative effects occur. Second, RCTs are rarely accompanied by a detailed agreement on potential compensations for the people who were harmed by the experiment, which means that scholars are not compelled to financially take on the negative consequences of their trials in case they exist. Third, experimenters are foreign citizens and therefore usually enjoy a secure judicial security. Economists coming from a foreign country for a limited amount of time rarely fear punishment in case of failure. Scholars do not face the prospect of a significant penalty should their experiments turn bad, either overall or for specific individuals. EADE case-studies take place in underdeveloped countries, where the legal accountability of world-class researchers would certainly not, in practice, be as constraining as the one they would face in their own soil. Fourth, the intermingling of research and grassroots action, a core characteristic of EADE, makes it difficult to precisely separate the researcher's own moral – and legal – responsibility from that of local partners, as it is often unclear whether it is a local group or the economist who first imagined and developed the experiment, and whether this programme was initially thought of as an experiment. In sum, we suggest that EADE case-studies should be accompanied by clear accountability agreements.

The 'foreign intervention problem'

Whereas EADE are in no way the kind of imperialist moves usually labelled 'neo-colonialism', it remains that some of its studies are ethically contestable in that they conduct a foreign intrusion in local politics. The point here is to acknowledge that some case-studies may have too large an impact on local populations to be considered simply as scientific research or innocent local scarcity relief. This particular political dimension presents both consequentialist and deontological dimensions.

From a consequentialist point of view, the foreign intervention problem joins that of the hazardous calculus. Artificial interventions in tension-ridden political episodes such as elections may provoke unpredictable chain reactions. As the so-called Arab Spring movement illustrates, large-scale political unrest sometimes erupts from seemingly insignificant events.

On the deontological side, the issue is first and foremost that of influencing political situations in other countries – which are sometimes in a state of very precarious equilibrium, like Mozambique, Nigeria, or Benin – as it constitutes a breach in sovereignty if all the stakeholders do not agree in the process. Consider the following

question: what if a Mozambican researcher had travelled with a significant budget (to the local standards) to Florida in 1999-2000, arguing that American democracy is not as sane as it should be, and set up an experiment seeking to enhance poor people's electoral participation? From a consequentialist point of view, this person could have turned American recent history upside down, but more than its consequences it is the very fact that foreign people interfere with domestic politics that makes it ethically questionable. RCTs are the means to promote and implement foreign values. If normative assumptions and enquiries targeting health problems are not, ethically speaking, highly problematic, studies on governance and education are indeed *a priori* less innocent, as they routinely seek to improve democracy, diminish clientelism, or – all objectives that are laudable in Western countries but not especially pertinent to pursue immediately in all developing countries.

Most 'political' RCTs are ethically questionable for these reasons. For instance, the experiment conducted in Mozambique by Aker, Collier and Vicente constitutes a clearly problematic RCT. First, from a deontological point of view, it promotes a specific political ideal. As they clearly note, their 'idea is to go beyond specific electoral problems to try to increase voter participation and electoral accountability' (Aker, Collier & Vicente 2010, pp.1-2). The first pages of their paper are particularly telling in this regard; the authors spend some times explaining how imperfect democracy is in Mozambique, in a way that seems to justify and legitimate their intervention. Second, from a consequentialist perspective, the study did impact the course of the electoral process and had the potential to provoke unanticipated consequences. Through the theoretically noble objective of strengthening democracy in a regime which is, we acknowledge, not beyond reproach, these researchers influenced the results of the elections and may have created situations of trouble. Even if they expected this impact to be limited, their action was still politically significant.

Other political RCTs suffer from the same problem. Fafchamps and Vicente (2012) claimed to have an impact on the 2007 Nigerian elections by conducting a randomized anti-violence campaign. Whilst the aim is hardly ideological and hence unambiguously laudable, and despite of a global positive impact, researchers have intervened in the local political process and may have provoked unexpected events. Vicente's field experiment on vote-buying in Sao-Tome (Vicente 2013) indeed revealed that campaigns like those implemented by EADE can have surprising and debatable effects such as a fall in electoral participation or a weakening of the challenger's position. Wantchekon's large-scale experiment conducted in Benin

during the 2001 presidential election (first described in Wantchekon 2003), which 'exposed randomly selected villages to "purely" redistributive/clientelistic or "purely" national public-goods platforms' (Vicente & Wantchekon 2009, p.298) in order to see the impact of clientelistic electoral campaigns on vote, is less ethically problematic because the experimental design was such that the 'probability that the experiment would change the electoral aftermath was low' (Vicente & Wantchekon 2009, p.299). However, the RCT did certainly operate modifications of local politics [24] that once again could have provoked chain-reactions. When the authors list the two 'important shortcomings with experimental methods for studying clientelism and vote buying', it is particularly telling that none relates to the contentious moral issue of foreign intervention in unstable countries.

In this context but on a minor note, some countries – and even some districts – appear to host such a big amount of EADE case-studies that they look, in a way, like open-air laboratories. Kenya is one of these countries. EADE scholars have intervened at numerous occasions in its education, healthcare, microfinance, and political systems [25]. Together, these studies/actions must have had a significant combined effect, and should therefore not be considered to be essentially different from some other forms of foreign intervention that are already under ethical scrutiny and questioning.

To be sure, social research can possess an engaged dimension. It is our opinion, though, that political objectives (contrarily to health or education goals) always pertain to ideology and hence experiments that aim to impact on contentious political contexts should be avoided. To us, there are two mutually exclusive possibilities: either is EADE a platform for scientific advance – and in this case its experiments should satisfy all the aforementioned ethical requirements (most importantly here informed consent) – or it is an engaged political programme.

Conclusions

Given the 'enormous complexity of making ethically based decisions about interventions in human experimentation' (Zimbardo 1973, p.244), we do not claim to have cast a definitive light on the ethics of EADE, nor are we able, given the variability of research designs within this agenda, to provide a binary acceptation/rejection of EADE as a research programme – such an attitude would be absurd. However, we are now in a clearer position than before thanks to a well-defined list of six ethical issues that may potentially occur, to varying degrees, in EADE.

The significance of these problems should encourage EADE scholars to be more reflective vis-à-vis their practices. As we have highlighted, these six problems are closely intertwined and hence call for a comprehensive understanding of the practical ethical requirement that they call for.

These ethical guidelines could be briefly summed up as follows. First, *randomization* has to obey the principle of equipoise, not because development economists are somehow committed to a deontological obligation to care for the participants, but rather because informed consent seems to be very difficult to obtain in this field. Second, even though equipoise is followed, substantial efforts should be done to reach *informed consent*, seriously understood with its four components. For this reason, we advise EADE scholars to bar incompetent people and pregnant women from experiments, to exclude children from experiments apart from the most inoffensive ones (like those on textbooks and test scores for example), and to avoid experiments that build on real situations of vulnerability (e.g. credit, illness). For cluster trials, thorough efforts should be made to ensure that stakeholders' representatives are in a truly legitimate position for the entire population under experiment. Third, as regards *instrumentalization*, we invite EADE scholars to avoid experiments whose goals are uniquely scientific, without aiming to improve their participant's well-being. We have seen that these three requirements are to be fulfilled as tightly as possible because their violation can hardly be justified with a consequentialist *harm/benefit calculus*. The possibility of potentially severe unexpected effects (such as HIV contamination or credit default) and the presence of alternative research methods make this kind of moral argument hazardous and pleads for a ban of RCTs related to serious health conditions. Fifth, as regards researchers' *accountability* for the potentially harmful (unintended) consequences of their experiment, EADE studies should be accompanied by a detailed compensation procedure with a compulsory legal dimension. Experimenters should be particularly careful in the follow-up of 'successful' experiments, since global positive effects may hide individual negative impacts. Finally, we invite EADE researchers to be more careful in their use of 'political' RCTs because of the *foreign intervention* problem, especially during elections. Not only are these experiments too risky, they are also a form of foreign intervention under the cover of science.

So far, only very few EADE case studies have fulfilled all these ethical requirements to a reasonable extent. These ethical guidelines should not, however, be seen as a constraint, but rather as the condition of possibility for producing both humane and scientifically sound research. If EADE scholars are to be truthful to

their laudable objectives – such as the reduction of poverty and the increase of well-being in underdeveloped countries – they will have to adopt such a point of view. We believe that the reflections put forward in the present article have the potential to initiate the move towards a more ethical EADE and perhaps even to frame the discussion of the ethical committees that have to assess RCTs in Development Economics. Ideally, adhesion to the major professional associations of Economists should be accompanied by an endorsement of these principles, and publication to the most prominent journals should be conditioned to their effective fulfilment, as it is already the case in Medicine.

Chances are great, however, that this move proves hard to follow. As Angell denounced in her 1997 editorial of the *New England Journal of Medicine* dedicated to the ethics of conducting medical trials in developing countries, research in the biomedical sciences currently seems to depart from the strong ethical principles that were developed in the second half of the twentieth century and which recurrently served as a model in the present analysis. She identified two main causes for this worrying trend:

> 'One reason may be a slavish adherence to the tenets of clinical trials. According to these, all trials should be randomized, double-blind, and placebo-controlled, if at all possible. [...] The retreat from ethical principles may also be explained by some of the exigencies of doing clinical research in an increasingly regulated and competitive environment. Clinical trials have become a big business, with many of the same imperatives. To survive, it is necessary to get the work done as quickly as possible, with a minimum of obstacles' (Angell 1997, p.849)

As these two causes are present in Development Economics, the importance of a genuine adherence of EADE scholars to ethical principles is even greater. As De Vries thoughtfully argued, precise ethical discussions on specific aspects of particular case studies tend to produce incongruous judgements as soon as they are not nurtured by a sincere interest in the broader philosophical questions that make them appear (De Vries 2011). In this regard, to set up a specific framework for assessing the ethical dimension of proposed EADE case-studies is not enough: scholars have to convinced themselves that following a moral obligation is, as Kant argued, not a constraint but an increase in autonomy and humanity.

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Endnotes

[1] For example, most members of the board of the MIT, where the JPAL is based, are M.D. or researchers in Medical sciences, and neither a philosopher nor an economist is present.

[2] This common nature has two facets: both the *criteria for evaluation* and the *members of the screening committee* are, most of the time, identical.

[3] This loose control may be an effect of the second point, in the sense that studies in Economics do most of the time look, intuitively, less ethically problematic than experiments in health sciences.

[4] Besides, research in Economics never figures in the literature on the ethics of research practices generally speaking.

[5] Despite the fact that most MIT research centers are labeled 'labs', we nonetheless find this label particularly telling.

[6] A program, in this sense, may perfectly be an absence or a combination of treatments.

[7] *Problematic* is by no way here a synonym of *wrong*. By *problematic*, we mean something which raises question, which might – perhaps – eventually be wrong and should therefore be scrutinized. In this regard, our article *problematises*, in a Foucauldian sense, the seemingly neutral, harmless character of EADE studies, behind their truly noble intentions. The idea is to encourage a 'reflective relation

to the situations in which we already find ourselves, whether consciously or not, enmeshed' (Koopman 2010, p.110).

[8] One is targeted at weak students and is human-based, the other one is for all students and is computer-based.

[9] As Alberti accuses, it nevertheless remains that 'large variations in practice still exist among different ethics committees' (Alberti 1995, p.639).

[10] Read Telles de Almeida & Schramm (1999), but also but also Halioua (2004), and Michaud et al. (1990).

[11] Writing in 1985, Adair et al. did not observe any significant change in mentality since the introduction in 1973 by the American Psychological Association of mandatory ethical guidelines for experiments in Psychology (Adair, Dushenko & Lindsay 1985); at most, they noticed a slight decrease in malpractices during the year of their writing. However, twelve years later, Nicks et al. (1997) showed that this anomaly was actually a clear trend towards a wiser use of deception and other ethically problematic research practices.

[12] As Baumrind explains, 'the concrete benefit to humanity of a particular piece of work, not matter how competently handled, cannot justify the risk that real harm will be done to the subject' (Baumrind 1964, p.422).

[13] In these case, a massive raise, throughout the world, of people's consciousness that ordinary all men and women may cause fatal harm under certain circumstances.

[14] Such a move is of course highly contestable.

[15] Read for example Miguel & Kremer 2002; Kremer & Miguel 2007; Ashraf, Berry & Shapiro 2006; Cohen & Dupas 2008; Dupas 2009.

[16] And, potentially, more benefits.

[17] The concept has first been coined in Fried 1974.

[18] The word *participant*, used all throughout the literature, is, by the way, particularly ill-suited, since the concept of participation implies both a informed consent to the rules of the game being played and an initial will to partake, which is not the case in most of EADE case-studies, where 'participants' are very often

unaware that an experiment is taking place. See our reflections on the 'deception problem', *infra*.

[19] Lying is explicitly prohibited, in all situations, by Kant.

[20] The second reason evoked here by the authors to ban deception relates to our 'instrumentalization problem' (see below).

[21] Since 1973, the American Psychological Association indeed accepts the use of deception under these three conditions, thereby implying its negative ethical status: deception has to be 'justified by the study's prospective value', the experimenter has to 'consider alternative procedures', and 'if deception was used, to debrief participants as soon as possible' (read Nicks, Korn & Mainieri 1997, p.75). See also Kelman 1967.

[22] On this requirement, read Smith & Richardson 1983.

[23] Most famously Habermas 1992; Rorty 1999.

[24] Note that besides, the authors encouraged political leaders to engage in clientelism in several randomized locations (see above the "instrumentalization" problem) and failed to meet the requirement of (cluster) informed consent.

[25] e.g. Glewwe, Kremer & Moulin 2007; Kremer, Miguel & Thornton 2009; Cohen & Dupas 2008; Dupas 2009; Miguel & Kremer 2002; Miguel & Kremer 2004; Duflo, Dupas & Kremer 2011.

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