大连理工大学科技伦理与科技管理研究中心

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Research on Practice Route of Applied Ethics in East Asia

Proceedings of the 5th International Conference on Applied Ethics and Applied Philosophy in East Asia

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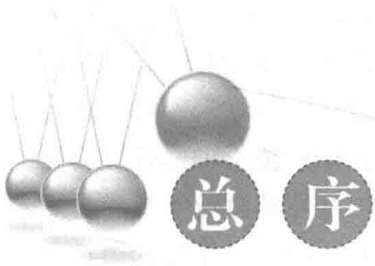

总序

进入21世纪以来，伴随着经济全球化的加速和知识经济时代的到来，科学研究与社会经济的联系比其他任何时候都更加紧密，日益呈现出职业化、社会化的发展趋势，科学研究的意义已显得不再像以前那样纯粹。在市场经济环境下，不少科学技术专家受到各种各样的利益诱惑，科学研究追求创造的理念大打折扣。人们在思考当科学技术为人类创造巨大的物质财富和精神财富的同时，科学研究的新成果与新理念对人类社会长期形成的社会伦理与道德底线提出了严峻挑战。科学道德诚信问题成为科学家和社会越来越关注的问题。面对这样的形势，科学共同体应当清醒地认识和分析在经济社会发展对科学技术的依存度如此之大的背景下，科学技术何去，社会经济何从，以及经济社会对科学道德诸多方面的深刻影响[①]。其核心问题是，科学技术进步应服务于全人类，服务于世界和平、发展与进步的崇高事业，而不能危害人类自身。因此，应该加强科学道德建设，强化学术界学术伦理观念，重建学术规范，重申科学伦理底线；大力宣传古今中外科学家的高尚品德和为科学真理而不惜牺牲的精神；在高校开设科学伦理课，通过课程教学真正做到科学伦理从学生抓起，使他们明白遵守科学道德比掌握科学知识更重要。为此，开展科技伦理与科技管理的问题研究与案例分析，对于指导科学伦理道德建设、推动科学技术快速发展具有重要的学术价值和社会价值。

现代科技的发展对现有伦理的挑战，也就是所谓的科技伦理是现代科学技术所引发的伦理问题，它包括网络伦理、核伦理、医学伦理、生命伦理、环境伦理（生态伦理）。哲学是一种反思的活动，伦理同样也是一种反思的活动。它们是对已发生的事情进行反思，也是对未来进行前瞻性的探讨。从科技伦理产生的时代背景，我们清楚地意识到，在科技伦理中包含着人类对科技的反思、对自然的反思、对人类自身的反思等。一味地依赖于科学技术（甚至包括经济、法律或其他）而不考虑伦理和哲学层面的话，新问题仍会层出不穷。伦

① 韩启德．科学共同体的科学道德责任．科技日报，2009-09-08.

理不是阻碍科技的发展，而是越来越融入到科技发展中，成为其中的一个部分。在科技发展中我们要反思自己的生活，反省我们自己该做什么，怎么做，该成为什么样的人。苏格拉底说："未经反省的人生不值得活。"同样，未经反思的科技是不能用来推广、应用和普及的。那么，究竟科技伦理或者说科技伦理学是什么呢？总的来说，也就是围绕人在科学与技术活动过程中科学技术与人、人与人、人对社会、人对自然的行为过程和后果所产生的伦理和道德的学问。总体而言，"科技伦理学主要有四个维度：第一，科技工作者和科技团体内部的道德关系和伦理规范。第二，科技工作者与一般社会、公民、政府等之间的道德关系和伦理规范。第三，科技工作者与非人类的自然环境、生命物种之间的道德关系和伦理规范。第四，科技工作者与作为研究对象的人类个体或群体之间的道德关系和伦理规范"①。正如我国科学技术哲学家刘大椿教授对科技伦理定义所做的概括：科技——"在求真与向善之间"。

科技管理是指通过对管理科学的运用，科技管理主体对科技活动中人力、物力、财力等资源进行分配、决策、组织、控制以取得更大的经济效益的过程。

科技伦理与科技管理不仅相互区别而且相互依存、相互渗透、相互补充、相互制约，两者之间存在着双向互动、辩证统一的关系。科技伦理对科技管理有导向和内化作用，科技管理对科技伦理有强化作用②。基于此，我们从科技伦理与科技管理的内在统一上来开展研究。具体来说，科技伦理基础理论研究主要探求科学伦理、技术伦理、工程伦理、科技伦理教育领域的基本理论问题。科技伦理应用研究主要针对高科技的伦理问题、引发的环境问题和管理问题开展反思和论证，并致力于寻求切实可行的伦理框架，以促进和保障新兴科技的健康和可持续发展。科学技术前沿的伦理治理研究主要围绕辨识和发现的科学技术前沿的伦理问题，从政府、企业、大学、科研机构等组织，以及科学团体、科学家、科技伦理学家、公众等各相关利益主体的不同角度，探索前沿科学技术伦理治理的组织模式与机制、制度模式及实施路径等相关问题。

大连理工大学哲学社会科学创新基地"科技伦理与科技管理研究中心"（以下简称"中心"）自"985 工程"二期作为教育部人文社科研究基地建立伊始，尽管主攻方向和各研究方向依托科技哲学与伦理、科学学与科技管理两个学科博士点，探索科学技术前沿问题，带有学科导向的特点，但在申请、承担和完成国家级和省部级科研项目的过程中，逐渐朝适应国家和人民的重大战略

① 张国清．当代科技革命与马克思主义．杭州：浙江大学出版社，2006：129.

② 戴艳军．科技管理伦理导论．北京：人民出版社，2005：78-80.

需求调整转向。突出表现在以下几方面：一是基于技术科学的强国战略与政策研究，先后承担完成这方面直接相关的校级重大项目、中国科学院学部咨询项目和国家自然科学基金项目。二是关于高科技与工程领域的伦理与治理问题研究，先后在中德科学中心资助下举办了中德双边高科技伦理研讨会，获得国家社科基金面上项目“实践有效性视角下的工程伦理研究”、国家社科基金重大项目“高科技伦理问题研究”。三是基于知识图谱的科学发现-技术创新管理与政策研究，先后主持和承担有关这一领域的国家自然科学基金与国家社科基金项目多项课题。这就为本中心以国家重大需求的问题导向调整主攻方向、设计重建研究方向奠定了扎实的基础。

中心自成立以来，围绕“科技伦理与科技管理”相关领域，加强了学术队伍建设，组建了跨学科、高水平的科研团队；加强了人才培养，造就了我国第一批科学学与科技管理学科的硕士、博士人才，特别是培养出我国第一批科学计量学博士，并在哲学与伦理学形成本科生-硕士生-博士生人才培养系列；加强了学科建设，集成现有博士点和硕士点力量，成功申办了哲学一级学科博士点，科技哲学成为辽宁省重点学科；加强了哲学社会科学基础设施建设，建立了有助于原创性研究的相关数据库、案例库和科学计量实验室；借鉴国外先进学术成果与研究方法，加强了国际学术合作与交流；紧密结合我国科学技术与经济社会发展的需要和振兴东北老工业基地的实际，承担了国家及地区科技伦理与科技管理相关领域重大项目，产出了一批高水平的学术成果。举办了重要的国际学术研讨会。

本着沟通交流、成果共享、共同提高的原则，大连理工大学人文与社会科学学部、“985 工程”教育部哲学社会科学创新基地、大连理工大学科技伦理与科技管理研究中心特推出“科技伦理与科技管理文库”。这套文库是一套跨越科学伦理与科技管理两个研究领域的综合性丛书，具有前沿性、交叉性、哲理性、现实性、综合性的特点，内容主要涵盖科技伦理及其治理问题的综合研究的诸多方面。这套文库是大连理工大学“建设世界一流大学”项目的重要组成部分。我们希望通过这套文库的持续不断的出版和若干年的努力，将中心（研究基地）建设成为在科技伦理和科技管理领域接近或达到国内一流学科水平和国际先进水平的国家级哲学社会科学重点研究基地，使之成为国内外科技伦理和科技管理研究领域的研究中心、信息资源中心和国际学术交流中心。

洪晓楠

2014 年 5 月 18 日

Foreword

Sponsored by Dalian University of Technology, Kobe University and Taiwan University and hosted by Dalian University of Technology, "The 5th International Conference of Applied Ethics and Applied Philosophy in East Asia was held from the 26th to 27th April, 2014 at Dalian University of Technology. More than 40 scholars and postgraduates from Mainland China, Taiwan, Japan and Korea participated in the conference. The topics covered included ethics of science and technology, environmental ethics, moral philosophy and its applied approaches, the historical and cultural resources of applied ethics of East Asia, the methodology of applied ethics and applied philosophy, Chinese philosophy and ethics of technology. The presentations and discussion centered on the above topics, trying to further expand the horizons of research into applied ethics and applied philosophy in East Asia. The conference made efforts to develop new practical pathways to promote the ethical thinking in the globalized world so that the applied philosophy will play its proper role in solving real major social problems.

In accordance with the joint promise made by the sponsors of the conference, the host university should be responsible for the publication of the proceedings. Supported by the Faculty of Humanity and Social Sciences, Dalian University of Technology, the Proceedings of the 5th International Conference of Applied Ethics and Applied Philosophy in East Asia will be published by the Science Press in the series of "Library of Sci-Tech Ethics and Sci-Tech Management. The proceedings include the papers submitted by scholars and postgraduates to this conference after the review by experts and revision by authors. Special gratitude goes to Professors Tsuyoshi Matsuda from Kobe University and Yuann Jeu-Jenq from Taiwan University for their great contributions to the publication of the proceedings. To improve the

quality of English writing, I invited Professor Wang Huili from School of Foreign Languages, Dalian University of Technology as the co-editor and thereby her hard work being appreciated.

The International Conference of Applied Ethics and Applied Philosophy in East Asia have been held five times with the increasingly mature, flourishing and profound momentum. In particular, great achievements have been made in cultivating young scholars. The academic ability of the postgraduates is elevated and the international horizons are expanded. It is expected that the publication of the proceedings will further boost the academic research on applied ethics and applied philosophy in East Asia, deepening the ideological exchange and cooperation between the scholars and postgraduates in this field. Based on the ideological resources of applied ethics and applied philosophy in East Asia, the harmony of the relationship between the sci-tech culture and human culture in the globalization era will be enhanced with the healthy and smooth development of human society.

Wang Qian
January, 2015
Dalian

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Two Sorts of Skepticism:
Ethical Debates between Evolutionism and Creationism

Yuann Jeu-Jenq
(Department of Philosophy, Taiwan University)

1. Introduction

With the rise of modern science, many religious ideas have been cast in doubt. Among these ideas, creationism with all the ideas it implies, was most targeted by the modern theory of evolution. This is possibly the most famous debate in the historical development of modern science. The debate boils down to the status of human beings and the significance of their life. Whether man is on the side of "an improved ape" or the side of "an angel to be improved" raises the attention of all people who care themselves and the world in which they are situated. Never before has scientific development caused such a tremendous anxiety. For the first time, for many at least, the meaning of life is fundamentally challenged with a reprehensible feeling. In face of the invincible power of modern science, not only the core position of humans in the universe is annihilated, but also in jeopardy the very notion of being 'rational animals'. Bowler explicitly says: "Reconciliation of evolution with traditional concepts of teleology and design became the chief aim of religious thinkers who tried to grapple with Darwin's theory". ①

What raises our attention in this debate is not what ends the debate, but what causes it. We intend to argue in this paper that in the debate between creationism and evolutionism, there was never any convincing idea explaining that the traditionally religious idea needs to be replaced with the newly

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① Bowler P. Evolution: The History of an Idea. Berkeley and Los Angeles: University of California Press, 1984: 206.

developed theory of evolution①. We want to stress instead that the debate is an ongoing one without decisive conclusion. The indecisiveness is reasonable as neither side contains well-founded reasons to stop the debate. Moreover, it is likely to say that both sides hold their reasons not from firm basis of any kind, but presuppositions of metaphysical kind. We can boldly say both sides come to the debate with their presuppositions. While the presupposition of the creationism refers to a transcendentally intelligible being, the presupposition of evolutionism refers to a presumed materialism. As we all know that there is no possibility of comparing two metaphysical presuppositions, the answer to the debate is hence an indecisive one. Or, it all depends on the reasons of conviction rather than that of prescription.

In what follows, the argument of this paper is divided into three parts. We will begin with the analysis of the debate's ethical dimension, and our attention concentrates on the origin of our moral consciousness (Section 2). Then, we will stress the futility of holding materialism as the cornerstone of modern science, especially its repudiating force of refuting traditional ideas in general and that of religion in particular (Section 3). After exposing the failure of the materialistic presumption, we intend to argue further that there is practically no possibility to comprehensively explain the origin of our moral consciousness, let alone from an evolutionary point of view (Section 4). Furthermore, with the previous arguments, we conclude that some presumptions of transcendental ideas are necessary to be incorporated into a full understanding of the very existence of moral consciousness. This paper finally stresses that a more tolerant attitude towards the debate is helpful for the further inquiry of science.

2. The Debate's Ethical Dimension

It is not an overstatement to say that the most prominent debates between creationism and evolutionism concentrate on the problem of the origin of

① It is well known that even Darwin himself "could not adjust fully to the prospect of totally meaningless universe". Ibid: 230.

morality. For some reasons nobody knows exactly, the evolutionist side gets the upper hand in these debates. It appears even reluctantly on the other side to react. The reluctance means hardly different from an unreserved concession of secularized human image and a total suspension of its distinctness among all species. If it were not because of this 'unbalanced' condition, creationism might not be able to find its chance of vindicating its intelligibility①. This is by no means an exaggeration as we all know nowadays that science rejects many traditional ideas not on the basis of its founded argument but in the stream of 'revolutionary trend'. In this trend, science appears to be the representative of truth revealing itself to the world since the very beginning of the modern era. However, even though the reason is lacking, science comes up with its revolutionary image invincibly destroying everything standing on its way of domination. This was the fact when scientists launched relentlessly the astronomical revolution in the 17th Century, the Enlightenment in the 18th Century, the Darwinian revolution in the 19th Century and eventually the Relativity revolution in the 20th Century. Science proceeded ceaselessly with firm paces and triumphed all its way through. In this long process of several hundred years, science never confronted a competent rivalry until the debate between creationism and evolutionism.

Science is challenged by its core theory of evolution which dethroned the central place of human beings from the superior species to one species among all. Today, despite the fact that there remain quite a few people still believe that human being are different from other species by being so created, nobody can seriously reply the question concerning why we as human beings do have innate moral ideas. We cannot simply say that these ideas such as compassion and justice coming from an accumulation of simple feelings based nevertheless on egoism. Nor can we hold that our inclination of being kind to

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① Murphy N. and Schloss J. says: "Although this [the evolutionally challenged origin of morality] was recognized early on as one of the most important implications of Darwin's theory, there has been surprisingly little recent engagement by religious thinkers with emerging ideas of and attending controversies over evolutionary ethics". This 'surprise' initiates the main ideas contained in this paper. Murphy N, Schloss J. Biology and Religion. In Rosenberg A, Robert A. (eds). Philosophy of Biology: An Anthology. Oxford: Wiley-Blackwell. 2010: 540.