

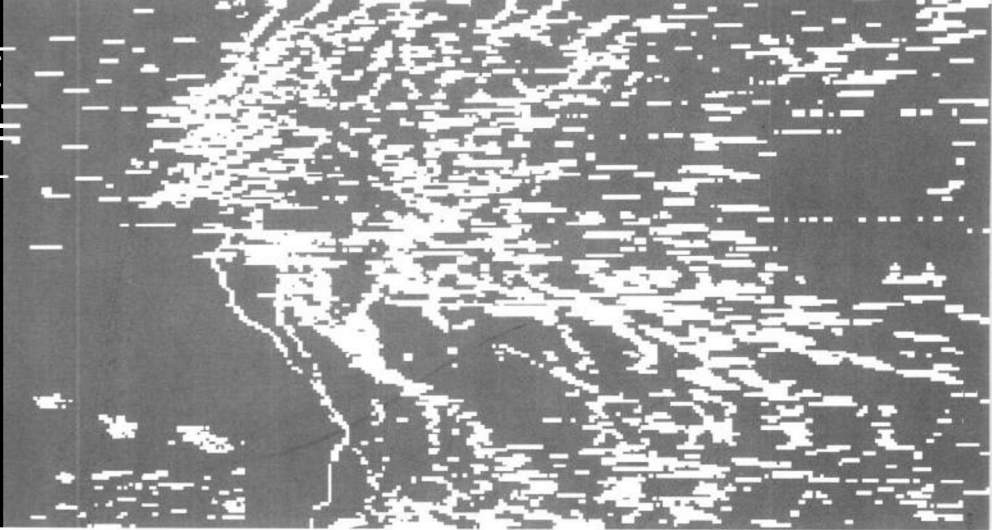
当代中国哲学丛书

# 理论思维与 工程思维

两种思维方式的  
僭越与划界

LILUNSIWEI YU GONGCHENGSIWEI

徐长福·著  
*XU Changfu*



XU Changfu

当代中国哲学丛书

# 理论思维与 工程思维

两种思维方式的  
僭越与划界

LILUNSIWEI YU GONGCHENGSIWEI

上海人民出版社

徐长福·著

**图书在版编目(CIP)数据**

理论思维与工程思维:两种思维方式的僭越与划界/  
徐长福著.

—上海:上海人民出版社,2002

(当代中国哲学丛书/张汝伦,陈昕主编)

ISBN 7-208-04073-7

I.理... II.徐... III.思维方法—研究

IV. B80

中国版本图书馆 CIP 数据核字(2002)第 008768 号

责任编辑 宋慧曾

封面装帧 王晓阳

·当代中国哲学丛书·

**理论思维与工程思维**

——两种思维方式的僭越与划界

徐长福 著

世纪出版集团

上海人民出版社 出版、发行

(200001 上海福建中路 193 号 www.ewen.cc)

新华书店 上海发行所经销 上海天马印刷厂印刷

开本 850×1168 1/32 印张 9.25 插页 6 字数 182,000

2002 年 6 月第 1 版 2002 年 6 月第 1 次印刷

印数 1—4,100

ISBN 7—208—04073—7/B·324

定价 18.50 元

---

“当代中国哲学丛书”编委会

---

主编:张汝伦 陈 昕

编委(按姓氏笔画为序):

陈 昕 张汝伦 吴晓明

高瑞泉 童世骏 靳希平



作者近影

## 作者简介

徐长福，1964年生，四川眉山人，文学学士(四川师范大学，1983年)，哲学硕士、博士(吉林大学，1994、2000年)。小时候的志向是文学创作，1986年下半年在所工作的四川西北的大山深处自感发现了中国社会的问题所在，遂走上了哲学研究之路。主要学术目标：以尽可能高的学术水准和尽可能宽的学术视野给我们民族近代以来、特别是近半个世纪以来的曲折经历和今后的努力方向一个思想理论上的交代。

## 总 序

---

中国正处于一个历史巨变的时代。虽仍困难重重,问题重重,但一个蓬勃向上的中国已经出现在历史的地平线上。希望使人激动与兴奋;困难又使人焦虑与迷惘。在这千载难逢的历史时刻,我们这个伟大的民族迫切需要智慧的思想——哲学,这是历史对处于命运转折点的当代中国人提出的时代要求。

的确,社会上存在着一股崇尚实利的思潮,在此情势下,似乎没什么比谈论哲学更不合时宜了。但是,每一个伟大的文明背后,都有伟大的哲学存在。哲学是一切文化的核心,是民族精神生命的体现,是文明成熟的标志。它是文明人类对自身命运和全人类命运的思考,它指引人类理智地选择自己的道路和趋向的目标。人无远虑,必有近忧。没有哲学的民族更是注定不会有远大的前途。王国维讲,哲学是“人类一日存,此学即不能一日亡也”,正是指明了这一点。一个物质文明飞速发展的中国,不能没有,也迫切需要有与之相适应的思想建设和文化建设;处于历史巨变中的中国,需要有自己的哲学家为之深思和前瞻;崛起的中华民族,应该再次给人类提供

自己的智慧和思想。我们生活的时代,正由“国际化”向“全球化”发展,我们不仅面临自己的特殊问题,而且也面临人类的共同问题。从人类历史发展的宏观角度看,人类文明正处于一个紧要关头。一方面,现代科技和经济制度第一次向人类展示了永久摆脱贫困的现实可能性;另一方面,人类在其精神生活和价值体系上从未像现在这么不定和迷惘。各种社会冲突乃至战乱不断向人类提出这样的问题:我们如何进入下一个一千年?回答这样的问题需要思想,需要智慧,一句话,需要哲学。不错,哲学从未像现在这么衰落,但哲学自我更新的契机也正在这似乎黯淡的现实状况中。“当代中国哲学丛书”的出现,恰恰证明了这一点。

哲学起源于人类的问题意识,起源于人类对自己生存的一般状况、一般条件和前景的困惑和疑问。今天,我们处在一个前所未有的重要历史时刻,面临许多前所未有的重大问题,迫切需要有新的思想去思考、探索、研究和总结。这种历史要求证明中国哲学已经具备自我更新的外部条件。然而,哲学本身的特性决定了不断创新是哲学的动力与生命。“哲学”一词在古希腊文中的原义是“爱智之学”。哲学追求的不是平庸空洞的抽象构造,或人云亦云的陈词滥调,而是启人心魂的智慧创造。这也是人们对哲学的最大期待。中国哲学的前途在于有原创性的思想。因此,我们期待,也努力促成成为当代中国哲学的研究和发展开拓新路的著作不断问世。

新的历史条件不仅要求哲学有新的思路,也要求它更加直面生活,直面世界及其问题。但这不等于说哲学不应该有自己的问题。历史上哲学的重大问题无不来自哲学家对现实



问题的思考。当哲学家将这些问题上升到理论和哲学层次时,就更突出了它们的基本性和重要性。无论是历史条件还是哲学自身的发展,都要求哲学家,尤其是一流哲学家,将眼光放在那些重要而基本的问题上,放在有远大发展前景的理论与方法上,放在已成为人类宝贵精神资源的伟大思想上。

必须承认,与人文科学的其他学科相比,哲学在中国近代以来的发展是相对落后的。这表现在像政治哲学、法哲学、社会哲学、道德哲学、宗教哲学、艺术哲学、文化哲学和历史哲学等专门哲学门类在中国几乎还是空白。不要说专著,即使是专门的研究论文也不多见。就此而言,当代中国哲学离国际水准和规模还有不小的距离。逐步建立这些哲学分支学科不仅对于建设当代中国哲学,而且对于将中国哲学研究提高到国际水准都具有极为重要的意义。“当代中国哲学丛书”希望能为此作出自己的贡献。

哲学探讨的是关于人类存在最一般和最基本的问题,因此,哲学的概念、范畴、问题与方法有相当高的普遍性,哲学思想的任何成果都具有普遍的意义。哲学首先是哲学,然后才有传统、立场、学说、倾向和内容等等区别。无论是中西哲学还是马克思主义哲学,只要是哲学,就应有共同关心的基本问题,区别只在于这些问题的提出、理解和回答上。因此,沟通各种不同的哲学传统对于发展当代中国哲学来说就尤其显得重要。成熟的中国哲学,只能在融会贯通了各种不同哲学传统精华的基础上产生。正如王国维早就指出的:“异日发明光大我国学术者,必在兼通世界学术之人,而不在一孔之陋儒固可决也。”当代中国哲学只有在与世界哲学积极对话交流中才

能形成自己的特色。这就要求中国哲学家同样能研究国际哲学界关心的一般和前沿的哲学问题,并提出自己的独特见解。当代中国哲学应该在未来的世界哲学中占有它应有的地位。这就要求当代中国哲学著作具有国际公认的专业性和学术规范性。这也是本丛书给自己提出的基本要求。

我们深信,中华民族将充满着智慧进入下一世纪。生机勃勃的当代中国哲学将向世人证明我们是一个睿智的民族,一个成熟的民族,一个真正优秀的民族。

谨序。

**“当代中国哲学丛书”编委会**

献给我的妻子

缴 健

# ABSTRACT

---

## **§ 1 This thesis discusses the following questions.**

Historically, why has a lot of well – designed humanistic and social engineering ended in failure? (Humanistic engineering refers to shaping personality, teaching children, producing works of art, that is, to engineering associated with the humanities rather than the natural or social sciences.) What are the lessons relative to thinking methods we can draw from these cases? These are initial questions which inspired me to explore this issue, and led to further questions.

Is there any difference between the thinking method used to establish theoretical system and that used to design engineering? If there is, what is the difference? How is the boundary to be demarcated? These are key questions directly concerning my theory in this thesis.

Is it possible that theory – thinking and engineering – thinking may overstep their authorities? If so, why? What will happen if theory – thinking is misused in designing engineering and engineer-

ing – thinking is misused in establishing theory? These are the questions I will use to critique views which are opposed to my own.

**§ 2 To solve the above – mentioned questions, I put forward an ontological theory of which engineering is the logical starting point.**

I will consider an object to be engineered if it is humanly constructed and of significant size. It means a single thing of which individuality is an outstanding property, and which also exists actually. This kind of individual existence or existing individuality is named substance in this thesis.

Any project of engineering should be constructed with objects, including materials and human resources, by subjects, namely human beings. Every one of these things exists with individuality, so all of them are substances. Substances are absolutely many in the world, and cannot be reduced to one.

Lots of different substances can be joined together in a project of engineering, just because there are certain relations between the attributes of these substances. These relations can be called principles (or objective laws) which are systems of certain or necessary relations. If the principle is that which has been applied in people's practice, then it is certain to have been interpreted as some theory, no matter whether the theory expresses it correctly or not. There are innumerable principles which are different from each other, and each of them has a unique system. Each system of principles is single and real, though it does not exist like a substance. So princi-

## ABSTRACT

---

ples are also absolutely many in the world, and cannot be also reduced to one.

Substances and principles are connected through attributes. Attributes, which, as universals, are components of principles, adhere to substances. Some attributes that belong to the same system of principles can be related by a logical method, while those that do not belong to the same system of principles must be related by a non-logical method.

Every substance is a limited unit. The unit of human being as substance must be individual; a human being cannot be subdivided and remain human. But the unit of things as substance is not certain, rather, it depends on human demands. Any substance as an integral unit is defined by the possession of all of its essential attributes. Without question, there is no identical logical relation throughout all these attributes, but nor is there some non-logical power that can integrate these attributes into the unit of a substance.

Every system of principle is also a limited unit, and, as a whole, it is made up of logical relations between premises and conclusions.

Substances and principles are wholes which cannot be taken apart, or they will cease to be what they are. These kinds of wholes are named *gestalts* in this thesis.

Any substance has many logically different attributes, so it must involve many different principles. Any principle is a universal being, so one principle must cover many substances. For this

reason, there is no completely corresponding relation between one substance and one principle. As a matter of fact, the relations between gestalts of substances and gestalts of principles are interwoven: one substance involves many principles, while one principle involves many substances.

As a result, every project of engineering is a complex made up of many substances, and any case of engineering-design should follow many logically different principles. So every project of engineering, in fact, is a dual complex: both a complex of many substances and a complex of many principles.

**§ 3 On this metaphysical basis, my theory of thinking-methods is established.**

Thinking-methods are systems of rational operations in the human brain, which can be divided into two kinds: the thinking-method concerning principles and the thinking-method concerning substances.

Those attributes involved in a system of principles are logically connected as a whole. A person can recognize a principle, but cannot invent a principle. So there is only one thinking-method fit for cognizing a principle. For this particular thinking-method, the function is objective cognition but not subjective invention, the character is logical inference, and the advanced formation is just theory-thinking.

Those attributes adhering to a substance may not be unified

logically, and they are composed into a whole only by some non-logical means. A substance can be not only cognized but also remade. People should work out a plan before they remake substances. As a matter of fact, there are two thinking-methods to be used to deal with substances: one is for cognizing substances, the other is for planning substances, and both of them are non-logical. The advanced formation of the latter is engineering-thinking.

The task of engineering – thinking is to design engineering. Any design of engineering must involve many substances as well as many attributes. So, it is impossible that the design be not guided by any theory, or that it be guided by only one theory; rather, it is necessary that the design be guided by all of the relevant theories at the same time.

Theory-thinking produces theories to serve engineering-thinking. *Engineering-thinking* designs the project to serve the operation of engineering. The ideal state of theory-thinking and engineering-thinking is that each of them is in its proper place, and both of them complement each other.

**§ 4—5 The arrogation of theory-thinking is the main target of my criticism in this thesis.**

The duty of theory-thinking is to cognize a principle, but the arrogation of theory-thinking is when theory-thinking is misused in cognizing substances and a designing engineering.

Theory-thinking, according to its traditional understanding,



may monopolize all of human thinking activities: it can be applied in cognizing both principles and substances, and can be applied in both cognition and planning. In other words, the assumption is that all of human thought can be brought into a logically theoretical system.

When theory-thinking is applied in cognizing substances, it needs some supportive programs: one is the program of “particulars → universal → particulars”, and the other is the program of essentialism. A particular means a single thing, namely a substance in this thesis, while a universal means an attribute adhering to a single thing. Attributes can be divided into essences and non-essences. The aim of human thinking is simply to identify the essences. According to these programs, the process of human thinking consists of two halves: the first is to abstract some common essence from particulars, and the second is to understand new particulars by means of the common essence.

Theory-thinking can cognize only those attributes interrelated logically. It is clear that theory-thinking cannot cognize any gestalt of substance, because when theory-thinking cognizes a substance, those attributes, which cannot be brought into a certain logical system, especially non-essential attributes, must be omitted.

The extreme case of the arrogation of theory-thinking is its misuse in designing engineering. The proper products of engineering should be gestalts, not just attributes. The key of engineering-design is to congregate those attributes among which there is no logical rela-