## 庞进文集第一卷

# 创造论

庞 进/著



加拿大西安大略出版社

## 内容简介

本书从哲学的根本问题谈起,把创造拓展到包括人类和非人类在内的整个世界的范围。认为:创造是由创造物参与并释放和发挥创造效能,经过创造过程完成从而有新的创造物出现的活动;世界的本原是创造,人类的本质是创造;创造律是自然界、人类社会和人的思维的最一般、最基本的规律;创造态是世间万事万物最基本、最普遍的存在方式;人类创造和非人类创造的根本区别在于人类的创造是智慧的创造,非人类的创造是非智慧的创造。作者以广阔的视野、深入的分析、畅达的论述,力图建立一个超拔众说、新颖鲜活、颇具立体感的创造哲学体系,为广大读者"换个角度看世界",最大程度地创造生命的价值和世间的美好提供参考。



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# 创造论

庞进/著

在追求卓越与甘于平凡之间,我选择追求卓越;在屈服命运与征服生活之间,我选择征服生活。

——谨将此书献给支持我的所有亲人和朋友

关中之东有华岳,秦兵马俑更惊世骇俗。吾结识庞氏先生, 眉不粗气粗,文通达万古。人世多残酷,但能在残酷中享受,则 是。

——贾平凹

## 庞进文集第一卷

Selected Works of Pang Jin, Volume One

## 创造论

## Theory of Creation

庞 进/著

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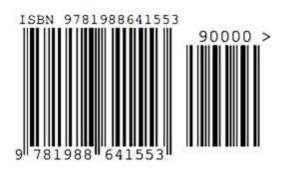
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## 卷首问答

问:创造,一个很有魅力,鼓舞人心的词汇,我们不陌生。然而,创造论, 我们了解的还不多,您能不能简要地介绍一下这方面的情况?

答: 将创造作为一门科学来研究, 历史并不长。1900 年时, 德国心理学家 W •斯 特恩(W. Stern)发表了论文《智力测验的新方法》(The Psychological Methods of Intelligence Testing),该论文介绍了一种新的智力测验方法——智力商数。 这"智力商数"与人的创造力相关,故可算作是较早的与创造相关的研究。1926 年,英国心理学家格雷厄姆•沃勒斯(Graham Wallas)出版了著作《创造性思维》 (The Art of Thought),系统地研究了创造性思维过程,并提出了著名的"创造 四阶段论",即准备阶段、孕育阶段、明悟或"顿悟"阶段、实证阶段。1936年, 美国通用电气公司(General Electric)首次为员工开设"创造工程"(Creative Engineering)课程,将探讨创造规律、讲授创造知识、提高创造能力提到显著位 置。20 世纪 30 年代,美国心理学家郭尔福(Joy Paul Guilford)开始研究创造 力的概念和测量方法。他提出了创造力的四个因素:原始思维能力、连续的创造 性思维、发散思维和收敛思维。这些因素成为后来研究创造力的基础。1941年, 美国 BBDO 广告公司的经理亚历克斯·奥斯本 (Alex Faickney Osborn) 发明了"智 力激励法"(Brainstorming),这是一种团队创造性思维技术,旨在通过鼓励和激 发团队成员的创造性想法,促进团队的创新和问题解决能力。 随后, 奥斯本于 1953 年出版了《创造性想象》(Applied Imagination)一书,这可以算是创造学的第 一部专著。20 世纪 50 年代,英国心理学家朱尔福德(J. P. Guilford)提出了"螺 旋式发展模型"来描述创造力的发展过程。在这个模型中,创造力被看作是一个 连续的、不断演变的过程。20 世纪 60 年代,美国教育家保罗•托兰斯(E. Paul Torrance)创建了成为后来研究创造力的重要工具之一的"创造力思维技能"测 试。1976 年,美国学者赛尔沃努•阿里提(Me1 Rhodes)出版了《创造: 想象的综 合》(Creating: A Comprehensive Guide to the Creative Process) 一书,被 学术界评价为创造学的最大成就。20 世纪 70 年代,美国心理学家米哈里•奇克森 特米哈伊(Mihaly Csikszentmihalyi)提出了"心流"(Flow)理论,他认为心流是一种充满创造力和挑战的心理状态,是创造力的基础。20世纪80年代,美国心理学家罗伯特•斯特恩伯格(Robert Sternberg)提出了"三元认知模型",他将创造力分为了三个方面:创新性、实用性和美学性。这个模型成为后来创造力研究的主要框架之一。

#### 问:目前的情形呢?

答:目前对创造问题的研究,已遍及世界各洲十数个国家。美国从1948年麻省理工学院开设《创造性开发》课程算起,现在已有五十多所大学开设了类似的创造性课程,涉及的学科也越来越广泛,不仅包括艺术和设计等相关专业,还渗入到航空学、地质学、建筑学、管理学、新闻学、教育学等各个学科中。此外,还出现了五十多个专门性的研究所和一些基金会,致力于创造性研究和教育的推广。

这里,笔者得着重介绍一下日本的情况。日本民族是一个创造性很强的民族,无论什么事情都不甘落后。1955年,日本从美国引进创造力工程,就即时在大学里开课讲授。1979年,日本成立了创造学学会,创造性研究会、创造研究所也相继建立,还有旨在传授和交流创造技法的"星期日发明学校",以及东京电视台自1981年10月开播的"发明设想"专题节目等。1982年,时任日本首相福田纠夫亲自主持会议,提出把国民创造力的提高作为通向21世纪的一条道路。每年的4月18日,是日本人民的"发明节",届时,东京及全国各地都要隆重举行表彰创造者和纪念成绩卓著的发明家的活动。在创造成果的应用方面,日本人也走到了世界的前列。日本的经济竞争力跃居世界前列,无疑和日本人重视对创造学的研究及其应用有很大关系。

在英国、德国、瑞典等西方发达国家,也都有相应的研究机构。到 20 世纪 90 年代,全世界范围内仅创造心理学方面的专著就达七八十种,而开发出来的创造性技法已有三百多种了。

问:我们国家要落后一些了?

答:将"创造"作为词汇来应用,我们国家并不晚。先秦典籍如《论语》《诗经》《礼记》中,都出现过"创"和"造"。到了公元5世纪至6世纪的南北朝时

期,史学家范晔便将"创""造"连在一起使用了。

当然,将创造作为一门学问来研究,我们国家就有些落后了。像一位姗姗来迟的新娘子,20世纪80年代初,创造学才"崭露头角"。由上海交通大学和广西大学的少数学者倡导,"全国第一届创造学学术讨论会"于1983年6月在南宁召开,会上成立了"中国创造学研究会筹备委员会",这可以说是创造学研究在我国已经开始的一个标志。至20世纪90年代,发表的论文和专著都不多,而且多是翻译或编译国外学者的成果,如《创造心理学》《创造社会心理学》《创造与创造力开发》《创造性思维方法101》等。也有个别学者的专著问世,如雷江旺的《创造教育》。这些著作都侧重于创造学的一个分支,宏观的全面系统的论著还未见到。

问: 那么, 创造学具体的研究对象是什么呢?

答:这个问题实际上是要回答什么是创造学,也就是给创造学下一个什么样的定义的问题。笔者见到的定义有四种,它们是:

创造学是本世纪中期兴起的一门新学科。其目的是探索和揭示人类发明创造活动的规律、研究如何培养人的创造活动的组织和创造环境的形成等问题。积极开展创造学的研究,对提高一个国家创造发明的效率,促进人们从事创造性思维活动,提高技术改进的经济效益,乃至整个社会的智力开发,都具有重大的意义。(孙衔、刘迅等编:《简明新技术革命知识辞典》,吉林科学技术出版社,1985)

创造学应当是一个庞大的科学体系,它是开发人的积极性、创造性和主观能动性的科学群。创造学的基本理论将涉及思维、教育、管理所涉及的数十门学科。它的应用科学将涉及"创造思维""创造心理学""创造教育学"和"创造工程""创造技巧"等。(雷江旺著:《创造教育》,西安交通大学出版社,1989)

创造学是研究人类的创造能力、创造发明的过程、方法及其规律的新兴学科。它涉及哲学、思维科学、脑科学、心理学、逻辑学、行为科学、教育学、未来学和科学技术史等学科,是一门综合性很强的学科。创造学以创造发明为研究对象,是人类创造发明的思维和实践经验的总结。创造学研究的内容:(1)通过对创造发明史所积累的大量材料进行实例考察和典型分析,揭示人类创造发明的机制和条件,探索发明创造的规律性。(2)通过对科学方法论、技术方法论、艺术方法论等方法论学说的研究,总结和探索创造过程的一般程序和方法,以形成创造活动的

方法论基础。(3)通过创造心理学、一般认识论去研究和探索创造性思维的发生规律、活动规律和发展规律,并通过对历史唯物主义和社会学的研究,揭示创造与社会环境的关系、创造的社会本质,形成创造学的完整体系。(萧浩辉:《决策科学辞典》,人民出版社,1995)

创造学是研究创造活动中人的思维形式与结构、心理素质、创造的方式方法、创造结果的验证以及环境对创造的影响的科学。创造学研究的主要内容包括:(一)研究创造思维的过程;(二)研究创造思维的生理机制;(三)研究影响创造思维的各种因素;(四)创造人才的培养与教育;(五)创造力的开发;(六)创造技法;(七)创造成果的评价以及创造学的发展史等。近年来,创造学着重于个体创造过程(包括心理素质、智力因素与创造思维的关系)和群体创造过程及思维过程的研究。(中国社会科学院语言研究所编:《社会科学新辞典》,商务印书馆,2001)

比较起来,第三种定义将已有的创造学阐释得更清楚,更准确、更完备一些。 从中可以初步了解目前创造学研究所涉及的基本内容和大体范围。

笔者的创造论和前人的创造学有难以割裂的密切联系,又有较大的明显的区别。问:有些什么不同呢?

答:笔者的创造论是一种世界观和方法论,是研究整个世界即自然界、人类社会和人类思维及其发展的最根本、最普遍的规律的科学。创造论认为,世界的本原是创造,人类的本质是创造;创造律是自然界、人类社会和人的思维的最一般、最基本的规律;创造态是世间万事万物最基本、最普遍的存在方式。创造论要讲清楚,为什么世界的本原和人类的本质是创造,为什么创造律是最一般、最基本的规律,创造态是最基本、最普遍的存在方式,以及这样的揭示和研究有何意义。

这样,笔者的创造论和前人的创造学的区别就很显然了。前人的创造学可以具体化为创造工程学(CreativityEngineering)创造心理学(Psychology of Creation)创造思维学(science of Creative Thinking),以及创造技法(Method of Creation)创造教育(Creative Education)等。或者是这几种学科的综合。而笔者的创造论则可以称之为"创造哲学"(Philosophy of Creation)。前人是微观地具体学科性地把握创造,笔者则力图宏观地抽象地哲学性地把握创造。笔

者认为,只有从哲学的即世界观和方法论的高度来把握和研究创造,才能揭示创造的本来面目,给人类一个新颖的从未有过的认识世界、认识自身的角度。从而明确:人类是作为的创造物来到这个世界上的,人的本性、人的使命、人的目的,人的一切的一切,全在于创造,尤其是智慧的创造。无创造无世界,无创造无人类,无创造无一切。

问:看来,您将以这样的观点统摄全书了?

答:是的。在本书中,笔者将从世界的本来、人的本质探讨起,要逐次考察创造的定义、创造物、创造律、创造态、创造过程、创造效能、创造类别、创造价值判断等;自然要涉及创造思维、创造心理、创造工程、创造教育、创造技法等;还要用创造论的眼光分析政治、经济、宗教、战争、科学发现、技术发明、艺术创作以及爱情,死亡等。

创造论是智慧的学问。笔者的考察充满艰辛但趣味无穷。我们的追求与我们 的创造同在。智慧的创造与我们的生命同在。创造,使大千世界斑斓。创造,使 人类社会丰赡。创造,使我们的生命璀璨。

## 一 创造与世界

## 1 什么是创造

●古汉语中的"创"和"造"

在古汉语中,"创"和"造"起初是分开来使用的。

"创",《说文解字》解释说,此字"从刀,仓声,凡刀创及伤字皆作此。"用刀砍东西,发出"仓仓"的声响——在没有伤口的地方砍割出伤口——创,就有了始造、首创、出新、前所未有的意思。

另外,"仓",是把谷物藏起来,加一个"刀",就是用刀将成熟的谷物割下, 然后藏存起来。这样,创,便有了收获、储存以满足生存需要的意味。

史书典籍正是在上述意义上使用了"创"字。如《论语·宪问》:"为命裨谌草创之。"(政命之辞由大夫裨谌起草。)《史记·司马相如传·封禅文》:"后稷创于唐。"(后稷创业于唐尧之世。)《汉书·叙传下》:"礼仪是创。"(礼的仪式就这样建立起来。)

"造"的本意是成就。如《诗·大雅·思齐》:"小子有造。"引申为创建、制造。如《礼·玉藻》:"大夫不得造车马。"《论衡·案书》:"《新语》,陆贾所造。"另外,"造"似还有奔走相告的意思,即将自己取得的成就让大家都知道。

最早将"创"和"造"连在一起使用的,是南朝宋史学家范晔。他在《后汉书·应奉传》中写道: "凡八十二事……其二十七,臣所创造。"《三国志·魏·武帝纪》注引《魏书》: "是以创造大业,文武并施。"这两处"创造"的意思就很明白了:发明或制成前所未有的事物。

#### ●前人的定义

对于"创造"的定义,我们已经看到过不少。如:

创造——首创前所未有的事物。(中国社会科学院语言研究所编:《辞海》,上

海辞书出版社,2016)

创造——想出新方法,建立新理论,做出新的成绩或东西。(中国社会科学院语言研究所词典编辑室编:《现代汉语词典》,商务印书馆,2016)

创造——有目的的活动,这一活动的结果是发现(创立、发明)某种新的早先未知的东西,或者积极地适应着时代的需要掌握已有的文化财富。(北京大学哲学系编:《新编简明哲学辞典》,商务印书馆,2013)

创造,是人的全部体力和智力都处在高度紧张状态下的一种活动。创造,是社会的人的劳动。{[美]米哈里·奇克森米哈伊(Mihaly Csikszentmihalyi)著:《创造心理学》,张凯平、周福祥译,北京师范大学出版社,1997}

创造就是把已知的材料重新组合,产生出新的事物或思想。或:创造就是把已知的经验重新结合,产生具有新价值的东西。{[美] 罗伯特 •斯特恩伯格(Robert J. Sternberg) 著:《创造性心理学》,曾宪华、陈扬、罗立勇译,浙江教育出版社,2002}

所谓"创造",是说它不是现成的,不是机械摹仿的,而是前所未有的、通过人的活动才产生的;至少包含着"前所未有""第一次出现"的成分。(杜书瀛著:《文学原理·创作论》,人民文学出版社,2001)

创造就是破旧立新。创造是创新,是创见性地解决问题。狭义的创造是指提供新颖的、独创的、具有社会意义的产物的活动。如科学上的发现、技术上的发明、文化艺术上的杰作等等。广义的创造则是指对本人来说提供前所未有的产物的活动。也就是说,一个人对某一问题的解决是否属于创见性的,不在于这一问题及其解决曾否有别人提出过。总之,创造或创造活动指的是提供新的、首创的、有社会意义的产物的活动。(王加微、袁灿编著:《创造与创造力开发》,浙江大学出版社,1986)

所谓创造就是在首创前所未有的事物的过程中的一种复杂的心理整合。(《教育研究》) 1991 年第1期)

如果说上述定义还不够丰富的话,笔者还可以列举出一批日本学者的定义。 1982年6月,日本创造学会曾向全体会员征求对"创造"的定义,结果有八十三人的定义入选,发表在1983年的该会会刊上。品种之繁多,用"五花八门"不足 以形容。简要地大体地分一下类,有将创造定义为一种"人类活动"的,如:

在综合概念和表象,解决问题的过程中产生新东西时,这个过程的特异性引 人注目的人类活动。(龟山贞登)

产生出至今没有的新的价值(人类要求的满足手段)的活动。(增田米二)

有的定义在肯定创造是"人类活动"的前提下,突出了思想和精神因素,如:

依靠扬弃到达更高层概念,把上述概念运用于具体事例,产生特有的价值的抽象和具体的精神活动。(村上忠良)

从通常的思考过程中飞跃产生的思想,一般来讲是独创的东西,也有的是深度思考的延长。(新井喜美雄)

有的甚至将创造定义为一种"意志"活动,如:

成为人类依神的意志在地球上称霸的原因的活动,同时也是成为人类灭亡的原因的活动。(大鹿让)

创造,是人类的传奇,因为它体现了一个人的个性,所以是意志的具体表现。 (小川滕弥)

有的定义认为创造是一种"能力":

造出对人类生活有价值的新事物的意欲和能力,无论何人都潜在地具有这种可能性。(佐滕三郎)

创造是智慧的机能,低的时候形成反馈,高的时候形成前馈。(杉田元宜) 有的定义认为创造是一种"行为":

创造,是以人类大脑左右半球的信息交换为基础产生新的文化的行为。(久田成)

除去实现目标的一切障碍,想出迅速实现目标的途径的行为。(保坂荣之介)这种行为,甚至是一种"苦行":

创造是自失乐园以来的人类宿命,是为了人类生存的苦行,然而其中亦有快 乐,此程度因人而异。(大江精三)

还有,认为创造是一种"过程":

从无到有的变化过程就是创造,不过,无是什么,这是个不能定义的问题。(岩田庆治)

创造就是对自己本身的攀登过程。(小林纯一)

创造是一种"挑战":

创造,是对可能性的挑战。(阿部光夫)。

否定至今的做法,产生进一步的成果。为此用全部精力去冲击至今的做法。(小岛莫德)

创造是一种"新组合":

异质的素材的新组合(这个定义适用于科学、艺术、哲学、宗教等精神活动的全部领域)。(新崎盛纪)

为了达到某个目的,把两种以上的异质的科学信息情报编排、融合在一起的精神的,或者技术的活动。(黑崎重彦)

还有一些不怎么周延的定义,如:

创造是实现即将到来的世界(未来)的梦。(江崎通彦)

产生平凡而新的事物,也包括消灭,使全体人类都快乐,如果不要定义更自然些。(西胜)

笔者不厌其烦地列举了众多的前人的定义,一方面,是想让本书读者初步了解一下截至目前学术界对"创造"的认识,达到了一个怎么样的程度;另一方面,是想为笔者后面的论述提供一个对比参照的系列。

上述定义,无疑多少都涉及到了"创造"的实质——出现新观点、新事物。然而,也都无一例外地将"创造"局限在人类活动的范围内。精神活动也好,意志的表现也好,以及"能力""行为""过程""挑战""新组合"等等,无一不是人类的"活动",非人类的"活动",是不在其内的。这样,就和本书所要讲的"创造"有了比较明显的区别。

#### ●创造和创造物

笔者认为:创造,是由创造物参与并释放和发挥创造效能,经过创造过程完成从而有新的创造物出现的活动。

理解这个定义的关键在于弄清什么是"创造物"。

创造物是宇宙间已经出现和正在出现的所有的物体和事象的通称。

人类出现以前,创造物是自然界的形形色色:日月星辰、山川河流、树木花草、鸟兽虫鱼等等。人类出现以后,创造物就既包括自然界的形形色色,又包括能够产生创造欲念,能够进行创造思维,能够有意识地释放和发挥创造效能,并积极主动地参与创造的人类。人类的思想、观念、情绪、感受、心态、行为、生活方式、社会关系等等,也都在创造物概括之内。总之,有机的,无机的;有形的,无形的;有情的,无情的;物质的,精神的;客观的,主观的,一切的一切,都是创造物。

这么说,世间就没有非创造物了?宏观地、整体地、系统地看,世间的一切都是作为创造物存在的,一方面都是创造的结晶,另一方面又都得进入某个创造过程,不参与此种创造,就得参与彼种创造,无一例外。所以,完全可以说,世间没有非创造物。然而,微观地、具体地、相对地看,如果某物体不进入某个创造过程,不释放和发挥某种创造效能,那么,相对于进入这个创造过程,释放和发挥了某种创造效能的创造物来讲,某物体就可以被看作是此一创造过程的非创造物。

比如,对于海湾战争,笔者桌上的墨水瓶,书房窗外的梧桐树,以及楼下某个房间里哇哇啼哭的婴儿,就可以说是海湾战争的"非创造物"。当然,世界是一个整体,宇宙浑然于一,我们不能说窗外梧桐树、桌上墨水瓶、楼下小婴儿和海湾战争绝对的、没有一丝一毫的关系,即绝对的没有一丝一毫的参与海湾战争,只能说这种关系、这种参与,太微小,微小到可以忽略不记罢了。

在对"创造物"有了一个概括的了解之后,再来看笔者的定义,就会发现这个定义是比较准确和周延的。从内涵上看,它总和地反映了创造的本质属性,概括了创造的全部内容:创造是一种"活动",怎么样的"活动"呢?创造物参与、释放和发挥创造效能、经过创造过程完成、出现了新的创造物的"活动"。从外延上看,它所指的对象范围很明确,凡是"由创造物参与并释放和发挥创造效能,经过创造过程完成从而有新的创造物出现的活动",都是创造。换句话说,"创造"这一概念的外延,指的是符合定义要求的一切活动。

很明显,符合笔者这个定义要求的活动,不仅仅是人类活动,非人类活动,如动物的活动、植物的活动、无生命物体的活动,都符合定义的要求。也就是说,

笔者所讲的创造,既包括人类的所有活动,也包括人类之外的一切物体的所有活动。这是笔者和前面列举过的那些定义的区别所在。按照前人的定义,天旋地转、日食月亏、山崩海啸、阴晴雨霁、喜鹊筑窠、春燕衔泥、蚂蚁搬家、海豹戏水等等,都不算创造,而按笔者的定义,这一切都是创造。比如一棵树,由种子入土,发芽生长,到枝干参天就是创造。参与创造的有树种、土地、阳光、空气、雨水等。这些创造物在参与创造的过程中,都释放和发挥了各自的创造效能。经过几十年或者上百年(一个创造时间),地球上便出现了一个新的创造物——大树参天。

## 2 创造本原说

#### ●源于何与如何源

笔者这里讲的"本原",指的是世界万物的最初来源。"最初来源"有两方面的意思,或者说应当从两个方面来理解,即"源于何"和"如何源"。

前辈思想家在"源于何"问题上分歧最大,其观点大体可划分为四类。

第一类:源于神。

这里的神,指的是上帝耶和华、真主安拉或其他具有全知全能、至高无上、主宰一切等神性的造物主。

基督教神学认为,"起初,上帝创造天地"。(《旧约全书·创世记》)"地和其中所充满的,世界和住在其间的,都属耶和华。"(《旧约全书·诗篇》)

伊斯兰教的第一个基本信条便是"信安拉是惟一的神"。是这位惟一的神"创造了大地上的一切事物"。(《古兰经·黄牛》)

婆罗门教和印度教认为,世界万物是由其始祖"梵天"创造的。据《摩奴法典》载,梵天出自"金胎"(梵卵),把卵壳分成两半,创造了天和地,然后创造了十个"生主",再由这十个"生主"完成其它创造工作。

第二类:源于物质。

这里的物质可分为具体物质和抽象物质。

源于具体物质的观点如中国古代的《管子•水地》篇:"水者何也?万物之本原也,诸生之宗室也,美、恶、贤、不肖、愚、俊之所产也。"古希腊哲学家泰勒

斯也认为"水是万物的始基"。比泰勒斯晚一个世纪的赫拉克利特,则认为世界的本原是"火"。他说:"世界不是由任何神创造的,也不是任何人创造的,它过去,现在和将来永远是一团永恒的活火"。

也有源于共同起作用的几种具体物质的观点。如中国古代的"五行"说,认为宇宙万物是由"金、水、木、火、土"相生而成。在古希腊,恩培多克勒提出了"四根说",认为世界的本原是土、水、火、气四种元素,万物由这四种元素按不同的比例"混合而成"。在古印度,佛教创始人将"四大"(即地、火、水、风四种基本原素)作为能造作一切"色法"(相当于物质现象)的本原。认为万物和人之身体,均由"四大"组成。

源于抽象物质的观点,如中国古代的"元气说"。《鶡冠子·泰录》:"天地成于元气,万物乘于天地。"《论衡·言毒》:"万物之生,皆禀元气。"

又如由古希腊哲学家德谟克利特提出的"原子论"。认为世界的本原是原子和 虚空,一切事物都是由这两种东西构成的。

第三类:源于精神。

这里的精神可分为主观精神和客观精神。

源于主观精神说如中国南宋陆九渊和明代王守仁的"心学"。他们认为,"四方上下曰宇,古往今来曰宙。宇宙便是吾心,吾心即是宇宙。"(《象山先生全集·卷二十二·杂说》)"无心外之物。"(《传习录·徐爱引言》)

在西方,有英国哲学家贝克莱的"存在就是被感知",他说:"宇宙中所包含的一切物体,在人心以外都无独立的存在;它们的存在就在于为人心所感知,所认识。"{[爱尔兰]乔治•伯克莱(George Berkeley)著:《关于人类知识原理的主张》,杨绍昌译,商务印书馆,1981}

源于客观精神说,在中国,有南宋朱熹的"理"是"生物之本"。他说:"未有大地之先,毕竟也只是理。有此理便有此天地。若无此理,便亦无天地,无人无物。"(《朱子语类》卷一)

在古希腊,柏拉图认为"理念"是世界的本原,"理念世界"高于现实世界, 先于现实世界。

在德国,黑格尔将世界的本原归结为"绝对观念"(或称"宇宙精神")。绝对

观念不但是超时空、超自然、超人类、超社会的,而且是在不断的运动、发展、变化着的,绝对观念正是在这些运动变化中将自身"外化"为自然界,"外化"成万事万物。

第四类:源于模糊。

这里的"模糊"指一些混沌不清,无法界定,不知其明确涵义,可以这样解释也可以那样解释的说法。

如古希腊哲学家阿那克西曼德提出的"无限",他认为"无限",是一切存在物的"始基和元素"。这个"无限"便是没有固定性质的东西。

再如中国古代思想家老子提出的"道"。"有物混成,先天地生,寂兮寥兮,独立而不改,周行而不殆,可以为天下母,吾不知其名,字之曰道。"(《老子·二十五章》)庄子亦言:"夫道有情有信,无为无形,可传而不可受,可得而不可见,自本自根,未有天地,自古以固存,神鬼神帝,生天生地。"(《庄子·大宗师》)然而,"道"到底是什么呢?便"惚兮恍兮",虚玄微妙,谁也说不清楚了。

"源于何"众说纷纭,"如何源"亦五花八门。综括起来,主要有下面几种观点:

第一种:神造说。

基督教圣经的《创世记》是神造说的典型代表。据称,上帝创造天地的时候,"地是空虚混沌,渊面黑暗,上帝的灵运行在水面上。"于是,"上帝说要有光,就有了光。上帝称光为昼,称暗为夜",有晚上,有早晨,这便是头一日了。接着,上帝又花了五天时间,用同样的方法,陆续造出了空气、陆地、海洋、花草树木、日月星辰、鸟兽虫鱼等等。天地万物造齐后,第七日,上帝便休息了。

上帝创世之前有东西没有呢?《创世记》的表述是暧昧的:一面说"空虚混沌",一面又说有"渊"有"水"。后经经奥古斯丁及中世纪以来的神学家们的发挥,教会才明确宣称,上帝乃是从完全的"无"中创造出一切,即宇宙被造出之前,没有任何物质存在,连时间和空间也没有,只有上帝,以及他的"道"和"灵"。上帝发出"话语"(即通过"道"),创造出世间的一切。

在印度神话中,创造之神"生主""用伟力造地而辟天"(《梨俱吠陀》)。"生主说现在我要繁殖,我要成多数。于是自生热力,依其热力而成这世界,于是成

就天、空、地三界"。(《他氏梵书》) 生主"发声为布尔,地就生出来;发声为布瓦尔,忽然就产生空;发声为斯瓦尔,而生出天来"。(《百道梵书》)

在中国古代神话和民间传说中,盘古充当着创造天地的角色。据说,最初"天地浑沌如鸡子,盘古生其中"(《三五历纪》)。他"将身一伸,天即渐高,地便坠下。而天地更有相连者,左手执凿,右手持斧,或用斧劈,或以凿开。自是神力。久而天地乃分。二气升降,清者上为天,浊者下为地,自是而混茫开矣"。(《开辟衍绎通俗志传》)

不管是西方的上帝,还是东方的生主、盘古,神造说无疑具有浓郁的神话色彩,或者说,它们本身就是美丽的神话。作为远古先民的世界观,神话的基本特征是在想象中将自然力人格化、形象化。既然是想象,而这种想象又和十分低下的生产力水平相适应,产生于人类的幼年期,其虚幻性也就显而易见了。

神造说的另一个缺陷是简单化。世界如何起源?这本是一个极其复杂的严肃命题,可在神造说那里,一切都简单得像幼儿园里的娃娃搭积木,甚至比搭积木还省事——搭积木还要搭一阵子,神造说只要神张口一"说"就行。

在《创世记》中,"事就这样成了"一语先后出现了五次。"事"怎样成了呢? 上帝一张口就成了。上帝说,天上要有光体,可以分昼夜,作记号,定节令、日 子、年岁,并要发光在天空,普照在地上,事就这样成了。上帝说,地要生出活 物来,各从其类,牲畜,昆虫野兽,各从其类,事就这样成了……

古代的阿拉伯人认为,"造物主是凭其意念而用他的语言创造宇宙万物的,如果没有语言,或者不说出来,宇宙万物就不会出现。"(《一千零一夜》,陈庆之译,人民文学出版社,1979)在另一则故事中,则说得更具体而形象:"宇宙、土波树,亚当和伊甸园都是安拉用他的万能之手直接创造的;除此之外的万物,安拉只对它们说'有吧'!它们便应声而出了。"(《一千零一夜》,陈庆之译,人民文学出版社,1979)

事实真的如此简单吗?答案毫无疑问是否定的。就说生命现象吧,其起源过程,即由无机物进化为原始生命,其间就经历了几十亿年的复杂漫长的变化过程,绝非是某某"神"一张口就能完成的。这已是被现代生物科学证明了的无可辩驳的事实。

第二种: 衍生说。

"道生一,一生二,二生三,三生万物"(《老子·四十二章》)可说是衍生说的典型表述。印度的《百道梵书》在论述"生主"诞生的过程时,也有"衍生"的意味:"初时这世界是水,水自己思忖说:怎样才得繁殖?自己思忖了,就生热力,诞生了一个金色的卵。"……这卵"游泳于水中。一岁之间,卵中诞生一人,他就是生主"。

衍生说是古人观察生物界生生不息现象后提出来的,具有直观、素朴的性质, 也有一定的合理成分。缺陷在于用部分说明全体,将一般现象当作普遍规律。

第三种:外化说。

外化说可分为主观精神外化说和客观精神外化说两种

主观精神外化说如中国古代的心学。"物莫大于天地,天地生于太极,太极即是吾心,太极所生之万化万事,即吾心之万化万事也。"(北宋邵雍《渔樵问答》)明初思想家陈献章认为,"君子一心,万理完具,事物虽多,莫非在我。"由此,他进一步提出:"天地我立,万化我出,而宇宙在我矣。"(《白沙子全集》卷三《与林郡博》)

禅宗是典型的中国化佛教,认为"一切万法尽在自心中",应当"从于自心顿现真如本性"。(敦煌本《坛经》)这种"自心顿现"无疑也属主观精神之"外化"。且看禅宗一则著名的公案:"时有风吹幡动。一僧曰幡动,一僧曰风动,议论不已。慧能进曰:'不是风动,不是幡动,仁者心动。'"(同上)

到了英国哲学家贝克莱那里,主观精神外化被说成"存在就在于为人心所感知"。在他看来,物就是一堆观念或感觉的集合或组合,例如,苹果就是我们所感知的颜色、香味、甜味、形状等感觉的集合体。如果把这些感觉到的性质去掉了,苹果也就不存在了。所以,他认为,"宇宙中所包含的一切物体,在人心以外都无独立的存在;它们的存在就在于为人心所感知,所认识。"{[爱尔兰]乔治·伯克莱(George Berkeley)著:《关于人类知识原理的主张》,杨绍昌译,商务印书馆,1981}

主观精神外化说突出地强调了人的精神因素的能动作用,如果仅就主观世界 作用于客观世界而言,是不无可取之处的。问题在于,这种外化说将人的精神因 素的作用夸大到了无限,这就不可避免地陷入了荒谬的泥潭。它无法解释人类出现以前的世界源于何和如何源的问题。

客观精神外化说,在中国,有南宋朱熹的"理"。"天地之间,有理有气。理也者,形而上之道也。生物之本也;气也者,形而下之器也,生物之具也。"(《答黄道夫》)朱熹认为,自然界的日月星辰以及地球等,都是"理",借助于"气""磨"出来的。"大地初间,只是阴阳之气,这一个气运行,磨来磨去,磨得急了,便拶许多渣滓,里面无处出,便结成个地在中央。气之清者,便为天、为日月、为星辰,只在外常周环运转,地便只在中央不动,不是在下。"又说,"造化之运如磨,上面常转而不止。万物之生,以磨中撒出,有粗有细自是不齐"。(《朱子语类》卷一)

客观精神外化说到了黑格尔那里,便是绝对观念之外化。这种"外化",集中表现在绝对观念辩证发展的第二阶段,即自然哲学阶段。在此阶段,绝对观念将自身外化为自然界。其间,又有三个小阶段之分:机械性阶段,自然界里的一切都处于零星、分散、机械杂陈的浑沌状态。到了物理性阶段,自然界出现了个体事物,如行星形成和火山爆发,出现了声、光、热、电、磁等不同的物理现象。物理性阶段必然朝着有机性阶段发展,经过地质有机体、植物有机体和动物有机体的演进,最后出现了能够思维的生物,即人类。

黑格尔哲学的根基是虚幻的,但他在论述绝对观念的发展演化时,有了进化 论的"胚种",和辩证法的"合理内核",这是值得肯定的。

第四种:运动说。

运动说最早的提出者大概是古希腊哲学家德谟克利特。他认为世界的本原是原子和虚空。原子是一种最小的、不可见的、不能再分的物质微粒,具有坚实、无空隙、不能毁坏的特点。虚空是原子运动的场所,其特点是松散。德氏认为,无穷多的原子在宇宙的虚空中做着急剧而零乱的直线运动,运动的速度很大,极易发生彼此碰撞,形成"原子旋涡"。于是,原子结合就形成万事万物,原子分散,事物就随之消失。他甚至认为,灵魂也是由原子构成的,即由火焰般的、球形的、极易运动的原子构成的。德氏的贡献在于将运动看成是原子本身所固有的属性,提出了原子自己运动的思想,并用原子的运动来阐释事物的发生、发展、变化和

消亡。

上面,笔者花了不少篇幅综述了在本原问题上的种种观点,目的不仅仅在于提供一个参照对比的系列,并使读者对有关我们生存其中的这个世界源于何和如何源的诸家观点有一个概括的了解;还因为,宏观地、广义地看,上述观点也应被纳括在"创造学"之内。或者分别称它们为"神灵创造学""衍生创造学""精神外化创造学""运动创造学"也未尝不可。这些打了引号的创造学,和笔者要讲的创造论,有的相去甚远,如"神灵创造学""精神外化创造学";有的不无可取之处,如"衍生创造学";有的还比较接近,如"运动创造学"。但是,近也好,远也好,有可取之处也好,总归不是一个体系。

笔者的体系是将创造作为世界的本原。

当然,上述各说也给了笔者一个启示:无论"神造"之"造"、"衍生"之"生"、"外化"之"化",还是"运动"之"动",其共同性都是一个"动"。也就是说,"动"是各家观点中共同的东西。有了"动",才有这个世界,没有"动",就没有这个世界,世界因"动"而生,"动"创造了世界,"动"和"创造"是同义词。

#### ●世界的本原是创造

笔者将世界的本原界定为创造,主要是从四个方面展开思考的:世界源于以创造为本质特征的创造物;世界通过创造而起源;宇宙间的一切都是创造物;万事万物永远处在创造中。下面我们展开来论述。

第一,世界源于以创造为本质特征的创造物。

我们知道,世界和宇宙本是一个同义词。我国古代《淮南子•原道训》注云: "四方上下曰宇,古往今来曰宙,以喻天地。"哲学意义上的宇宙,一般指天地万物的总称,即广漠浩渺的空间和其中存在的各种天体及其所有弥漫物的总称。

关于宇宙的起源,目前影响最大的学说是由美籍(俄国血统)天文学家伽莫夫等人,在 20 世纪 40 年代提出来的"大爆炸宇宙学"。这种学说认为,人类目前探测所及的宇宙,即自然科学意义上的宇宙,有过一段从密到稀、从热到冷不断膨胀的演化过程,膨胀开始时十分迅猛威烈,如同一次规模巨大的爆炸。

为了论述方便,我们有必要先将大爆炸宇宙学的有关内容简要介绍一下。

大约在一百多亿年前的宇宙早期,温度高达 100 亿度以上,宇宙间只有处于高密状态的电子、光子、中微子和少量的中子、质子等基本粒子。由于整个体系在膨胀,温度很快下降。当温度降到 10 亿度左右时,中于和质子开始结合,生成重氢(氘)核和氦核等化学元素。当温度降到 100 万度后,早期形成化学元素的过程结束,宇宙间的主要物质是质子、电子、光子和一些比较轻的原子核,当温度降到几千度时,电子与氢核和氦核组成原子。这些原子逐渐凝聚成气云,气云继续化合,最后逐渐形成今日宇宙间众多的星系和恒星。

笔者说过,创造,是指由创造物参与并释放和发挥创造效能,经过创造过程完成,从而有新的创造物出现的活动。这样,将大爆炸宇宙学纳入笔者的理论,就会发现,宇宙起源过程,实际上是一个巨大的创造过程。这个巨大的创造过程,又由许多相对小的创造过程组成。如果将化学元素的形成过程视为最初的创造过程,那么,最原始的创造物就是处于高密状态的电子、光子、中微子及中子、质子等基本粒子。是这些基本粒子进入了最初的创造过程,释放和发挥了各自的创造效能,从而生成了新的创造物——重氢(氘)核和氦核等化学元素的基核。

笔者说过,任何创造物实际上都是双重身份:既是创造的参与者,又是创造的结果。作为创造的参与者,电子、光子、中微子及中子、质子等基本粒子,进入了宇宙大爆炸的最初的创造过程,为形成新的创造物(氘、氦、锂等化学元素)做出了贡献。作为创造的结果,电子、光子、中微子及中子,质子等基本粒子又是别的创造物参与创造的产物。这也等于说,在这些基本粒子之前,还有更早、更原始的创造物。这些创造物是什么呢?宇宙学家们经过观测和推测,提出了基本粒子之前还有轻子、夸克等点粒子的观点。如果这样的观点成立,那么就可以认为,宇宙源于轻子、夸克等点粒子。再进一步追溯,轻子、夸克等点粒子之前,还有没有创造物呢?有的,只是人类的能力有限,目前还认识不到罢了。

事实上,现代宇宙学面对的宇宙,是距离尺度一百多亿光年,时间尺度一百多亿年的宇宙,尽管从时间到距离已经遥远得使我们生活在地球上的人望尘莫及、难以想象了,但这个宇宙毕竟还是天文观测所及的宇宙,是一个"有限"的宇宙,不是哲学意义的宇宙。哲学意义的宇宙是"无限"的,时间上无始无终,空间上无边无沿。然而,哲学上的无限的宇宙并非天马行空,它不能脱离天文学上有限

的宇宙。作为概括和抽象,前者必须建立在后者探索研究的基础上,必须也只有 以现代宇宙学家们观测到的事实及提出的理论为蓝本。

鉴于此,有必要说明,笔者在探讨世界本原问题时,将大爆炸宇宙学借用来作了论据,或者说,让现代宇宙学有关宇宙起源的理论进入了笔者的理论体系。这样做的好处是增加了笔者论证的说服力,从而也证明笔者的创造论可以解释和概括(或曰覆盖)任何自然科学理论。缺陷在于,这样做容易使哲学问题自然科学化。比如,笔者说世界源于创造物,带入大爆炸宇宙学,就可能将这里的创造物具体化为某些基本粒子或点粒子。这里就需要再三申明了:如果我们将目光局限在现代宇宙学提供的框架内,我们就可以认为最初的创造物就是某些基本粒子或点粒子;如果我们超越现代宇宙学提供的框架,那么,导致宇宙生成的创造物就可能是其它什么东西。尽管我们现在观察不到,无法测定,但它们作为创造物则是无疑的。创造物之前还有创造物,创造之前还有创造。宇宙无限,创造无限,创造物无限。说来说去,有一点可以肯定:世界源于创造物。

第二,世界通过创造而起源。

既然说世界源于创造物,为何不说创造物是世界的本原,而将创造作为世界的本原呢?创造物和创造又是怎样的关系呢?

前面笔者讲过,本原的含义有两个方面:源于何和如何源。两个方面紧密联系,不可或缺。没有源于何,就谈不上如何源;而没有如何源,也就无所谓源于何。前辈哲学家谈及本原问题时,多强调源于何,笔者则想更多的强调如何源,尽管源于何和如何源同样重要。因为懂得了起源,也就懂得了本质;了解了如何源,也就了解了源于何。强调源于何,是对本原问题的静态把握;强调如何源,则是对本原问题的动态把握。动态把握比静态把握似乎更贴近、更符合宇宙的本原而目。

显然,说世界源于创造物,解决的是源于何的问题;说世界通过创造而起源,则是解决如何源的问题。创造是创造物进入创造过程,释放和发挥创造效能,从而生成新的创造物的活动。创造物只有进入创造才能称作创造物,创造也只能是创造物的创造,不进入创造的创造物和不是创造物的创造,世界上都不存在。创造,无疑是创造物最本质的特征,所以,与其说世界源于创造物,毋宁说世界源

于创造。

仍以大爆炸宇宙学提供的材料为例。如果处在宇宙最早期的那些电子、光子、质子、中子等基本粒子(最初的创造物),不进入爆炸过程(宇宙整体膨胀、温度骤然下降、释放大量热能),就不可能彼此结合,生成氘、氦、锂等轻元素(新的创造物)。同样,氘、氦、锂等轻元素(创造物),若不在温度继续下降的情况下结合成原子核(新的创造物);原子核(创造物)若不凝聚成气云,气云不继续化合,也就不会形成宇宙各种各样的星系和恒星(更新的创造物)。

这里的爆炸、结合、凝聚、化合等等,无一例外的全都是创造过程。创造过程 是创造的载体和轨道,创造通过创造过程而进行而展开而完成。一个一个相对小 的创造过程连接组合成一个相对大的创造过程;一个一个小的创造累积演化为一 个巨大的创造。

这样,宇宙的生成过程便是最初的创造物进入创造过程,释放和发挥创造效能生成新的创造物,新的创造物又进入创造过程继续释放和发挥创造效能生成更新的创造物,更新的创造物再进入创造过程再释放和发挥创造效能生成更更新的创造物的过程。进一步概括,便是:创造→再创造→再再创造······累积成一个大创造。

这个概括显示了创造在宇宙生成过程中的巨大作用。这种作用是本原性的, 也就是说,没有创造,就没有宇宙,就没有世界,我们的世界是通过创造而起源 而形成的。

第三, 宇宙间的一切都是创造物。

我们面对的世界,大到天体星系、太阳月亮,小到基本粒子、细胞原虫;无论是字观世界、宏观世界,还是微观世界;无论是天上飞的,地上跑的,水中游的;还是天上不飞的,地上不跑的,水中不游的,总之是宇宙间的一切,全都作为创造物而存在。

笔者说宇宙间的一切都是创造物,一是因为这一切都是创造的结果,二是因为这一切又都是创造的参与者。

以太阳为例,太阳是太阳系的中心天体,是距我们最近的一颗恒星。恒星是由星际间弥漫的创造物如尘埃、微粒、某些元素及其分子集聚而成的天体。在宇

宙大爆炸后期,宇宙空间形成许多以氢、氦等元素为主要成分的星际云(创造物),这些星际云在自身引力(创造效能)的作用下不断收缩(创造过程),收缩到一定程度,就形成包括太阳在内的,由炽热的气体组成的,能自己发光的新的创造物——恒星。作为新的创造物,太阳必然继续进入创造过程,比如它要自转,要公转,要发光,要抛撒太阳风,要出现太阳耀斑和太阳黑子等等。太阳参与创造后形成的一切,都可视为更新的创造物。

再以小河里的一枚鹅卵石为例。它可能来自某座大山,而这座大山则一定是某次造山运动即创造的结果,山石因风雨地震而松动,因山洪奔泻而被冲入河道,因水激石磨而去掉棱角……经过这一连串、一系列的创造过程,一枚光滑溜圆的创造物——鹅卵石便形成了。这枚鹅卵石当然还要继续创造,若依然躺在水中,便在水激石磨下继续光滑,并与游鱼水草为伴,装点一方风景;若被捞起,则可能成为混凝土结构中的一分子,进入或楼基,或桥桩,或路面中,为人类的文明事业效力;要是被某个小孩捡起,夹在弹弓里打鸟,那它就作为武器,进入了打鸟的创造过程。鸟若被打下来(不打下来也一样,打出去这一事象本身也是创造物),这枚鹅卵石在这一个创造过程中的使命便已完结,而进入另一个创造过程了。

世界上的万事万物都可作如是观。

第四,万事万物永远处于创造中。

笔者说过,世界上的万事万物都是创造物,而创造物一方面是创造的结果,一方面又是创造的参与者。作为创造的结果,它标志着一个创造过程的结束;作为创造的参与者,它标志着另一个创造过程的开始。这是一个无头无尾、无休无止、无穷无尽的创造链,每一个创造过程只是这创造链中的一个环节。创造无限,创造物无限,创造链无限。

仍以太阳为例。科学家通过对太阳的光谱分析,得知太阳上最丰富的元素是氢,约占71%;其次是氦,约占27%;还有碳、氮、氧、铁、硅、镁、硫等其它元素,约占2%。太阳是一个炽热的气体球,中心温度高达1500万度。在这样的创造条件下,太阳中心区不间断地进行着氢核聚变成氦核的"热核反应"(创造过程),产生并释放出创造物——巨大的能量。这些能量主要以辐射的形式,相对稳定地向宇宙空间发射(创造过程)。这时候的太阳处于主序星阶段(这之前称作原

恒星或"星胎"),此阶段长达一百亿年。当主序星核心部分的氢全部通过热核反应变成氦的时候,这一阶段才告结束。此时,热核反应即创造过程由中心区转移到核心外层,释放的热量使太阳的体积大幅度膨胀,表面温度随之降低,发出的辐射光主要呈红色,这时的太阳,便演化成新的创造物——红巨星了。

进入红巨星阶段,意味着恒星步入中年。此时,太阳核心部分的温度高达 10000K,即 1 亿度,其间的氦便开始热核反应,聚变为碳。当核心的氦全部聚变 成碳以后,还要发生由碳→氧和镁的核反应,由氧→氖、硫的核反应等,总之是 热核反应即创造过程一个接一个,每次反应都要生成新的创造物即更重的元素,直到最后所有的核燃料燃烧殆尽,统统聚变成稳定的重元素铁为止。这一系列核反应,标志着太阳进入了晚期恒星阶段。在这个阶段,光度和体积要发生周期性变化,还要向外抛射大量物质。在空中形成新的创造物,即行星状星云。

太阳内部的核燃料全部烧光后,核反应停止了,创造并没有结束。高温使太阳外部不断发生大爆发,抛射大量物质,最后只剩下一个密实的核,这个核被称作白矮星。白矮星还要继续创造,要逐渐演化成红矮星,红矮星要演化成黑矮星。黑矮星可以说是太阳作为恒星,生命走到尽头的标志。然而创造过程并没有结束,黑矮星还要继续进入一连串的创造过程,直到永远。

太阳永远处于创造中,其它万事万物也永远处于创造中,万事万物的具体形态、结构、品性等,千姿万态,复杂多样,然而它们作为创造物必然进入创造过程,必然释放和发挥创造效能,从而必然生成新的创造物这一点却是一致的、不变的、永恒的。也就是说,创造是万事万物的根本特性。这个根本特性和共性决定了万事万物必然是创造物。具体创造可以五花八门形形色色,抽象创造,即哲学意义上的作为世界本原的创造,只能有一个。创造作为万事万物的根本特性和共性,与万事万物具备的个性和其它特性并不矛盾。个性和其它特性隶属于共性和根本特性,是共性和根本特性的展开和具体化。

比如,森林里的树木,种类千差万别,大小粗细不一,但它们都要进行光合作用,即利用太阳光能,不断地将水和二氧化碳等无机物转化成碳水化合物,并不断地放出大量的氧。光合作用就是创造。说光合作用是树木的共性,也就等于说创造是树木的共性。尽管这一片叶子和那一片叶子有形状、颜色、薄厚的不同,

释放的氧气也有大小多少之差。

同类属的创造物是这样,不同类属的创造物也是这样。窗外这棵梧桐树,和笔者书桌上这座台灯,属于不同类的创造物。梧桐树要生长开花,台灯要通电发光。生长开花是创造,通电发光也是创造,尽管生长开花不能等同于通电发光。它们属于具体不同的创造过程,然而在具体的基础上将它们的共性来一番抽象,就会发现,在作为创造物参与创造这个根本问题上,它们是共同的,一致的。况且,相对于笔者来说,它们都进入了笔者的创造氛围,成为笔者的创造条件:梧桐树给笔者以绿意,台灯给笔者以光明,笔者的创造成果中,也凝结着它们的一份无私的奉献。再扩大一步,相对于太阳系而言,梧桐树、台灯、写作中的笔者以及眼前看得见、看不见的一切,都作为地球上的创造物,随着地球太阳旋转(旋转也是创造)进入了太阳系及整个宇宙的创造过程。

这样的创造,难道不是永恒的吗?

## 二 创造与人类

## 1神话的迷雾

人类是最高级的生命体,是生命现象发展到高级阶段的产物。讨论人类的起源和本质,必然涉及生命的起源和本质。换句话说,了解了生命的本质,也就了解了人类的本质。

关于生命及人类的起源,世界各民族的神话和传说丰富多彩。

基督教圣经记载着上帝创造生命的详细过程:"上帝说,地要长出青草和结种子的菜蔬,各从其类;以及结果子的树,也各从其类,果子都包着核;事情就这样成了。"上帝"造出大鱼和水中所滋生的各种有生命的动物,各从其类,又造出各种飞鸟。也都各从其类"。(《旧约全书·创世记》)最后,上帝造出了牲畜、昆虫、野兽和人。

据称,上帝是按照自己的形象造人的。他用地上的尘土造出了第一个男人,取名"亚当"(出自希伯来文 adham, 意为"出自泥土""被造者""人");然后将生气吹入他的鼻孔里,亚当便活了。上帝又从亚当身上取下一根肋骨,造成一个女人,取名"夏娃"(出自希伯来文 hawwan,意为"母性"或"生命之源")。亚当和夏娃婚配生育,从此便有了人类。

有趣的是,一位名叫杰姆斯·厄歇尔的爱尔兰神学家,还根据圣经里的一些文字,推算出上帝创造出地球的"准确时间",即公元前 4004 年 10 月 12 日的上午 9 时。这也就等于说,人类和其它生物,是在距今六千多年的某几天才突然被创造,从而在地球上出现的。

在伊斯兰教的经典里,真主安拉是创世主。他在两天之内创造了大地,在四天之内为需求者规定了生活所需;随后,真主造了向他顶礼膜拜的众天使;最后,真主用黑色成形的粘土造了亚当,并将灵魂注入他的体内,于是这位亚当,便有了生命的气息,成为真正的人。在《古兰经》里,真主自白道:"我确已用泥土的

精华创造人,然后,我使他变成精液,在坚固的容器中的精液,然后,我把精液造成血块,然后我把血块造成肉团,然后我把肉团造成骨骼,然后,我使肌肉附着在骨骼上,然后,我把他造成别的生物。"

其它宗教及有关的神话传说,亦有类似的说法。如犹太教,认为是创世主一一"惟一真神"雅赫维从"空虚混沌"之"地"和"水"上造出世界,又用"尘土"造了人。在古埃及的传说中,则是一个叫哈奴姆的"圣神"用陶土塑造了第一批人。古希腊神话则认为,是先觉者普罗米修斯用泥和水捏塑成人,并赋予其生命,再由智慧女神雅典娜给这些生命以灵魂和呼吸。

中国的神祇庞杂散乱,有关创生的神话也多种多样。最早有阴阳二神"混生"说:"有二神混生,经天管地·····烦气为虫,精气为人。"(《淮南子·精神篇》)稍晚有盘古"垂死化身"说:盘古死后,"身之诸虫,因风所惑,化为黎氓。"(《绎史》卷一引《五运历年纪》)还有诸神共同造人的说法:"黄帝生阴阳,上骈生耳目,桑林生臂手"。(《淮南子·说林篇》)当然,流传最广泛的还是女娲氏"抟黄土作人":"俗说天地开辟,未有人民,女娲抟黄土作人,剧务,力不暇供,乃引绳于泥中,举以为人。"(《太平御览》)卷七八引《风俗通义》)为了使造出来的人世代繁衍,女娲氏还做了人类最早的媒人,使男人和女人配合,生养儿女。

不管是上帝耶和华、真主安拉,还有埃及的哈奴姆、古希腊的普罗米修斯,以及中国的女娲氏,这些"造物主"还都可算作"人神"——具有一定的"人性"和"人形"(据说安拉"无形象",但"人性"还是有的),而世界上某些少数民族,则往往将某些动植物作为创造人类众生的神灵。

北美太平洋西北岸的印第安人认为世界的造物主是银狐。据说世界开始的时候,地上一片汪洋,生活在天上的银狐趁反对它创造的长尾狼外出之机,用矢凿开天层,随之坠落海面,造出一个小岛。长尾狼归来见状,也动了心,就求银狐带它下去,银狐便取矢射天,狼就掉了下来。小岛太小,生活不便,银狐就用力地跺跺足,岛即立刻变大。就这样先蹈东方,然后北、西、南,连续蹈了五夜,岛就变成了今天的陆地。接着,银狐又给大地上创造出树木、泉水、动物和人类。

加利福尼亚的印第安人将神话中的野狼奉为祖先:野狼起初用四脚跑路,后来开始产生一节手指、一片指甲、一只眼睛等人类身体上的东西。不久又变为两

只手指、两片指甲、两只眼睛等等,此后又脱掉尾巴,学会了端坐和直立。就这样逐渐演变为完全的人类。

还有,奥日贝人认为他们的祖先是狗变的;阿玛哈人传说他们的祖先是水牛的化身;荷萨吉人说他们的始祖是由雄蜗牛破壳进化成手、臂、足和腿的男子,然后与海狸婚配而产生;澳大利亚维多利亚地区的土人,认为最初的人类,由橡皮树的枝与瘤节演变而成;新南威尔斯岛土人传说其祖由野鹅蛋孵化而生;伊利斯岛土人相信豪猪为岛上的初民,其子孙变化成人类;西里伯岛人认为是水泡凝固成卵,然后在阳光的照耀下孵化为一男一女,二人婚配生育,成为人类的祖先。

也有人与动植物结合再生人的传说。如北美的柏柏尔人宣称其民族是祖先与 鳄鱼结婚生成的;海达人传说是大乌鸦酋长和一只海贝结婚,生一雌海贝;酋长 又娶雌贝为妻,从而产生其族。还有,肖克士人与雌熊结婚生其族;西非青花鱼 人与青花鱼结婚生其族;栗鼠族人与栗鼠化作的美女结婚生其族,等等。

无论是宗教典籍的载述,还是流行于民间的神话传说,都不过是人类的认识水平还处在低级阶段时期的产物,"都是用想象和借助想象以征服自然力,支配自然力,把自然力加以形象化"(《马克思恩格斯选集》第二卷,人民出版社,1951)的结果,当然不是科学的真实的反映了。尽管从这些"反映"中,可以探测到古人创造性思维产生发展的某些轨迹和特征,如泥土造人的神话很可能是人类学会用泥土制造陶器后的产物;而人和动植物同祖或与动植物结合再生人的传说,则可视为"生命同源"遗传在人们意识中的一种"原始意象"——"原始意象"也是创造物,历史的、精神的创造物。

显然,宗教载述和神话传说不能笼而统之地视为虚妄,其积极意义很大成分上在于,这些载述和传说的创造者看到或者说猜测到了世界上的所有生物及人类自身都是被创造出来的,是作为创造物出现的。神学家和古代人受自然的、社会的及人类自身等等创造条件的限制,弄不清也无法弄清到底是谁在创造,怎么样创造,从而错误地把一切创造之功,都归结到"造物主"——神灵的头上。他们不明白,正是他们创造了神灵——观念中的造物主,而不是虚幻的观念中的造物主创造了他们。

## 2 生命在于创造

对生命起源的科学解释,有赖于由公元 16 世纪才逐渐发展起来的生物科学。早些时候,有人根据"腐肉生蛆",淤泥、污水中生出了鱼、蛙等现象,提出了"自然发生说",即认为生物可直接从无生命的物质中自发产生。于是,1668 年,意大利科学家雷迪做了腐烂的肉能否自行产生苍蝇的实验。结果表明,腐烂的肉不能自行生出苍蝇。蛆(以及后来的苍蝇)是从苍蝇在腐烂的肉上产下的卵中生出来的——自然发生说被否定了。

接着,1675年,荷兰生物学家洛文霍克用磨镜片(可视为最早的显微镜)发现了第一批后来被称为"原生动物"的微生物。1683年,他又发现了更小的活物——细菌。1753年,瑞典博物学家林耐出版了《植物种态》,初步确立了动植物的分类系统。1838年到1839年,德国生物学家施来登和施旺创立了细胞学说,认为细胞是构成生物体的基本结构和功能单位,在现在的生命世界里,无论是动物、植物或是微生物都是由细胞和细胞的产物所构成。从而阐明了生物界的统一性,证明了动、植物界没有不可逾越的鸿沟,为生物进化论提供了有力的证据。

为进化论提供证据的还有法国博物学家拉马克,他于 19 世纪初叶,发现了动物在地球历史上出现的顺序,和从动物胚胎至成熟阶段逐步发育的顺序相吻合的现象。

1859年,创造巨人,英国生物学家达尔文的《论借助自然选择(即在生存斗争中保存优良族)的方法的物种起源》(简称《物种起源》)一书问世,震动了整个世界。在这部划时代的著作里,他摈弃了"神造说",提出了以自然选择、适者生存为基础的生物进化论。

达尔文认为,各种生物的物种在开始时彼此并不是独立的,也没有什么区别。 后来,由于繁殖的压力和自然淘汰,所有的活物逐渐起了变化,老的、不适于生存的物种被新的、更适于生存的物种代替。几个不同的物种最早也许是同一个祖先,而地球上所有的生命可能都是从一种最原始的生命发展进化而来。这就意味着,"人们不需要再去寻找那些已知的几百万个活物的产生原因,只需了解任何一种生命体的创造原因就够了(不管这种生命体是多么简单)。这种自然发生的原始 的简单的生命体在进化的过程中引起了其它种种复杂的生命的发生,直至出现人类。"{[美] 阿西莫夫(Asimov I.)著:《地球以外的文明世界》,王静萍译,译林出版社,2011}

那么,这种"原始的简单的生命体"是什么呢?现代科学认为,生命的最基本的元素是蛋白质和核酸。生命的起源首先是由无机物生成有机小分子,再由有机小分子形成蛋白质、核酸等有机高分子,这些有机高分子再组成多分子体系,最后发展为原始生命。

恩格斯在《反杜林论》中曾给生命下过一个著名的定义,即"生命是蛋白体的存在方式,这种存在方式本质上就在于这些蛋白体的化学组成部分的不断的自我更新。"(《马克思恩格斯选集》第3卷,人民出版社,1951)这个定义的科学依据是当时的生物学成就。近几十年来,生物科学有了长足的进步,人们发现,生物科学中最重要的物质可能是核酸。核酸是信息性生物大分子,决定着蛋白质(属功能性生物大分子)的性质。所以,恩格斯的生命定义就应该发展为:生命是核酸和蛋白质的复合体系的存在方式,这种存在方式本质上就在于核酸和蛋白质的化学成分不断地自我更新。

显然,用创造论的观点来看,这种不断的自我更新,毫无疑问地属于创造的范畴。新陈代谢、自我复制、生长发育、遗传变异及感应性、适应性等生命现象,都既是创造的过程,又都是创造的结果。笔者说过,创造是创造物不断地进入创造过程,不断地释放和发挥创造效能,从而不断地生成新的创造物的活动。不断地生成新的创造物,是创造的最基本的目的性要求。在生命领域,新陈代谢是最基本的创造过程,是其它一切生命现象的基础。新陈代谢就是不断地生成新的创造物,不断地生成新的创造物就是新陈代谢;换句话说,新陈代谢就是创造,创造就是新陈代谢。

这样,笔者就有理由认为,生命的本质在于创造,生命就是创造;生命的形成过程是一个创造过程,生命的发展过程也是一个创造过程;生命是创造物(无机小分子、有机小分子、核酸、蛋白质等)不断地新陈代谢,即不断地进入创造过程,不断地生成新的创造物(各种生命现象)的结果。

生命的创造过程是极其漫长的。现代科学认为,人类赖以生存的地球乃至整

个太阳系,是四十六亿年前经过宇宙大爆炸后形成的,而地球上的生命则大约起源于三十多亿年前,这也就是说,地球上的生命从无到有大约经过了十多亿年的时间。生命从无到有作为一个巨大的创造过程,无疑是由一系列相对小一些的创造过程组成的。根据现代科学提供的资料,这些相对小的创造过程似乎可以这样划分:

第一步,分散在原始地球表面的一些创造物即碳、氢、氧、氮等一些基本元素,在高温条件(原始地球是一个炽热的球体)下,通过碰撞相互结合,生成新的创造物氨、水、二氧化碳等无机物。

第二步,氨、水、二氧化碳等创造物与从地核中喷到地球表面上的碳化物相 互作用,生成新的创造物——甲烷、乙炔等碳氢化合物。碳氢化合物进一步与水 分子、氨分子结合,生成更新的创造物,即更复杂的有机物,如氰化氢等。

第三步,由甲烷、氨、氮、氢、水、二氧化碳、氰化氢等组成的原始大气,在宇宙射线、紫外辐射、雷击电闪、火山喷发、陨石碰撞等种种因素(创造条件、创造契缘)的作用下,不断化合,生成可直接产生生命的创造物——包括氨基酸、核苷酸、脂肪酸、单糖等等在内的一系列有机化合物。

第四步,这些有机化合物通过雨水和河流的作用汇集于原始海洋中,经过漫长的积累,在适当的创造条件具备的情况下,氨基酸经过缩合形成蛋白质分子,核苷酸经过聚合形成核酸分子。

第五步,在海水里越积越多的蛋白质和核酸等生物大分子,由于日晒蒸发等 多种原因,进一步浓缩聚集,形成一种以蛋白质和核酸为主要成分并呈颗粒状的 多分子体系。

第六步,这些被称作团聚体或微球体的小颗粒,漂浮在原始海洋中,在适合的创造环境下,吸收其它元素,不断地进行加减化合(即同化和异化),结果终于出现了一些能把同化和异化作用统一于一体,有了原始的新陈代谢作用,并且能够自我复制(繁殖)的成功的高品位的多分子体系,这样的多分子体系便是伟大的创造物——原始生命。

讨论到这里,有读者可能会提出这样的疑问:你说生命的本质以及宇宙的本原是创造,那么,这创造的动力基础是什么呢?比如生命创造过程的第一步:由

那些分散在地球表面的基本元素(碳、氢、氧、氮筹),通过碰撞相互结合,生成氨、水,二氧化碳等有机物。是什么力量促使这些基本元素发生碰撞从而相互结合呢?再上溯到世界的起源,使那些基本粒子在大爆炸中结合成基本元素的动力源泉又是什么呢?

这实际上是一个理论难题。创造巨人,杰出的物理学家牛顿在回答这个难题时也不免陷入困惑。尽管他总结了前人和自己的创造成果,归纳提出了经典力学的三大定律——惯性定律、加速度定律和作用力与反作用力定律,并发现了著名的万有引力定律,为人们探索这一理论难题,也为人类的科学进步事业,做出了巨大的创造性贡献。

牛顿认为,一切行星都是在某种外来的"第一推动力"的作用下由静止开始运动的,这种外来的"第一推动力"是什么呢?亚里士多德认为是神秘的"理性",牛顿认为是"神"即上帝。托马斯·阿奎那讲得更明白:在动力因中,如果没有第一个动力因(如果将动力因作无限的推溯,就会成为这样情况),那就会没有中间的原因,也不会有最后的结果。这显然是不符合实际的。""从根本上构成所有事物之基础的那种事物,完全可以算作是最高级原因的原因。""因此,创造者非上帝莫属,上帝是第一原因。"{[意大利]托马斯·阿奎那(Thomas Aquinas)著:《神学大全》,刘炳森、黄文炳、谢长池、张鹏翔译,商务印书馆,2013}

这样的观点笔者当然不能同意。笔者认为,首先,不存在所谓的"第一推动力"或"第一原因"。因为创造无限,创造物无限,创造链无限。哲学意义上的"宇宙",没有开头,也无所谓结束,当然不会有所谓的"第一推动力"或"第一原因"。"第一推动力"或"第一原因"的提出,是人类认识受到局限的产物。

其次,没有"第一推动力"或"第一原因"不等于没有动力基础或动力源泉。 这个动力基础或动力源泉便是创造效能。创造效能是创造物与生俱来的、本身固有的、主要由创造物的内部结构决定的一种本质性能量。创造物千差万别的内部结构,决定了创造效能大小多少、高低强弱的千差万别。显然,任何创造物都有其内部结构,因而,任何创造物都具有创造效能,不具备创造效能的创造物世界上不存在。

创造效能的释放和发挥构成创造力。换句话说,创造力便是创造效能的释放

和发挥。正是创造物内部具备的创造效能的释放和发挥即创造力,构成了创造的动力基础或动力源泉。

创造力团聚组合为创造力场,如控制着粒子、原子相互作用的万有引力场、 电磁场、强核相互作用及弱核相互作用等。创造力场具备更强大的创造效能,创 造物正是在创造力场中相互作用,聚变化合,从而生成新的创造物的。

现在,笔者就可以这样回答读者的问题了:在世界(当然是我们面对的"世界")起源的初始阶段,使那些基本粒子在大爆炸中结合成化学元素的动力源泉是创造力,即这些基本粒子本身具备的创造效能的释放和发挥。在生命起源的第一步,依然是创造力,即碳、氢、氧、氮等基本元素本身具备的创造效能的释放和发挥,促使这些基本元素发生碰撞,从而相互结合,生成新的创造物氨、水,二氧化碳等无机物的。其碰撞,其结合,又都是在一定的创造力场中进行和完成的。

## 3人类的本质

看到这个题目,联系上面章节,读者一定会想到这样一句话:人类的本质是创造。不错,人类的本质确实是创造。这种创造,毫无疑问,属于生命的创造、宇宙的创造的一部分。但是,必须指出,人类的创造是生命的创造乃至宇宙的创造的最高级、最精致、最复杂的一部分。因而,从一定意义上讲,人类的创造又不同于人类以外的生命的创造、宇宙的创造。人类的创造是智慧的创造,是有思维有意识有情感的创造。所以,与其说人类的本质是创造,毋宁说人类的本质是智慧的创造,是有思维有意识有情感的能动的创造。

为了说明问题,我们需要粗线条地了解一下从原始生命到出现人类之间的由 简单而复杂,由低级而高级,由水生而陆生的创造过程。如下所示:

原始生命(非细胞形态生物)→原始单细胞生物→原生动物→腔肠动物→两侧对称动物→后口动物→棘皮动物→原始脊索动物(无头类)→原始有头类→有颚类→渔类→两栖类→爬行类→哺乳类→灵长目动物→猴→猿→人。

这个创造过程极其漫长而复杂,大概经历了二十亿年的风雨岁月。其间,十 亿年前出现原生动物,五亿年前出现原始脊索动物,四亿年前出现原始鱼类,三 亿年前出现两栖动物,二亿年前出现爬行动物,一亿八千万年前出现哺乳动物。 两千五百万年前,哺乳类取代爬行类在自然界获得统治地位。

出现灵长目动物的时间可追溯到七千五百万年前,过了大约四千万年,也就 是到了三千五百万年前,灵长目动物分化为两部分:一部分是小猴和狐猴,大脑 不怎么发达;一部分是大猿,大脑比较发达。

大脑比较发达的大猿继续进化,到了距今大约八百万年前,出现了一种大脑特别发达的类人猿。又过了七百多万年,到了距今六十多万年前,类人猿逐渐转变为人类。

由猿到人的转变无疑是一个了不起的意义巨大的创造过程。根据考古界发现的人类化石,这个巨大的创造过程又由四个相对小的创造过程组成:早期猿人阶段、晚期猿人阶段、古人阶段和新人阶段。

早期猿人阶段距今三百万年至距今一百五十万年左右,以东非坦桑尼亚发现的"能人"和肯尼亚发掘出土的"1470"号人为代表。其基本特征是能够直立行走,能制造简单的砾石工具,脑容量在700毫升以上,肢骨基本上与现代人相似。

晚期猿人阶段距今约一百五十万年至距今二十多万年,以爪哇猿人和北京猿人为代表。其基本特征是:两足能完全的直立行走,能制造较进步的石器工具,能使用、保存和控制天然火,脑容量接近于现代人,达到1200多毫升。

古人阶段也称早期智人阶段,距今约二十万年到距今约十万年,以德国的尼安德特人和我国广东的马坝人、山西的丁村人等为代表。其基本特征是:能健步行走,能制造精致的石器工具和复合工具,能用兽皮做简陋的衣服;不仅能使用天然火,而且能人工生火。脑容量已达到现代人水平,男女平均为1440毫升,但脑的形状和结构还保留不少原始性。

新人阶段也称晚期智人阶段,距今约四万年到距今约一万年,以法国的克罗马农人和我国广西的柳江人及北京周口店的山顶洞人为代表。其基本特征是:不仅能制造多种精制的石器,还能制造鱼叉、箭矛及骨质、角质的文具、装饰品等,发明了制造工具的工具,能摩擦取火和控制用火,能建造简陋的房屋,出现了原始的制陶、纺织、冶炼、农业以及以雕刻、彩画和塑像为主要内容的原始艺术。脑容量和现代人已很难区分,骨架一般比现代人高大。

总括起来看,在从猿到人的创造过程中,有几个关键性的创造成果特别值得 我们注意。这便是:直立行走、制造工具、使用火和脑容量的增加。

直立行走,使以往低垂的头颅从此高昂了起来,加速了大脑结构的进化和完善,脑容量随之增加,头部感官得到发展,为一种全新的创造——大脑的思维活动及神奇的创造物——智慧的产生提供了生理基础。同时,直立行走,也使两只前足得以解脱,变作双手,投入于大脑思维指挥下的,制造工具、使用火等能动的改变大自然的创造。

如果仅从直立行走和脑容量的增大两方面来考察,还不足以说明问题,因为企鹅、袋鼠等动物也能直立行走,大象和鲸鱼的脑容量比人的脑容量还要大得多。但综合考察,即加上制造工具和使用火两项内容,其它一切动物就都相形见绌了。因为除了人类之外,至今还未发现世界上有任何一种动物能够制造工具和使用火。作为人类的"专利",制造工具和使用火是和人类的思维活动紧密联系在一起的创造,是人类独有的智慧的创造。也就是说,参与人之成为人的创造过程的创造物,除了与人密切相关的自然界和人的肉体感官外,还有人的大脑,以及大脑通过思维活动而产生的智慧。智慧是高级的能动的创造物,它意味着人无论在任何一个创造过程中,都能够进行认识、谋划、辨析、判断、鉴别和选择,一句话,能够使任何创造物都打上人、人的思维、人的主体能动性的烙印。

显然,这种创造物,只有作为"万物之灵长"的人类——人类的大脑才能产生;人类之外的任何生灵无论具有任何超人的能力,都不会产生智慧、人类的智慧。试问,除了人类之外,有哪一种动物能够想到制造工具和使用工具以强化自身的创造手段?又有哪一种动物能够想到点燃火和使用火以熟化食物,增强创造的体质和能量?没有也找不到,智慧非人类莫属。

有这样一段话很精彩:"如果仅从身体条件来看,人类只是很平淡的物种,在 力气上,人比不过大象、老虎,甚至比不过和他同样大小的其他动物。人虽能昂 首阔步地行走,但行动远不如猫的灵巧;人也跑不过狗,更跑不过马了。人的视 觉不如鹰,嗅觉不如狗,听觉不如羚羊,许多感觉都很迟钝。人类虽能站立,但 站久了却要'腰酸背痛',这说明人的骨骼和肌肉不太适合他的直立姿势。人可能 是生物界中惟一不协调的物种,其他生物绝无这种情况。鱼在水中游,鸟在空中 飞,都是那样和谐完美。甚至小小的昆虫,都能有那么大的繁殖力和那么强的适应环境能力。但是,主宰世界的仍旧是人类。人类能做到这一点,完全靠的是人类的智慧。换句话说,人类具有其他动物无与伦比的大脑。仅仅是这一差别,使得人类统治了世界。"(《自然杂志》编辑部编:《当代科学之门》,学林出版社,1982)如果需要补充的话,那就是:智慧的创造,使人类区别于动物界;智慧的创造,使人类称霸于世界;智慧的创造,使人类成为人类。

在这个问题上,马克思也有一段经典性论述:"动物仅仅利用外部自然界,单纯地以自己的存在来使自然界改变;而人则通过他所做出的改变来使自然界为自己的目的服务,来支配自然界。这便是人同其他动物的最后的本质的区别,而造成这一区别的还是劳动。"(《马克思恩格斯选集》第3卷,人民出版社,1951)

在创造论看来,劳动乃是智慧的外化,智慧的创造包含着劳动。动物由于不具备智慧,因而只能"仅仅利用外部自然界";而人由于具备智慧,就能改变自然界,"支配自然界"。所以,我们完全可以用"智慧的创造"来取代用"劳动"作为对人与动物的本质区别的概括。"智慧的创造"比"劳动"更准确、更透彻、也更新颖。

## 4人类创造和非人类创造的区别

实际上,在上一节中,笔者已经将人类创造和非人类创造的区别讲清楚了,即人类创造是智慧的创造,非人类创造是非智慧的创造,两者的区别在于有无智慧作为创造物参与创造。在这一节中,我们再从非人类创造的角度,具体考察一下这种区别;同时,也顺便将非人类创造的诸种特点揭示出来。

#### ●非生物创造

非生物指的是自然界中一切不具有生命的创造物,如太阳、月亮、星星、山脉、河流、岩石、沙漠、声、光、电、热、磁,以及各种矿物质、无机与有机物质等等。这些非生物,和任何生物一样,每时每刻都处于创造中,即每时每刻都投入某个创造过程,释放和发挥一定的创造效能,从而生成某种新的创造物。如

太阳要产生光辐射,山脉要影响大气流,沙漠上要卷起风暴等等。那么,非生物创造有那些特征呢?

首先,和生物创造相比较,非生物创造是无生命现象的创造——非生物的内部结构中,不包含由蛋白质和核酸耦联形成的多分子体系,所以,它们既不能遗传,也不能复制。月亮可以绕太阳旋转,可以反射太阳的光芒,可以不断地变化着形状,但月亮不会怀孕再生一个月亮,黄河可以容纳百川,一泻千里;可以数次改道,泛滥成灾;可以浮人载舟,养鱼游虾;但黄河自己决不会照自己的样子再复制出一条黄河来。

其次,和人类创造相比较,非生物创造没有感觉,没有知觉,没有表象,没有思维——连最起码的感应性都不具备,当然更谈不上智慧的产生和投入了。

比如火星,作为太阳系的九大行星之一,其某些创造现象,和地球上的情形比较接近,如有昼夜交替,有四季变化等。20 世纪,有人在望远镜中发现,火星表面有几百条比较整齐的黑色的纵横线纹,于是认为那是智慧生物所开凿的人工"运河",是用来引火星两极融化了的冰雪水灌溉不毛之地的。20 世纪 60 年代起,人们陆续发射了多艘宇宙飞船对火星进行反复考察,结果表明:所谓的"运河",不过是纵横交错的山脉被季风吹卷起来的尘粒。着陆器带回的火星土壤里也没有存在生命的痕迹。这说明火星上的一切创造现象,均属无生命智慧的非生物创造,是自然形成的,而非人为的,或人与自然共同创造的。

火山喷发,岩浆奔流,长虹凌空,陨石落地……非生物创造为我们这个世界增添了无数无穷的壮景奇观。然而,火山没有感觉,它听不到也看不到人们对它的评论、赞赏、诅咒、埋怨;岩浆没有知觉,它不懂"选择",更谈不上"理解",知觉所具备的其它特性也与其无缘;长虹不会有表象,它记不住上一道长虹的方位,也想不来下一道长虹的长短;陨石更不会有思维,它不能主动提出和选择落在地球的哪一个部位,不能哭不能笑,不能用语言这个智慧的产物来表述自身的一切。

"万物有灵"的观念,产生于宗教形成之前的古代或远古代,至今我们从存世的大量的神话传说中还能看到其影响。这种观念认为,高山大地,日月江河,植物动物,即世界上的一切,都和人一样,是有"灵魂"、有"气息"、有"生命"

的。这显然是原始人简单笼统的模糊思维的产物,属于低层次的群体表象式的"创造",和事实是大相径庭的,尽管它导致了自然崇拜和自然宗教。

#### ●微生物创造

生物创造大致由微生物创造、植物创造和动物创造三大类组成。我们先看微生物创造。

微生物包括细菌、放线菌、霉菌、酵母菌、螺旋体、立克次体、支原体、衣原体、病毒、类病毒、原生动物和单细胞藻类等。微生物创造的特点是和非生物创造相比,它是有生命的创造;和植物创造相比,它是感应性不强的创造;和动物创造相比,它是无感觉的创造;和人类创造相比,它是无智慧的创造。

比如细菌,作为单细胞或多细胞的微小原核生物,其创造过程,具有生命起源初期的某些特征。细胞系无性生殖,即不经过生殖细胞的结合而由亲体直接产生子代——这种生殖方式大约经过了二十亿年的历史才进化到有性生殖。细菌的亲体在生殖创造中将自身直接分裂为两个子体。虽然是单亲遗传,且结构简单,但毕竟属于能自我复制的有生命的创造,这种创造非生物是望尘莫及的。

微生物创造会出现微小的刺激感应性。由于不具备成熟的感觉器官,更不具备中枢神经系统,所以,微生物的刺激感应性距离感觉能力还相当遥远,尽管刺激感应性是感觉的萌芽,感觉正是以刺激感应性为基础而产生而发展而强化的。再进一步,具有微小的刺激感应性的微生物创造,和产生并投入智慧的人类创造相比,就更因质的不同而差别甚大了。

#### ●植物创造

原始生物经过长达三十多亿年的进化,形成了现今遍布地球各个角落的四十 多万种植物。可分为藻类、菌类、地衣、苔藓、蕨类和种子植物等。由原核到真 核,由异养到自养,由厌氧到好氧,由单细胞到多细胞,由无性到有性,由水生 到陆生——植物的创造过程无疑是一个由简单而复杂,由低级而高级的进化过程。 和非生物创造相比,植物创造是能够自我复制的有生命的创造;和微生物创造相 比,植物创造是感应性较强的创造;和动物创造相比,植物创造是无感觉的创造; 和人类创造相比,它依然是无智慧的创造。

大多数植物都含有叶绿体,并依靠叶绿体进行光合作用,即吸收利用太阳能,将低能的二氧化碳、水和无机盐转变成富能的为植物所需要的有机化合物,并释放出氧气,从而"自养"。微生物的结构中不含有叶绿体,所以,能够进行光合作用以"自养",无疑是植物创造的一大特征,也是植物创造与微生物创造、动物创造以及人类创造的一个重要区别。

和微生物相比,植物创造的刺激感应性增强了,出现了感夜性,感温性、感 震性等等"感性运动"。如许多豆科植物的小叶昼开夜合;含羞草受到接触、震动、 电击等的刺激时,便小叶折合,叶柄下垂,做一副羞答答的模样;郁金香能由温 度的变化而引起开花等。还有,一些植物会发声,一些植物能泌油;我国广西忻 城境内的一株青冈树,其叶子颜色会根据气候的变化而呈现出规律性变化,使人 们可以观树测天气;印度尼西亚爪哇岛和非洲的马达加斯加有一种"吃人"树, 树杆和树枝能缠人、粘人,使触碰它的人或动物窒息而死,成为树的肥料。

具备了较强的刺激感应性,不等于就产生了感觉。从结构上讲,植物不具备感觉器官,没有神经组织。因此,植物创造是具有感应性甚至是较强的感应性的创造,但不是具有感觉的创造,更不是智慧的创造。

#### ●动物创造

动物是生物界三大类中最大的一类。目前地球上生存的动物估计约有一百五十万种,如果将亚种包括在内,已定名的动物大概已超过二百万种。动物创造和非生物创造相比,是有生命的创造;和微生物及植物相比,是有感觉甚至是有简单思维的创造;和人类创造相比,它依然是无智慧的创造。

动物在结构上不具备叶绿体,自然不能像植物那样通过光合作用而营自养生活,动物的特点是行异养生活,即将微生物、植物以及动物作为营养物来维持和繁衍生命。经过漫长的进化,动物适应异养生活的机能结构逐渐由简单而复杂,由低级而高级。

原生动物(动物界最低级、最简单的一类动物,只有一个单细胞或由单细胞集合为群体),即开始对外界的刺激有明显的反应,如能游离一滴酸,而游向一滴

糖等。原始的多细胞动物——腔肠动物,出现了最初的神经细胞。神经细胞对任何一个微小的刺激都相当敏感,能通过突触(神经细胞间的微小间隙)将这种刺激迅速传递。低等动物如海蜇,这类神经细胞已遍布全身。发展到扁虫动物,出现了最初的感觉器官,即对某一刺激特别敏感的特殊神经细胞群。这些神经细胞群逐渐向首先与环境接触的头部集中,于是出现了最初的中枢神经系统——呈球形的"中央神经索",这便是脑的雏形。随着进化的继续,感觉器官的数目逐渐增多,敏感性逐渐增强,中央神经索也越来越复杂。发展到脊索动物,便出现了前脑、中脑和后脑三种结构。大脑是前脑最大的也是最主要的一部分。覆盖在大脑顶部表面的灰质层叫大脑皮层。高等哺乳类动物的大脑皮层的覆盖面已超过大脑的表面,形成纵横折叠、起伏不平的皱褶,亦称"沟回"。大脑沟回是对各种感觉器官所感受的刺激进行分析综合的功能部位。发展到灵长目,大脑更大,中脑几乎消失,皮层沟回也更发达、更微妙,形成了与遍布全身的感觉器官、内脏器官、运动器官相联系的极其复杂的神经网络系统,为思维创造提供了物质机能基础。

可以这样说,动物创造是感觉器官越来越完善、感觉内容越来越丰富的创造, 是由低等动物的初级感觉向高等动物的高级感觉及表象思维发展迈进的创造。这 个创造过程相当漫长,其间由若干个创造阶段相联结。大体上,感觉对应于环节 动物阶段,知觉对应于节肢动物阶段,表象对应于灵长类以下脊椎动物阶段,思 维则和灵长类动物相对应。

这里有两个问题必须明确:第一,动物(主要指具有中枢神经系统的动物)创造属于有感觉的创造或产生感觉的创造,人也是动物,其创造无疑也属于有感觉的创造。但人的感觉创造和动物的感觉创造是不可等同视之的。二者的根本区别在于:人的感觉创造是和人的智慧创造密切联系交融互渗不可分离的,而动物的感觉创造则基本上是单纯的感觉创造。恩格斯说过:"鹰比人看得远得多,但是人的眼睛识别东西远胜于鹰。狗比人具有更锐敏得多的嗅觉,但是它不能辨别在人看来是各种东西的特定标志的气味的百分之一。至于触觉(猿类刚刚有一点儿最粗糙的萌芽),只是由于劳动才随着人手本身的形成而形成。"(《马克思恩格斯选集》第3卷,人民出版社,1951)识别、辨别正是智慧的表现;而劳动,我们已经说过,乃是智慧创造的行为化。所以,人的有智慧创造参与的感觉能力是任

何动物都不能比拟的。

第二,动物创造是由感觉创造向思维创造发展渐进的创造,有些动物(主要是灵长类)甚至具备了思维器官。然而,动物的思维创造和人类的思维创造有质的不同。区别在于:动物的思维是低级的简单的非智慧的思维,人的思维是高级的复杂的智慧的思维。如果以能否产生智慧作为判断思维的标准,那么,只有人的思维才算得上是真正的思维。马克思说过,"蜜蜂建筑蜂房的本领使人间的许多建筑师感到惭愧。但是,最蹩脚的建筑师从一开始就比最灵巧的蜜蜂高明的地方,是他在用蜂蜡建筑蜂房以前,已经在自己的头脑中把它建成了"。(《马克思恩格斯全集》第23卷,人民出版社,1972)人的智慧的思维创造表现在在创造之前就已经构想、设计和谋划,动物的非智慧的思维创造表现在只能在创造中将遗传本能有限度地予以释放。人的智慧的思维创造的另一个重要特点是能够设计、制造和使用工具,而一般动物的非智慧的思维创造只能简单地利用现成的自然界,尽管少数灵长类动物似乎也能利用棍棒等简单的自然物作工具,但它们决不能有意识有目的地制造工具。

语言文字是人类智慧创造的结晶。尽管人类的近亲黑猩猩经过特殊训练可以 学会单个的信号(当然仅指形体信号而非有声信号或文字信号),而且还能把这些 信号结合在一起来表达诸如"把钥匙给我"等一类句子的意思。但是,第一,黑 猩猩如果不经过特殊训练,就永远不可能学会并使用符号语言。第二,即使经过 特殊训练,黑猩猩也不可能利用有限的语言要素去创造出无限多的句子。更不可 能将这无限多的句子用书面的形式展示出来。人类创造和使用符号语言的情形使 黑猩猩望尘莫及。任何懂得某种语言的人,无需经过专门的训练,就能说出和听 懂他过去从未听过和说过的话。人类的语言系统所能构成的话语的数量是无限的, 而且人类能够将这些无限多的话语化作书面符号以交流思想、传播文明。这是人 类的思维创造和动物的思维创造的又一根本性区别。

# 三 创造律

## 1 创造律概说

创造律指的是创造规律。由于世间一切活动都可视为创造活动,因此创造律便是自然界、人类社会和人的思维的最一般、最普遍、最基本的规律。作为创造现象内在固有的、本质的、稳定的、重复的和相互制约的联系,创造律决定着一切创造即一切事物发展演变的必然趋势。换句话说就是,世间一切事物的发展演变,都必须遵循创造律。没有不受创造律规定制约的创造,也没有不规定和制约创造的创造律。

那么,什么是创造律呢?

创造律是创造物必然进入创造过程,必然要释放和发挥创造效能,从而必然 有新的创造物出现的规律。

具体讲,首先,创造物必然要进入创造过程。

笔者说过,世间的万事万物都是创造物。既然是创造物,就必然要进入创造过程,不进入此创造过程,就进入彼创造过程,或者同时进入若干个甚至许多个创造过程,没有例外。

比如,天边一朵白云,作为悬浮在 5000 米以上高空的由冰晶组成的可见的聚合体,它无疑是高层水汽在空中凝华(气态创造物不经过液态阶段而直接凝结为固态创造物)后的创造物,它在天边存在多久,也就作为冰晶聚合多久——聚合就是创造。同时,它还参与了大气圈的创造、水圈的创造、水汽循环的创造以及人们欣赏它的创造,等等。

再如一个人,作为有意识的能动的创造物,他时时刻刻、处处在在都处于创造中。他坐着,就进入了坐的创造过程;他站着,就进入了站的创造过程;他吃饭,便进入了吃饭的创造过程;他工作,也就进入了工作的创造过程,等等。

其次,进入创造过程的创造物必然要释放和发挥创造效能。笔者讲过,创造

效能是由创造物内部结构决定的一种本质性能量,可以说是创造物的"本能"。这种"本能"是一定要释放和发挥的。不在此创造过程释放和发挥,就在彼创造过程释放和发挥,或者在几个创造过程同时释放和发挥,总之是一进入创造过程,就必然要释放和发挥。尽管释放和发挥的能量有大有小,有多有少,方式也各不相同。

白云的成分是水汽冰晶,白云在天边存在多久,这些水汽冰晶也就必然将自身的可凝华可聚合的创造效能释放和发挥多久。如果这朵白云渐渐消散——消散也是创造,那么,这些水汽冰晶所释放和发挥的就是自身可消散可分解的创造效能。

人也同样,如果他在睡觉,他释放和发挥的就是能导致他睡觉的创造效能;如果他在行走,他释放和发挥的就是能使他行走的创造效能;如果他进入了恋爱的创造过程,他就必然要释放和发挥能使他产生强烈的思念和依恋等情感的创造效能。

再次,既然进入了创造过程,释放和发挥了创造效能,就必然要出现新的创造物。不出现新的创造物的创造,和不进入创造过程,不释放和发挥创造效能的创造一样,世界上根本不存在。进入创造过程之前的创造物丰富多样,进入创造过程,释放和发挥了创造效能,从而出现的新的创造物更是丰富多样。创造无穷,释放和发挥创造效能的方式无穷,新的创造物无穷。这是大千世界永远丰赡永远新颖的根本原因。

飘逸在天边的白云体薄透光,轻柔无影,其形状是在不断变化、不断创造的,一会儿像小钩,一会儿像羽毛,一会儿又像马尾,这些变动不居的形状,就是新的创造物。进入人的视野,画家描摹下来,这幅画就是新的创造物;摄影家拍摄下来,这幅照片就是新的创造物。甚至描摹拍摄本身就既是创造过程,又是新的创造物——现象也是创造物。如果某人对这片白云进行审美,那么,产生的美感就是新的创造物;再有人将这美感写成文字,诸如"蓝蓝的天上白云飘,白云下面马儿跑"等等,并演唱出来,那么这文字、这歌词、这演唱,就又都是新的创造物。

一个人更是如此, 你和人谈话, 内容、气氛、格调、情绪、效果等等, 都是

新的创造物;你挥笔写作,落在稿纸上的字迹,写出的文章,表达的情思、塑造的形象等等,也都是新的创造物;你去锻炼身体,打出去的球,划开来的水,头上出的汗,脚上粘的土,以及激动的脉搏、兴奋的情绪、愉快的感觉乃至周围人对你的观望、评论等等,全都是新的创造物。

## 2 新异替变律

新异替变律可简称新异律,是创造律中最基本、最重要的目的律,它意味着任何创造,都必须也必然以追求和出现新异替变为目的。也就是说,任何一个创造过程的结束,都必然和必须以出现新异的创造物为最基本的终端性标志,不以新异替变为目的的创造不算创造;没有出现新异的创造物作为终端标志的创造过程算不上创造过程。

新,是刚出现的,过去没有的;异,是有区别的,不相同的。从根本上讲,新的也就是异的,异的也就是新的。刚出现的、过去没有的,肯定和已出现的、过去曾有的相"异";有区别的、不相同的,相对于原来的、相同的就一定是"新"的。具体分析,新和异稍有不同,新是过去从来没有,彻头彻尾地刚出现;异是和过去出现过的有区别,但一定有联系,甚至是以过去出现过的为基础、为本营而分化、而裂变的。比如异化,就指的是相似的或相同的事物逐渐变得不相似或不相同;或指事物的自身素质或力量转化为跟自身相对立,甚至反过来支配自身的过程或结果。

替,是代替,替换;变,是变化,改变。新意味着替,异意味着变。新的创造物一出现,就意味着有的创造物成了旧的、陈的,将要被或已经被新的创造物所代替、所替换,尽管这种代替和替换不一定都是迅速的、彻底的、整体的和全部的。比如,买一件新衣服,就意味着旧衣服将被取代;新产品研制出来,就意味着老产品将被取代;年轻人成长起来,就意味着老一代将被取代,等等。异的创造物一出现,同样意味着有的创造物成了一般化的、不新颖的,将要发生变化,甚至被异的创造物所改变,尽管这种改变也未必是迅速的、彻底的、整体的和全部的。如塑料的出现,就使过去的铁铝制品、木材制品发生了变化;合成纤维的

出现,就使服装面料发生了改变,等等。我们说,自然界的一切活动都是创造,这也就等于说,自然界里的一切活动都要受新异替变律的制约和支配,都以出现新异的创造物为标志为目的。太阳每时每刻都在创造,太阳每时每刻都是新的;月亮每时每刻都在创造,月亮每时每刻都是新的;星星每时每刻都在创造,星星每时每刻都是新的。昨天的太阳是前天的太阳的替变,今天的月亮是昨天的月亮的替变,明天的星星又是今天的星星的替变。海洋在月球引力的作用下产生潮汐,每次潮汐都是新异的;海面上卷起风暴——空气大漩涡,每次风暴都是新异的;海水中游动着鱼虾鳖蟹;每条鱼虾、每只鳖蟹都是新异的。每次潮汐、每次风暴都标志着前一次潮汐,前一次风暴成为过去,而鱼虾鳖蟹正是在不断地创造、不断地新异、不断地替变中诞生发育、长大死亡的。

新陈代谢是生物创造的基本过程和基本特征。新陈代谢也就是新异替变,或者说新异替变律表现在生物体内就是新陈代谢。不管是分解还是化合,也不管是需能还是释能、同化还是异化,新陈代谢的结果总是以出现新异的创造物——以自我复制、生长繁殖、遗传变异等构成的生命现象为标志。新陈代谢的终止,也就意味着生命现象的终止。

人是最高级的智慧的生命体。人的创造,毫无疑问要受新异律的制约和支配,如果说人之外的,即非人类的创造总是不自觉地、被动地、自然而然地服从新异律的话,人的创造则是自觉地、有意识地、主动地服从和利用新异律。人类总是将自己的无穷的智慧,不断地投入创造过程,力求创造出前无古人的、全新的、包含着巨大的创造价值的创造物。

科学发现和科技发明是饱含人类智慧的创造,是人类有意识地追新求异的结果。如果我们把经过探索和研究,将自然存在的现象和规律揭示出来称为"发现"的话,那么,"发明"则是指这样一种创造,即将已经发现的自然存在的现象和规律应用于技术、产品等的构思和制作过程之中,以求出现新的创造物——新技术、新工艺、新机器、新设备、新的制作方法等等。

比如,1820年,丹麦物理学家奥斯特发现了电流的磁效应,第一个揭示出电与磁之间的密切的内在联系。1821年,英国物理学家法拉第根据电磁原理发明了世界上第一台电动机,为人类走向电气时代迈出了开创性的一步。1922年,英国

细菌学家弗莱明在实验中偶然发现了能分泌某种杀灭葡萄球菌或防止其生长的霉菌,即青霉素。十五年后,英国病理学家佛罗里和德国生物学家钱恩合作,成功地研制出青霉素的化学制剂,并应用于临床。从此青霉素以其巨大的魔力,救治了数以百万、千万计的人的生命,为人类的文明事业作出了巨大的贡献。

显然,无论发现还是发明,都符合新异律,都遵循着新异律,体现着新异律,是新异律的外化。而且,由于人类智慧的介入,创造中新异的成分增大了,强化了,从而生成的新的创造物中所包涵的创造价值更高,更具文明意义。奥斯特家中如果养着一只漂亮的波斯猫,这只猫也可能总是依偎在奥斯特身边,但它能像它的主人那样,发现电流的磁效应吗? 法拉第肯定会骑马,说不定他的马还很骏美,然而法拉第的骏美的马,能制作一种简单的装置,让通了电流的线路绕着一块磁铁不停地转动,从而发明电机吗?答案无疑是否定的。同样,没有弗莱明和佛罗里、钱恩等人卓越的智慧,青霉素肯定不会自己冒出来,更不会变成化学制剂,走出实验室,去有效地杀灭滋生在人体内的那些该死的病菌。发现和发明是人类的专利,是人类智慧创造的产物,是任何非人类非智慧的创造所不能比拟、不可企及的。

诚然,非生物以及微生物、植物、动物也遵循新异律进行创造,但它们永运也不能像人类这样认识和理解新异律,不能主动地智慧地利用新异律进行创造。人类之所以成为人类的一个根本素质,就在于人类知道自己的一切活动,都是以追求新异为目的的创造,从而积极地、主动地将自己的智慧投入创造过程,积极地、主动地、最大限度地释放和发挥自己的创造效能,力求出现更多更大更新更具创造价值的创造物。

因此,标新立异、喜新厌旧、见异思迁等词语就需要重新认识、重新理解了,至少不应当有更多的贬义。毫无疑问,创造论旗帜鲜明地褒扬和赞赏推陈出新、破旧立新、除旧布新、革故鼎新、厌故尚新等等,而不赞赏、不喜欢墨守成规、因循守旧、因循惯例、抱残守缺、陈陈相因等等。道理很简单也很明白:前者符合新异律,是新异律的顺应;后者违背了新异律,是新异律的反动。

在日常生活中,人们不可能总穿一套衣服,总吃一种饭菜,总谈论一个话题。 衣服总喜欢款式新颖的;一种饭菜再好,吃多了也会腻味;鲁迅笔下的祥林嫂开

始讲她的阿毛被狼吃了的悲惨故事时,周围的人都还耐心地听着,甚至还陪着抹一把同情的泪。当她一而再,再而三地反复地向人们讲述同一个故事时,"大家也都听得纯熟了,便是最慈悲的念佛的老太太们,眼里也再不见有一点泪的痕迹。后来全镇的人们几乎都能背诵她的话,一听到就烦厌得头痛。"(《彷徨·祝福》)为什么呢?违反了新异律。

作家的创造遵循着新异律。无论是小说、散文还是诗歌,人物、故事、情节、 意蕴、结构、语言等等,总要写出些前所未有的新异。

在思想领域,新异律照样制约和规范着人们的精神产品的创造。古今中外, 伟大的思想家无不是以提出和发表了独到的、新颖的、不同寻常的、超越前人的 观点或理论体系而闻名于世。没有关于"仁"的一系列著名观点,也就没有东方 的孔夫子;没有对于哲学、逻辑学、修辞学等学科的那些开创性见解,也就没有 西方的亚里士多德;释伽牟尼在菩提树下悟出了"诸法无常""诸行无我""缘起 性空"等,影响深远的佛教因之创立;剩余价值学说和科学社会主义理论使马克 思成为人类思想史上的一座丰碑,精神分析学说又使弗洛伊德成为现代心理学的 先驱者和奠基人……

新鲜独到的观点,博大精深的理论,总是饱含着思想家探索世界、探索人生的心血和智慧。这些思想精华,提供给人们认识世界、认识社会、认识自身以各式各样的钥匙、各种各样的角度,使人们在创造世界和创造自身中有了丰富有力的思想手段、智慧武器。它们像一座座灯塔,照亮了人类前进的航程,没有这些灯塔,人们的眼前将一片漆黑,人类的文明将不可想象。

当然,没有一种观点或理论穷尽了真理、无懈可击;任何一种观点或理论都可以再发展再创造再新异。生活之水常流,创造之树常青,相比之下,现成的观点和理论总是灰色的。任何一种看法都代表着一种过去,现在和未来永远是新异的。

智慧的创造使人类成为一个整体,也使人成为群体的人、社会的人。作为群体创造的产物,生产方式、社会形态、经济基础、上层建筑等等,也都必然遵循创造律。人们谋求生产资料和生活资料的手段日新月异,生产方式决不会始终停留在一个水平上,旧的落后的生产方式必然被新的先进的生产方式所代替。因此,

不管哪一种社会形态,都不可能固若金汤,千秋永续。所谓"万岁""永存""不 朽""万古长青"等等,怎么说都仅仅只是"口号"而已。

一些学者曾归纳总结出若干条"创造原理",如移植原理、放大原理、缩小原理、替代原理、改变原理,等等。这些原理,也都在创造律的概括之内,都可视为创造律的具体化、技术化。

属于新异替变律框范内的创造原理有:

替代原理——即取而代之。如水力发电被火力发电取代,火力发电被核能发电取代等等。

改变原理——改变原来事物的形状、颜色、味道,以及技术、策略等等。如 收音机的形状由笨大变小巧,自行车颜色由单一变多样,传统莱肴加以现代化"味 素"以提味等等。

陌生原理——即用陌生的新异的眼光考察熟悉的司空见惯的东西。比如对文学名著《红楼梦》,可以不用传统的熟悉的文学批评方式去评析,而用结构主义的或解构主义的、精神分析学的或者原型批评的方式去评析,如此得出的结论,自然是新异的。

熟悉原理——和陌生原理相反,即用熟悉的理论和方法去分析和认识陌生的东西。比如数学家遇到陌生的难题,往往运用熟悉的公式去解决。演员们遇到一段新编的唱词,往往用熟悉的曲牌、曲调去演唱等等。

在具体创造中,不管运用了、体现了何种创造原理,根本目的是一致的,即主动地遵循创造律——追新求异。也只有不断地主动地追求新异,人类创造才能焕发出无穷的神奇的魅力。

## 3 加减化合律

加减化合律是创造中的方法律,它意味着一切创造都必须也必然以加减化合的方式进行。没有不以加减化合为手段进行的创造,加减化合的方法贯彻在任何一个创造过程的始终。我们可以分解开来谈。

#### ●加律

加,有两层含义,一是参加,加入;二是增加、添加。

对于一个创造过程而言,作为创造物参与进去,便是"加"。非生物,以及植物、动物、微生物的"加"是无意识的、非智慧的;人的"加",有时是无意识的、非智慧的;但更多的情况下,则是有意识的、智慧的。

比如攀登世界屋脊最高峰——喜马拉雅山珠穆朗玛峰,运动员们跨出攀登创造的第一步,珠峰上浩瀚的冰川、宽厚的雪原、峻峭的岩石、稀薄的氧气等等,就作为创造物和运动员们一起,加入了攀登珠峰的创造过程。冰川雪原,岩石氧气的"加"是无意识的、非智慧的,它们不会因人类的光临而具有灵性。运动员们的"加"则是有意识的、智慧的。选择登山路线、选用登山工具、使用保护设备、和恶劣的气候作斗争等等,无一不需要意识、需要智慧。

第一层含义上的,作为参加、加入的"加",适合于一切生物创造和非生物创造。

第二层含义的"加"即增加、添加,则更多的指生物创造尤其是人类创造而言。或者说,增加或添加一般来讲都是有意识的、人为的。非生物以及植物、动物、微生物在创造中不会主动地有意识地增加什么或添加什么。狐狸再聪明,也不懂得给自己的食物上撒点盐巴,调点味素;海豚再可爱,也不能够自己打扮自己——涂上胭脂,抹上口红等等。学者们总结出来的创造原理,也都是针对人类创造而言的。

如移植原理,即将某一理论、方法或某物品的某些器件原封不动或稍加改动 地应用于其他方面。这显然是一种"增加"或"添加"了。即将一个创造物由此 创造过程移入彼创造过程;对创造物本身来说,就是退出一个创造过程而加入另 一个创造过程。如将细菌致病学说运用于医学中,便产生了抗菌消毒法;将含有 病毒的牛痘疫苗接种于人体内,就出现了人工免疫法;柴油发电机可以移植于拖 拉机引擎,飞机螺旋桨可以改装于轮船上作推动装制,等等。

再如放大原理,即拓宽原有理论、方法、技术等的用途,或者将现有的创造物加长、加高、加厚、加宽、加重、加强或增多,从而出现新的创造物。用望远镜观察星际世界是一种放大;用放大镜考察微观世界也是一种放大;增加计算机

的运算次数、楼房加固、路面拓宽、管道延长、服用抗衰老剂以延长寿命等等, 都是一种放大、一种增加。

日本有一家"山贼老面店"。这家面店的老板经常有意识地做一大钵(可以吃饱四五个人)的"山贼大面",谁在规定时间内将此钵面连面带汤全部吃光,谁就当场赢得掌声,得到一张漂亮的表扬状,名字也将列入墙上的"光荣榜"之中。这家面店还备有一个可装十瓶啤酒的特大酒杯,谁要一口气喝完这一大杯,就隔天再免费送你一大杯。由于采用这种有意识的"加"的办法,这家面店每天都生意兴隆,顾客盈门。

体现加律的创造技法有类比联想法,即通过在相同的或不同的创造物之间进行比较,得到启示,从而提出一种新的见解,或将属于此创造物的特长、风格、技术、工艺等模拟移植于彼创造物。英国物理学家狄拉克通过对正负电荷的类比提出了存在正电子的见解;法国科学家德布罗意通过对光和实物的类比,提出了实物不但像光那样具有粒子性,而且还具有波动性的观点。再如,古埃及人用不断转动的链条来运送水桶的办法灌溉田地,英国人埃文斯则将这个方法运用到磨坊里传送谷粒;美国发明家莱特兄弟通过观察老鹰飞行,制作出后缘能够弯折的机翼,解决了飞机在空中拐弯时保持机身平稳的问题;现代仿生学模拟人和动物的器官,成功地研制出了电子眼、电子耳、电子动力心脏、振动陀螺仪、智能机器人等。

缺点列举法和希望点列举法所体现的也是加律。

缺点列举法是召开一定的会议,让与会者尽可能多地列举某一创造物的缺点,然后加以提高和改进。提高和改进的部分相对于原创造物就是一种"加"。如列举出老式伞的种种缺点,诸如太大太长不便收藏携带、伞布透水容易滴湿裤脚、花色式样单一不易识别等等,针对这些缺点加以改进,于是就有了便于收藏携带的折叠伞、伞布经防水处理后的不透水的伞、花色丰富式样新颖的便于识别的伞等等。

希望点列举法也是召开一定的会议,让与会者尽可能多地对某一创造物的功能、特性、结构、材质、形状等提出新的设想、新的希望,然后制订出具体方案,逐步将这些新的设想和希望化为现实。相对于原来的创造物,这些物化了的设想

和希望,无疑是一种"增加"。比如对过去的电冰箱,人们曾提出许多种设想和希望,希望它多开门、两边开门、能自动除霜或无霜、箱外能取冷饮等等。这些设想和希望通过厂家的努力,大多已化为现实。现在市面上已有多开门、两边开门、能自动除霜或无霜、箱外能取冷饮的具有多种功能的电冰箱。

#### ●减律

减,也有两层意思。一是减去、退出;二是减少、缩小。

退出此创造过程而进入彼创造过程,对于参与此创造过程的创造物而言就是"减"。如某一位篮球运动员退出某场比赛,对于这个运动员与这场比赛,就是一种"减"。当然,一个创造过程的"减",意味着另一个创造过程的"加",比如这个运动员若去打排球,他就加入了打排球的创造过程;若去医院治伤,他就进入了医院治伤的创造过程;若去会女朋友,他就进入了会女朋友的创造过程等等。

退出、减去意义中的"减",适合于一切创造物:太阳落山是一种"减",月 亮坠海也是一种"减",一棵树枯死了,是一种"减",一只鸟飞走了,也是一种 "减",等等。减少和缩小是另一层含义的"减"。这种"减",往往打上了人类智 慧的烙印,或者说只有人类创造才能主动地有意识地智慧地减少什么、缩小什么。 老鼠王国不会搞计划生育,大象家族不会开展减肥运动,清除全球性的环境污染, 也只有人类才能办得到。体现减律的创造原理有缩小原理,切割原理和重组原理。

缩小原理对应于放大原理,即通过浓缩、提纯、分裂、化整为零、降低、缩短、简化、袖珍化等手段以形成新的创造物,如从白酒中浓缩出酒精,从原油中提纯出汽油;一个政党分裂为两派或几派;游击战术中的化整为零;降低产品成本;将弯路取直缩短距离;简化繁体汉字;将收音机、录放机、电话机、电脑、手机等袖珍化等等。

切割原理是把原有的创造物(理论、方法、技巧、器物等)的某些方面切开或切去,留下有用的东西。一块大蛋糕可以切割成若干小块;一棵大树伐倒,砍去树枝,留下树身做檀做椽;正方形可以切成长方形、梯形、三角形;圆柱体可以切割成圆锥体、圆锥台等。

重组原理是将组成原有创造物的各部分、各元素重新组合,从而得到新的创

造物。重组原理既是"减"——将参与一个创造过程的各创造物"减"至 0,又是"加"——将参与一个创造过程的各创造物"加"至适度。参与两个创造过程的各创造物数量上没有变化,区分在于变换了位置,即不同的排列组合。如小孩搭积木,积木块的数量是一定的,却可以搭出各式各样的不同形状的"房子"来。飞行员在空中做队型表演,一会儿梯形,一会儿菱形,一会儿三角形,而飞机的架数并没有变,相同的元素由于排列组合不同,可以构成不同的物质,如碳元素C,既可以构成石墨,又可以构成金刚石,前者松软可削,后者坚硬无比。

重组原理是将参与一个创造过程的创造物"减"至 0,然后将这些创造物全部"加"入另一个创造过程。如果将参与原创造过程的创造物并不全部"加"入另一个创造过程,甚至新的创造过程几乎不要原创造过程的参与者参与,这样的情形就不是"重组",而是"重建"了。比如,拆掉一座旧楼,在原址上重建一座新楼。旧楼的砖瓦木石等建筑材料,对新楼来说,可能部分有用,如垫地基等,也可能全部无用,作为垃圾清理干净。

具体创造时的"破坏法",体现的就是这种"减"。不少作家都有过撕碎、烧毁自己作品的经历。之所以要将原有的创造成果破坏殆尽,就是为了义无反顾地、脱胎换骨地"重建",写出比原来的作品更新更好的作品来。

#### ●化合律

化合是两种或两种以上的创造物在一个创造过程内交互作用,从而生成新的创造物。我们这里的"化合",既包括化学上的"化合",即两种或多种物质经过化学反应而形成新的物质,如氢与氧化合生成水;也包括物理学上的"混合",即两种或多种物质搀和在一起而不发生化学反应,原来的各种物质并不改变其性质,如将油倒入水中。甚至包括化学上的"分解",即一种化合物由于化学反应而分成两种或几种较简单的化合物或单质,如氯酸钾分解成氯化钾和氧气。

之所以将物理学上的"混合"和化学上的"分解"也纳入创造论的"化合"之中,是因为"混合"和"分解"都生成了新的创造物。生成新的创造物的过程,就是"化合"的过程;换句话就,"化合"就是"生成"。区别"化"与"未化",关键看是否出现了新的创造物。将油到入水中,油虽然在水上漂着,但这时候的

水就是漂着油的水,这时候的油也是漂在水上的油,都属于新的创造物,都是一种"化合"。任何一种化合物,自个儿都不能分解,必须有其他创造物参与,要有一定的温度、湿度、催化剂、反应器皿等。如氯酸钾必须在 356℃以上的情况下才能分解出氯化钾和氧气,氯化钾和氧气便是氯酸钾和热能以及反应器皿等等创造物"化合"的结果。

总之,笔者这里讲的"化合",比化学上的"化合"含义要宽泛得多。任何一个创造过程都可以作为"化合"过程来理解。这里的"化合",包括化学反应,但不专指化学反应,它还有变化、改造、生成,形成、提出等意义。

杂交原理是比较突出地体现化合律的创造原理。杂交就是将两种或多种现有的创造物(理论、方法、技术、元素、生物、器物等)纳入一个创造过程,使其集合、综合、混合、结合、交合——化合,力求出现新的创造物——新理论、新方法、新技术、新产品、新品种等等。苹果和梨杂交产生苹果梨,驴和马杂交生出骡子;社会学和心理学杂交形成社会心理学,地质学和力学杂交构成地质力学——现代科学技术几乎都是杂交的产物。日本钢铁工业技术系统就是杂交化合的产物,参与杂交的创造物有奥地利的氧气吹顶炼钢、法国的高炉吹重油、西德的熔钢脱氧、美国的高炉高温高压和带钢轧制及瑞士的连续铸锭等。

典型地体现着化合律的创造技法有组合法、综合法和信息交合法。

组合法是将作为现象的创造物和作为技术的创造物组合在一起,从而出现新的创造物;或将两种或几种创造现象、创造技术组合在一起,以出现新的创造物。如将超声波现象和诊断技术组合在一起,就出现了超声波诊断新技术;将摩擦这种物理现象与焊接技术结合在一起,就形成了摩擦焊接法;将磁阻效应和霍尔效应(均为物理现象)组合在一起,就导致了索尼二极管的研制成功。

综合法是组合法的放大。参与综合的创造物不像组合法要求的两种或几种,而是多种甚至许多种。第三次技术革命,就是原子能、空间技术、微电子技术和电子计算机技术等多种新的科学技术综合在一起的产物。超高速船是高速快艇和气垫船的复合型,由于它综合了水中部分酷似飞机的船形、重量轻的材料、大输出功率和高效率的喷水推进系统、高速控制系统等开发性技术,因而被列入 20 世纪最后几项超大型技术之一。

信息交合法是将两类创造物整体分解成要素序列,并用X轴和Y轴的形式即信息坐标表示出来,形成一个"信息坐标反应场",然后将两个轴上的各要素逐一地进行交合,从而求得新的创造物。如可以将瓶子的功能、结构、形状等排成一个序列,再将人们的日常活动,诸如喝水、下棋、锻炼身体、审美欣赏等排成一个序列,两个序列构成一个信息坐标反应场。然后将两个序列上的各个要素逐一交合,瓶子的功能和喝水交合,产生可当作口杯用的瓶;和下棋交合,瓶底可塑上将士车马炮等字样,瓶子用完,翻过来便可以做棋子;和锻炼身体交合,瓶子可拴成流星链、可挂在墙上做子弹靶;和审美欣赏交合,可在瓶体上绘画、写字,也可以将各种各样的瓶子粘接成各式各样的艺术品……两个序列轴的长度无限,瓶子的用途无限。

宏观地考察,人们总结出来的种种创造技法无一不符合化合律、体现化合律。如智力激励法,就是通过一定的会议,形成一个能够相互启示、引起联想、开发智力的创造环境,以求得出现新建议、新方案。这当然是一种"化合",一种众人智力参与创造的"化合"。再如 KJ 法,此法是日本东京工大教授川喜多二郎提出来的,KJ 是他的名字的字头。此法是将与某一课题有关的分散想法进行分类整理,经过归纳组合后而发展成一种新的想法。此法无疑也是一种"化合",一种由各分散想法参与创造的"化合"。

其它创造技法,均可作如是观。

上面笔者为了叙述方便,将加律、减律、化合律分开来说了。实际上,对一个创造过程而言,加减化合是融合在一起的。对这种创造物来说是"加",对另一种创造物来说就意味着"减";反过来一样,对一种创造物来说是"减",对另一种创造物来说是"加"。好比炒一盘菜,盐放多了就意味着糖醋酱等其它调料少了,反过来同理。而且,加减的过程、加减的终端、加减的目的,也必然是"化合",即生成新的创造物。不管是多放盐少放糖还是少放盐多放糖,目的都是为了诸种创造物在炒锅内好生化合,从而出现一盘可口的好菜——一盘色香味形俱佳的新的创造物。

作家的创造遵循着加减化合律。曹雪芹写《红楼梦》"披阅十载,增删五次"。 鲁迅先生说:"写完后至少看两遍,竭力把可有可无的字、句段删去,毫不可惜。" 笔者做报纸副刊编辑三十多年,就是以"加减化合"方式,"为他人作嫁衣"的三十多年。大量的来稿一般都存在"头皮厚、肚腹胀、尾巴长"问题,于是就"去厚皮、减腹胀、砍长尾",当然还要改正错别字并通篇润色。我自己的写作也遵循着加减化合律,每一篇作品,都是在反复地琢磨、修改、润色之后,才予以发表,发表以后,也有再修改。20世纪70年代,我开始练习写作,几十年来发表了上千篇作品,出了三十几种书,这些作品、书,都是加减化合的产物;当然,也是新异替变的产物。

## 4 文明积淀律

文明是智慧创造的产物,人类之外的动物、植物、微生物以及非生物,是非智慧的创造物,所以本节讨论的文明积淀律是一个在一定范围内起作用的、相对特殊的创造律,它只适合于构成文明主体的人类创造,非人类创造不受此规律的制约和支配。换句话就,就是非人类创造只遵守新异替变律和加减化合律,人类创造除遵守新异替变律和加减化合律外,还得遵守文明积淀律。这也是人类创造和非人类创造的又一重大区别。

作为人类创造的物质财富和精神财富的总和,文明积淀和凝结着几十万年来人类创造世界、创造自身所付出的巨大智慧,标志和显示着人类社会开化、进步、发展所达到的水平与程度。比如,口头语言、石制工具、人工取火及熟食、发明和使用弓箭、巫术和原始艺术,就是旧石器时代的标志;哥白尼"日心说"的提出、牛顿古典力学的建立、纺织机和蒸汽机的发明,就是农业社会走向工业社会的标志;量子力学、基因论和相对论的创立,原子能、电子计算机和空间技术的应用等,就是人类进入高度工业化、现代化社会的标志,等等。

笔者这里讲的"积淀",借用了分析心理学的术语,但比分析心理学所讲的"积淀",涵义要宽泛得多。在分析心理学(尤其是以荣格为首的神话原型派)那里,积淀主要指集体无意识即普遍的原始意象和观念的积累和遗传。笔者所讲的"积淀"的内容,除包括荣格等人总结提出的集体无意识、个人无意识,以及弗洛伊德提出的潜意识之外,还包括意识——个人意识、集体意识、社会意识,以及这

些意识的物化,即人类智慧创造的结晶——以文明形式出现的语言文字、音乐建筑、雕塑绘画、机械器具、思想理论、方法技术、生产方式、社会形态等等。

这样,"积淀",就至少具有下面三个方面的含义:

第一,积累。人类的智慧创造,是一个由小到大,由少到多,由低到高,逐渐聚集、逐渐文明的过程。金字塔是一块一块巨石垒起来的,万里长城是一块一块青砖砌起来的。早期人类不可能享用电视电话电脑打印机,也不可能造一艘宇宙飞船登上太空。然而,没有最早的对火的发现、控制和使用,以及后来的火药的发明等等,也就没有今天遨游太空的宇宙飞船;没有最早的口头语言及后来的象形文字、楔形文字和字母文字,也就不会有当今现代化的通讯设备和办公用具。从学会用火到制造火箭、卫星、宇宙飞船;从原始的手势口语到电脑打印数码通讯,其间积累着世世代代无数创造者的聪明和智慧。文明的历程,是智慧创造由点点滴滴到涓涓细流再到汪洋大海的历程。

第二,遗传。这里的遗传,不仅指人的生理构造和生理机能的代代相传。心理的、智慧的、精神的遗传也包括在内,甚至包括智慧创造的产物,诸如方法、技巧、技术、手段等等的一代传给一代。比如,作为产生智慧的中枢和摇篮——大脑的生理构造和机制的遗传是遗传;古代先贤的哲言睿语,诗人才俊的佳句名篇的传诵不绝也是遗传;取火的方法、造纸的技巧、冶铁的技术以及种种谋生手段的代代相传也都是遗传。这些遗传,传递了人类智慧的火种,是文明赖以延续和发展的桥梁和杠杆。

第三,滤汰。即过滤和淘汰。文明积淀并非兼收并蓄,毫无选择。在积累和遗传过程中,必然要过滤和筛选——判断、鉴别、选择——淘汰,留下合适的、进步的、优质的,去掉不合适的、落后的、劣质的。制作陶器,留下的多是当时条件下所创造的最优质、最精致、最好看的;劣质的、粗糙的、难看的,一出炉甚至在粗胚时就扔掉或摔碎了。语言文字在交际使用中,总是不断地淘汰那些生僻的、繁琐的、艰涩的、难认难读难写的字词,留下或创造出新颖的、简洁的、易于辨认的好读好写的字词。

"积淀"的上述几层基本含义,为文明积淀律的几条基本原则的提出提供了基础。这些基本原则是:进步的原则,优化的原则,人道的原则。作为制约和规

范人类创造的特殊规律,文明积淀律要求人们在任何创造中都得遵守这几条基本原则,一旦有所违犯,就必将受到惩罚。

进步的原则要求人们在创造中投入智慧以后,生成的创造物不但是新异的,而且是进步的。(一般来讲,新异的就是进步的,但不尽然,如,人们说出的每一句活,干的每一件事,在创造论看来都是新异的,但不一定都是进步的。)进步意味着接近或赶上超过文明积淀目前所达到的最高水平,换言之,文明积淀目前所达到的最高水平,就是衡量进步与否的标尺。比如出版一部书,目前的最高水平是内容新颖独到,装帧精美别致,电子分色、激光照排、套色胶印等等。如果全部,或部分地接近或达到这样的水平,那么,出版的这部书就是进步的,否则就是落后的,或者是部分落后的。"进步"的书,自然会受到广大读者的青睐,"落后"的书,想赢得读者,是很困难的。

一个社会的政治状况也可以用进步的原则来衡量。发展到已进入 21 世纪的现代化文明,要求随之适应的政治是科学的而不是随意的,符合民意的而不是独裁专制的,透明的而不是神秘的。科学的、民意的、透明的政治是进步的政治,随意的、独裁的、神秘的政治是落后的政治。落后的政治必然要被进步的政治所代替。这是文明积淀律所决定的,是任何个人意志都不可逆转的。

优化的原则要求人们在创造中投入的创造物和出现的创造物都必须实行"优化",即选择最进步、最优秀的创造物,淘汰落后的、3差劣的创造物。目前最先进的排版技术是电脑输入,激光照排,效率是原来铅字组版的十几倍甚至几十倍。如果不选择不采用激光照排系统而采用铅字组版的"活字印刷术",那么这个印刷厂是不会有效益的,是办不下去的。学生升学,要考试要体检,遵守的是优化的原则;干部升迁,要综合考察,遵守的也是优化的原则。工农业生产和科学实验中常采用优选法,即依据数学上寻找某个函数极值(极大或极小)的办法,以较少的试验次数找到合理的配方、合适的工艺条件等。日常生活中,人们吃饭、穿衣、旅行散步,看电视听音乐,时时事事处处都存在一个"优化"的问题。

人道的原则是很重要的一条原则。它要求人们在创造中,必须符合人道,必 须用人之成为人的最起码的一些准则来约束。人是宇宙的精华,万物的灵长,创 造的主体,所以,人道的原则;也就是尊重人、爱护人、保护人的原则。这就要 求人们在创造中,要尊重、爱护和保护人的创造效能、创造价值;尊重、爱护和保护人的生存、生活、言论、出版等等基本的创造权利。杀人是一种创造,罪大恶极、十恶不赦的罪犯都依法该杀,然而滥杀无辜,甚至屠杀手无寸铁的善良的民众,这样的"杀"就违背了人道的原则,不是尊重、爱护和保护人,而是残害、剥夺、荼毒人。文明积淀律不容许这样的惨无人道的创造,一旦出现,必将予以严厉的惩罚。

血腥的侵略战争,罪恶的奴隶贸易,种族歧视和隔离,毒品的生产和贩卖,等等,都是违反人道原则的创造。这样的创造自然要受到全人类的谴责、制止和 裁决。这同样是文明积淀律的必然要求,任何个人意志都不能左右的。

这里我们得将臭名昭彰的阿道夫·希特勒写上一笔。作为世界级恶魔,若论希特勒的创造能力,不能说不巨大——居然发动了一场导致三千五百万人丧失性命的第二次世界大战;若论其创造手段,不能说不新异——短短的几年时间,便由一个不名一文的纳粹党徒一跃而为世界强国之元首,并以闪电般的速度建立起法西斯独裁统治;若论其创造影响,也不能说不深远——和其同代及不同代的许许多多的人都无法回避地谈论他(甚至有人还力图效法他)。美国作家哈特在撰写《历史上最有影响的100人》时,虽然"带着一种恶心的感觉",但却不能不把希特勒列入书中比较高的位次。

然而,希特勒的创造是违反文明积淀律的不符合人道原则的创造。他掌权期间,推行了历史上无与伦比的种族灭绝政策,庞大的集中营里,无辜的男女老幼被活活毒死。几年时间惨遭杀害的犹太人数高达六百万。不仅犹太人,大批大批的俄国人和吉普赛人,以及许许多多被他认为是低劣种族的人也在其血腥屠杀下丧失了生命。落入这样一个法西斯魁凶的魔掌中,人们连起码的生存权利都得不到保障,那里还谈得上人格的尊严、言论的开放、创造的自由!

如果说希特勒的创造还算一种创造的话。那么,人类文明绝不允许第二个这样的创造出现。有人如果敢冒天下之大不韪,想当希特勒第二,那么,文明积淀律必将驱使人们用更强有力的更有效的创造手段来制约、制止和制裁他。纳粹战犯受到全世界范围内的通缉和审判便是文明积淀律惩罚作用的体现。

# 四 创造态

## 1 创造态概说

创造态是创造物进入创造过程,释放和发挥创造效能的种种情形、种种状态。由于世间万事万物都是创造物,都得进入创造过程,都得释放和发挥创造效能,所以,创造态就是世间万事万物最基本、最普遍的存在方式。换言之,任何创造物都必然以创造态的形式存在于世,世间没有不以创造态存在的创造物。——这是创造态的普遍性。

创造物进入创造过程,释放和发挥创造效能的情形是千差万别、变化多端的,也就是说,创造态是以多种多样的形式呈现的。——这又是创造态的多样性。但不管有多大差别、多大变化,也不管如何差别、怎样变化,总归都呈现的是一种创造态。差别和变化,不过是创造态的不同情形、不同状况而已。

我们可以将银河系整个地看成一个巨大的创造物。这个巨大的创造物由包括 太阳系在内的恒星、星团、星际气体和尘埃等众多的创造物聚集而成,由于参与 聚集的各个成分总是不断地进入新的创造过程,不断地释放和发挥着各自的创造 效能,而且"进入"和"发挥"的方式又多种多样,因而也就导致了银河系必然 呈现出各种各样的创造态。银河系内的恒星、星云和其它星际物质,作为整体, 不停地绕着银轴转动,这是银河自转态;银河系内的各种天体,如中性氢云、电 离氢云、星际非热、超新星遗迹等,不断地产生射电现象,这是银河射电态;银 河系空间中存在着很不规则的磁场,可称作银河磁场态;银河系内有运行很不规 则的气体流,可称作银河风态;还有银河光态、银河吸收态、银晕态、银冕态, 等等。就是我们用肉眼在无月晴夜所看到的横跨天空的乳白色光带,即所谓的"天 河""银汉",也是时远时近,时明时暗,时长时短,时宽时窄,时密时疏,时正 时斜,变化不居的。

不同的创造物具有不同的创造态,相同的创造物也具有不同的创造态;一个

创造物自身,其创造态也是不断变化、不断新异的。动物园里的雄狮,坐在那里是坐态,卧在那里是卧态,吃食物时可称作饕餮态,吼叫时可称作咆哮态,还有憨态、娇态、病态、威猛态、凄厉态、老弱态,等等。水一般情况下是液态,到了0℃以下,就成了固态;加热到100℃以上,就变作气态。液态、固态、气态的水也各有各的无限多的不一样的形状。

人是智慧的创造物。由于智慧的介入,人的创造态可以说是特别复杂,无限丰富,用"五花八门""千姿百态"远远不足以概括和形容。大体上划分,人的创造态有感觉态、知觉态、表象态、思维态、潜意识态、意识态、灵感态、情感态、理智态,等等。这里提到的每一种创造态,又都可进一步划分为若干不同的具体态。如感觉态可分为视觉态、味觉态,听觉态、嗅觉态、触觉态、第六感官态等;思维态可分为侧向思维态、逆向思维态、联想思维态、粉碎思维态、综合思维态、形象思维态、意象思维态、抽象思维态等。还有,人的血液在血管里涌流,呈液态;人全身有几百块骨头,呈固态;人吸入的新鲜氧气,排出的二氧化碳,呈气态;人身具备某种磁场,呈场态;人体可能辐射某种光波,呈波态,等等。

创造物的创造态尽管变化多端,无限丰富,但并非无规律可循。创造态是创造物进入创造过程所呈现的种种情形、种种状态,所以创造态无疑也是一种创造物。既然是创造物,就得受创造律的制约和支配。新异替变律要求创造态总是新异的、不断替变的;加减化合律决定了创造态总是在不断地加减化合;文明积淀律导引着人类的创造态朝着能够出现进步的、优化的、人道的创造物的方向迈进。

划分创造态的种类可以有多种方法,如物理学的化学的划分法、生物学的人类学的划分法、心理学的社会学的划分法,等等。笔者采取的是宏观的创造哲学的划分法。这样的划分法,将无限丰富的无限多样的创造态大体上归纳为三大类:创造静态、创造动态、创造变态。

## 2 创造静态

创造静态是相对于创造动态而言的,由于万事万物时时处处都处于创造中, 所以宏观地看,创造动态是绝对的、永恒的、无条件的,创造静态则是相对的、 有时限的、有条件的。

相对的创造静态不外乎两种情形:

第一,相对于进入某个创造过程的创造物来讲,未进入这个创造过程的创造物就处于创造静态。比如,菲律宾的火山正在喷发,日本的火山没有喷发,相对于菲律宾的正在喷发的火山,日本的没有喷发的火山就处于创造静态。又如海湾战争,相对于发生战争的科威特、伊拉克和沙特阿拉伯等国家,没有发生战争的国家和地区就处于这场战争的创造静态。

第二,对于创造物本身而言,进入创造动态之前和经过创造动态之后,就相对地处于创造静态。菲律宾的喷发前的火山和喷发后的火山,相对于正在喷发时的火山,就处于创造静态。战争前和战争后的海湾,相对于正在发生战争的海湾,就处于创造静态。

考察创造静态至少有两个方面的意义:

首先,创造静态为认识、区别和分析创造物的质的规定性提供了必要条件。我们说世间的一切都是创造物,不等于说世间的一切都是一类创造物、一种创造物或一个创造物。创造物具有无限丰富的多样性。要认识、区别和分析这无限丰富的多样性,即认识、区别和分析各类、各种、各个创造物的性质和特点,测量和确定这些创造物的创造质和创造量,就必须将各类、各种、各个创造物置于相对稳定、相对静止的状态,即创造静态来把握。草原上的马群,如果处于剧烈的奔驰状态,我们便无法确定每匹马的体格特征,无法分辨马与马之间的具体差别,也无法测检每匹马的高度、长度、重量、口龄、有无疫病等等。即使是测量某匹马的奔跑速度,那么,这匹马在奔跑的始点与终点,同样得处于创造静态,奔跑不止的马是无法测定其速度的。从另一个角度看,奔跑的马无疑处于创造动态,但这匹马奔跑时经过某段距离的某一个点时,相对地就可视为创造静态,这当然是创造动态中的创造静态。用摄影机将骏马奔跑的情形拍摄下来,每秒钟可获得二十四个画格,即二十四张小照片——马奔跑的各个动作在不同瞬间的静止影像。这些静止影像,也即创造静态,为人们研究、分析马运动时的情形,诸如肌肉的张弛、骨节的弯折、鬃毛的风扬、动作的造型等等提供了条件。

其次,创造静态是创造动态的休整、准备、酝酿和渐进。一般来讲,大的创

造成果,即创造质和创造量达到较高甚至很高的价值指数的新的创造物,是在创造动态的情形下出现的。创造静态时也出现创造成果,即新的创造物,但无论其创造质还是创造量,其创造价值指数都比较低。因而,对于智慧的人类创造而言,无疑有追求较高的创造价值指数的趋向,即创造价值指数越高越好。由于较高的创造价值指数只有在创造动态时才能实现和达到,所以,人们总是希望缩短创造静态的时间,尽快地进入创造动态。但是,没有创造静态也就没有创造动态,创造静态是创造动态的休整、准备、酝酿和渐进,创造动态是创造静态发展、演化之必然,两者相互转化,相辅相成。

骏马不能不吃不喝不休息地奔驰在草原上,运动员不能一天二十四小时地活跃在体育馆、绿茵场;一个作家也不能一年三百六十天,写它八千六百四十个小时。当然,骏马的价值就在于奔驰,运动员的辉煌也就表现在体育馆、绿茵场,作家之所以被称为作家,也只是因为其手中有一支能艺术地表达人类智慧和情感的运行着的生花妙笔,所以,骏马的吃喝拉撒睡是为了更好的奔驰;运动员的休整、疗养、保健,是为了体育馆和绿茵场上的更快、更高、更强、更好;作家放下手中的笔,棋枰对奕、河边散步,听听音乐、看看电视、会会朋友等等,正是下一步写作的准备和酝酿。没有马的吃喝拉撒睡,也就没有马的奔驰;没有运动员的休整和疗养,也就没有运动场上的更快、更高、更强、更好;没有对奕、散步、旅游、会友等等准备和酝酿,也就没有作家的指示造形、穷情写物、天人际会、笔走龙蛇。

最后,笔者还要强调一下创造静态的相对性。事实上,无论哪一种创造静态,也都是创造动态中的创造静态。菲律宾的火山当然不会永无止息地喷发,相对于喷发期,休止时的火山处于创造静态。这时候的参考系是处在喷发状态的火山。这个参考系如若换成太阳,那么,菲律宾的火山就永远处于创造动态,道理很简单,它要随着地球绕着太阳作无休止的旋转,直到太阳爆炸,地球毁灭。同样,相对于激烈的战争状态而言,结束战争后的海湾进入了创造静态。但是,参照系一变,比如换成月亮吧,海湾就没有创造静态可言了——那些燃烧的油井可能还在冒烟,那里的人民也要医治创伤,发展生产,政治家们在为中东的持久和平来回奔走,科学家们在想方设法减少和清除战争带给海湾乃至全球的环境污染……

总之,我们既不能否定创造静态的存在,又不能将创造静态绝对化。否定了创造静态的存在,我们就无法测定分析创造物的性质、特点、差别及价值指数;将相对的创造静态绝对化,我们就违背了创造律,就等于放弃和否定了创造。因为说到底,创造是"活动",是创造物进入创造过程释放和发挥创造效能从而出现新的创造物的活动,如果处于绝对的"静"态,那还"活"什么"动"呢?还有什么创造可言呢?

## 3 创造动态

与其说创造态是世间万事万物最普遍、最一般的存在方式,毋宁说创造动态是世间万事万物最普遍、最一般的存在方式。因为世间万事万物作为创造物必然要进入创造过程,必然要释放和发挥创造效能,不进入此创造过程就进入彼创造过程。进入创造过程、释放和发挥创造效能本质上就是一种"动态",新的创造物只有在这样的创造动态中才能生成。所以,创造动态是创造物最根本、最广泛的存在态。创造物和创造态如影随形,须臾不可分离。创造物是处于创造动态的创造物,创造动态是创造物的创造动态。世间不存在离开创造动态的创造物,也不存在不以创造物为基础、为根源、为本体、为依托的创造动态。

创造动态可分为创造萌动态、创造悠动态和创造激动态。

#### ●创造萌动态

创造萌动态是创造的萌发期。这时候的创造物刚刚进入一个创造过程,开始 初步释放和发挥各自的创造效能,新的创造物刚刚萌芽,甚至还处于"胚胎"或 "蓓蕾"状。用两句古诗来形容,就是"小荷才露尖尖角""草色遥看近却无"。

创造萌动态标志着一个创造过程的开始,是创造悠动态和创造激动态的前奏、 序幕和基础。毫无疑问,没有创造萌动态,就没有创造悠动态和创造激动态,创 造过程以及出现新的创造物等等也都无从谈起。

地震发生时地下岩石构造的异常活动,台风形成时洋面上湿热空气的局部聚积;种子入土,胚芽初露;饿狼出洞,凶视眈眈;发明家的脑子里忽然产生一个发明某种创造物的意念;作家萌发了描写某种人物、某个事件、某篇作品的欲望

等等。不管是生物界还是非生物界,创造萌动态都普遍地存在着,没有哪一个创造过程不经过萌动期,只是"萌动"的时间有长有短、形式多种多样而已。

非生物的创造萌动态具有非感觉、非欲念、非意识、非智慧的特点。地下的 岩石并不因出现异常活动而感觉、而意识到要地震;洋面上的湿热空气并不因局 部聚积而产生刮它一场台风的欲念,也不会产生和投入什么智慧,如决定风力大 小,选择行进路线、登陆时间、从何处上岸等等。

生物的创造萌动态大大地不同于非生物的创造萌动态。微生物、植物的创造萌动态具备刺激感应性,如种子的萌芽、花朵的苞蕾对温度、湿度、风、霜、雨、雪等都很敏感。动物更进一步,其创造萌动态是有感觉甚至是有欲念的萌动态一一当然是源于动物本能的感觉和欲念。地震前夕,准确地说,地震"萌动"时,鼠蛇到处乱窜,鸡犬骚动不安;饿狼出洞,也一定是感到肚子饿了,该找点什么东西吃了,前方若出现鹿群,其神经系统也肯定会产生用鹿来充充饥的"欲念",于是便尾随、挑衅、伺机捕噬猎物。

人的创造萌动态除具有感觉、欲念外,更重要的是意识和智慧的参与,这是人之外的任何生物非生物都不可企及的。人的创造萌动态,很大程度上首先是在人的大脑中"萌动"。中国东汉时的蔡伦,在看到用竹简、丝帛作书写材料笨重、昂贵,不便于人的缺点后,是脑子里先"造意"——《后汉书》原话为"伦乃造意",即萌动了造一种价廉、方便的纸来代替竹简、丝帛作书写材料的欲念,然后才用"树肤、麻头及敝布、鱼网以为纸"(《后汉书•宦者列传》)的。生活在 15世纪中叶的德国发明家约翰•古腾堡也一定是先在脑子里"萌动"了改进缺点甚多的刻板印刷术的想法,然后才在实践中逐步发明适于制造活字的金属合金及倒字铸模、油印墨水和印刷机,并进而创建欧洲第一家印刷所的。

文艺创作中的创造萌动态更是典型地以表象、意象的形式,或清晰或朦胧地首先出现在作家艺术家的"脑海"中。中国古典文论、画论所讲的"熔意心神""意在笔先""迁想妙得""搜尽奇峰打腹稿"等等,讲的也就是这种创造萌动态。

举世闻名的阿 Q 的"影像",曾在鲁迅先生心目中萌动了好几年,先生曾回忆这个"影像":"该是三十岁左右,样子平平常常,有农民式的质朴、愚蠢,但也很沾了些游手之徒的狡猾。在上海,从洋车夫和小车夫里面,恐怕可以找出他的

影子来的……"(《且介亭杂文•寄〈戏〉周刊编者信》)

《生死疲劳》是获得诺贝尔文学奖的作家莫言的代表性作品。莫言在该书序言中说,这本书从动笔到初稿只用了四十三天,但书中的主要人物原型却在自己的脑海中活跃了四十三年。这四十三年,便是"创造萌动"的四十三年。

唐朝天宝年间,唐玄宗曾派画家吴道之去四川嘉陵写生作画,数月后,吴道之两手空空地回到了长安。唐玄宗见吴道之未画一张草图,很不高兴。吴道之说:"皇上息怒,我可以将嘉陵山水风光毫无差错地描画出来,因为嘉陵江沿岸的一草一木、一山一石全在我的心中。"玄宗不信,吴道之便当即挥笔,不到一天就完成了绝妙佳作《嘉陵江三百里旖旎风光图》。没有事先心中的"萌动",吴道之显然不可能将数月所见一挥而就。

讨论到这里, 笔者要引出两个重要的概念: 创造契缘和创造灵感。契, 是契 机,契合;缘,是因缘,缘分。创造契缘就是创造的契机和缘分,即创造的机遇、 创造的触媒。一个创造过程,往往因创造契缘的触发而"萌动"。一枚烟头未熄, 可以引起绵延数月的森林大火:一只老鼠钻进配电箱,整个企业因之短路停电。 这里的未熄灭的烟头、钻进配电箱的老鼠就是森林大火、短路停电的创造契缘。 鲁班上山,被有齿的茅草划破了手指,于是发明了锯子; 瓦特看见沸腾的壶水打 得壶盖啪啪响,于是发明了蒸汽机;牛顿看见苹果从树上自己掉下来,于是发现 了万有引力定律——这里的茅草划破手指、壶水打响壶盖、苹果自动坠地,就构 成了鲁班发明锯子、瓦特发明蒸汽机、牛顿发现万有引力定律的创造契缘。列夫•托 尔斯泰在散步中偶尔发现了路边一丛被打断被损伤却坚持生命、顽强活着的牛蒡 花,于是萌发了写作中篇小说《哈泽·穆拉特》的愿望。俄国画家苏里柯夫偶然 看见雪地上有一只乌鸦好似一个黑点停在洁白的雪地上。在好些年里,他"不能 忘记这个黑点",于是便创作出了主人公穿一身黑衣服的名画《女贵族莫洛卓娃》。 显然,路边的被折断被损伤而顽强活着的牛蒡花,雪地里兀立成一个黑点的乌鸦, 以及和托尔斯泰、苏里柯夫目光的遇合,便成为托尔斯泰写小说、苏里柯夫作画 的创造契缘。

如果说作为一种创造现象,创造契缘也存在于非人类创造过程中的话,创造 灵感就是人类创造的"专利"了。道理很简单,创造灵感属于智慧创造的一部分, 非人类创造是非智慧创造,自然不会产生创造灵感。创造灵感是人类所特有的一种突发式创造性思维活动,是智慧创造的"脉冲"形式,即大脑中枢神经系统刹那间像一颗质量巨大的"脉冲星",发射出短而强的高频率的智慧射电。就人类创造而言,如果说创造契缘是看到什么、听到什么、嗅到什么、尝到什么、触到什么、梦到什么、感觉到什么的话,创造灵感就是在看、听、嗅、尝、触、梦、感觉到什么的同时或之后忽然间想到什么、悟到什么。当然,这里说的想到的什么、悟到的什么,是充盈着创造智慧的、具有较高甚至很高的创造价值,能够给人类社会带来较大甚至很大的创造成果的"什么"。

如,法国数学家彭加勒在一只脚踏上刹车版的瞬间,突然想到了数学上一道难题的求证方法。德国化学家凯库勒梦见一条蛇咬住了自己的尾巴,于是豁然开悟,想到苯分子也应是环形结构。鲁迅先生被突然造访的,因受迫害导致神经错乱的一位姨表兄弟的言行所触动,想到应该彻底揭露专制制度的"吃人"实质,于是产生了显示"五四"文学革命实绩的第一篇伟大作品《狂人日记》。莫言受一幅"六道轮回"的壁画启发,为《生死疲劳》中的主人公西门闹设计了"六道轮回"。让其先后转世为驴、牛、猪、狗、猴,直到第六世,才终于投胎成一个有着不可治愈疾病的大头儿。旅居国外的波兰作曲家肖邦听到已获解放的华沙又被沙皇军队占领,成千上万的爱国志士惨遭屠杀的噩耗后,思绪翻腾,悲愤不己,彻夜难眠,于是,一口气谱写了三支后来被称作"埋藏在花丛中的大炮"的世界名曲——《C小调练习曲》《A小调前奏曲》和《D小调前奏曲》。

显然,创造契缘是创造灵感的导火索、诱导者和触发者,创造灵感以创造契缘为前提、为媒介。创造契缘和创造灵感结合在一起,构成了人的某些创造萌动态的最初情形。但是,应该指出,不是任何一种创造契缘都能诱导、触发出创造灵感。很多情况下,创造契缘引发出来的只是创造欲念。不象创造灵感那样充盈着高质量的人类智慧,且以短而强的高频率的"脉冲"射电的形式出现在脑海中,创造欲念只是一种欲望、一个念头,其创造质和创造量即创造价值指数比创造灵感低小得多,且并不以高频率的脉冲射电的形式在脑海中出现。比如,一个人上街看到某件衣服挺漂亮,产生了买来穿穿的欲念;见到某种食品很美味,产生了买一份吃吃的欲念;看到电影广告,产生了进去看看的欲念等等。这"穿穿""吃

吃""看看"的欲望和念头,只是简单的"穿穿""吃吃""看看"而已,和充盈着智慧"射电"的创造灵感相比,差距甚远,自然不能混在一起、同日而语。不过,创造契缘及其引发的创造欲念同样也构成了人的创造萌动态的某些最初情形。

创造萌动态没有时限标准,有的相当长,如生命的起源就"萌动"了若干亿年,有的又相当短,如某些生物只"萌动"几天、几个小时,甚至几分钟几秒钟。 人的创造欲念的萌动一般都很短暂,我们常说的"刹那间",大概相当于一秒钟的几十分之一,"如壮士一疾弹指顷,六十五刹那。"(《俱舍论》卷十二)

创造萌动态是相对于一个创造过程而言的。比如相对于一个人的整个生命历程而言,萌动期就是十月怀胎;相对于一朝分娩而言,胎儿的萌动期就是受孕的那一刻。另外,还有这样的情形:有的创造物进入一个创造过程后,仅仅是"萌动"一下而已,并不向创造悠动态、创造激动态过渡和演变。如种子刚发芽就旱死了淹死了,苞蕾还未绽开就风催了雪杀了。人的许多欲念也只是在脑子里闪一下而已,并不一定去实践、去兑现。如想买什么并没有买,想吃什么并没有吃,想说什么并没有说,想写什么并没有写,等等。

### ●创造悠动态

创造悠动态是创造的进展期,具有过渡性、中介性和过程性等特点。讲其过渡性,是因为创造物经过创造萌动后,一般都要经过一段创造悠动,然后才或快或慢地进化到创造激动态。讲其中介性,是因为创造悠动态是创造过程的中间环节,是连接创造萌动态和创造激动态的桥梁和纽带。讲其过程性,是因为创造悠动态一般情况下,要占去一个创造过程的大部分时间。也即是说,一个创造过程的大部分时光,相对而言,都要在创造悠动态度过。人类创造最艰难、最辛苦,从而最需要意志、毅力、韧性和体力的情形,也往往都出现于创造悠动态。如果说新的创造物主要是在创造激动态形成的话,那么,创造萌动态和创造悠动态就共同构成了创造激动态——即形成新的创造物的基础。

我们居住的地球起源于四十六亿年前的原始太阳星云之中,如果将地球胎的 生成对应于创造萌动态,将地壳的最后形成对应于创造激动态,那么,极其漫长的地核圈层、地幔的形成过程就可视为处于创造悠动态。小麦生长的创造悠动态

是从返青、拔节到吐穗开花前。雏鸡出世的创造悠动态是开始孵化到破壳之前。 人的认识活动的心理历程,一般要经过四个依次递进的环节,即感觉、知觉、表 象和思维。感觉可划入创造萌动态,知觉和表象便是创造悠动态。正是经过知觉 和表象作为中间环节的"悠动",感觉才上升为思维,感性认识才过渡、进化到理 性认识。

一个作家萌动了撰写某部作品的欲望,于是他开始搜集资料,整理素材,规划提纲——这些都可视为创造悠动态,甚至可以把辛苦的灯下耕耘也整个地视为创造悠动态,尽管写作中不乏"激动"的时刻。曹雪芹写《红楼梦》花了十年时间,这十年便是"创造悠动"的十年;歌德写《浮士德》,先后长达六十年,这六十年也是"创造悠动"的六十年。科学技术上的发现和发明,往往是先在科学家、发明家的脑子里"萌动",然后经过一系列实验、求证、运算等等"悠动",才最后取得成功的。欧里希发明治疗昏睡病和梅毒病的药物606(砷凡纳明),做了六百零六次实验,失败了六百零五次,这失败了的六百零五次,便是处于创造悠动态的六百零五次。放射性元素镭,是居里夫妇花了几个月时间,一公斤一公斤地从数吨铀矿的残余中提炼出来,从而发现的。这提炼的过程,便是处于创造悠动态的过程。

和创造萌动态类似,创造悠动态也没有时限,有的相当长,有的相当短,得视具体的创造过程和具体的创造物而定。不同的创造物的创造悠动态不尽相同。同一个创造物的创造悠动态也不尽相同。相同的只是"悠动"——占用的创造时间多一些,创造速度慢一些,创造的形式平和稳定一些——这当然是相对于创造萌动态和创造激动态而言。

### 创造激动态

创造激动态是创造的喷发期,是经过萌动、悠动之后的创造效能的较大规模、较高指数的总体性爆发。一出戏,如果说序幕是创造萌动态,剧情的演化发展是创造悠动态,剧末的高潮就是创造激动态。一场战争,运筹帷幄是"萌动",调兵造将、两军对垒是"悠动",真枪实弹地打起来,便是"激动"了。

创造激动态和新的创造物如影随形, 创造激动态的呈现过程就是新的创造物

最终形成的过程。如果说一刻受孕和十月怀胎是创造萌动态和创造悠动态,一朝分娩就是创造激动态。崭新的生命也就是在这嘶天喊地的激动态中呱呱坠地、宣告诞生的。

创造悠动态有时很短暂,短暂到几乎和创造萌动态缩合为一,即一"萌动" 便立刻进入了"激动"。对智慧的人类创造而言,由创造萌动立刻跃入创造激动, 即是所谓的"灵感状态"或"顿悟"状态。这样的情形在科学发现、科技发明和 文艺创作中普遍存在。凯库勒由咬住了自己尾巴的蛇联想到苯分子的环形结构, 于是"从电掣中惊醒",在异常兴奋的创造激动态中工作了整整一夜。郭沫若在《我 的作诗的经过》一文中,曾回忆他创作两首诗时的情形: "《地球,我的母亲》是 民八学校刚放了年假的时候做的。那天上半天跑到福冈图书馆去看书,突然受到 了诗兴的袭击,便出了馆,在馆后僻静的石子路上,把'下驮'(日本的木屣)脱 了,赤着脚踱来踱去,时而又率性倒在路上睡着,想真切地和'地球母亲'亲昵, 去感触她的皮肤, 受她的拥抱。——这在现在看起来, 觉得有点发狂, 然在当时 却委实是感受着迫切。在那样的状态中受着诗的推荡、鼓舞、终于见到了她的完 成,便连忙跑回寓所把她来写在纸上,自己觉得就好像是新生了的一样。""《凤凰 涅槃》那首长诗是在一天之中分两个时期写出来的。上半天在学校课堂里听讲的 时候,突然有诗意袭来,便在抄本上东鳞西爪地写了那诗的前半。在晚上行将就 寝的时候,诗的后半的意趣又袭来了,伏在枕头上用着铅笔只是火速地写,全身 都有点作寒作冷,连牙关都在打战。就那样把那首奇怪的诗也写了出来。"

进入创造激动态后,由于人的创造效能得到了非常有效地、淋漓尽致地、最大限度地释放和发挥,因而巨大的无与伦比的创造快感便随之产生,它常常使人若痴若狂,如醉如迷,神魂颠倒,飘飘欲仙,忘乎所以。对此,柏拉图谓之"灵感迷狂",果戈理谓之"甜蜜的颤栗",别林斯基谓之"神秘的灼见",郭沫若谓之"神经性发作",我们则可以称其为"创造高峰体验"或"创造极致效应"。

男女欢爱中的性高潮是典型的创造高峰体验。其时,男女双方的身心两方面都达到极度的兴奋——身体方面:心跳加速,呼吸加快,血压升高,四肢抽搐,浑身发热,一瞬间,耳朵、眼睛都几乎变得听不见、看不见;精神方面:大脑中枢高度兴奋,独特的无法比拟的难以形容的全方位快感洪水般冲来,似乎要将整

个脑袋连同躯体一卷而走,有一种被抛向空中,在宇宙间飘忽的眩晕感。高潮过后,男女双方都会感到全身通泰、内外舒畅、痛快至极、妙不可言。

文艺创作和科技发明中的创造高峰体验及创造快感,和男女欢爱中的创造高峰体验及创造快感性质有所不同,前者比后者时间长、效力久、意味深、影响大。"性高潮"最多几秒钟就过去了,文艺创作和科技发明带来的快感则要持续一段时间。郭沫若将诗作《地球,我的母亲》一气呵成后,激动的心态依然不能就此冷却,于是他便帮助一位赶车的同学扛了两里路的行李,"自己是愉快得了不得"。果戈理有一次进入了创造激动态,在稿纸上宣泄了一通,仍感不过瘾,于是便手举小阳伞走出屋子,在大街上跳起舞来,跳得得意忘形,旁若无人,小阳伞被他舞出许多花样,最后只剩下光秃秃一杆伞柄。更重要的区别在于,男女欢爱中的创造高峰体验,基本上是男女双方的事,对社会的影响是间接的、些微的;而科技发明和文艺创作中的创造高峰体验除创造发明者自身可获得最大的快感满足外,还有较大的甚至巨大的社会意义——现代科学技术无疑是新的社会生产力中最活跃的起决定性作用的因素,而文学艺术作品,用曹丕的话说,乃是"经国之大业,不朽之盛事"(《典论·论文》)——人类文明因之而积淀,而替变,而进化,而发展。

产生于创造激动态之中的创造高峰体验,并不限定于男女欢爱、科技发明和文艺创作,它贯穿和表现于政治、军事、生产、生活各个方面。随之产生的创造快感当然也不仅仅是"甜蜜的颤栗",极度兴奋的快活感、濒临绝境的死灭感、高度紧张的惊恐感、充满义愤的悲烈感、满腹辛酸的苦涩感等等,无疑也都在创造快感容括之内。唐代诗人孟郊登科及第后,"春风得意马蹄疾,一日看尽长安花"是高峰体验;史学家司马迁惨遭宫刑后,忍辱发愤,"欲以究天人之际,通古今之变,成一家之言",同样也是高峰体验。一同西刺秦王,秦舞阳一进秦宫,便"色变振恐",浑身发抖,是高峰体验;而壮士荆轲,坦然献图,遂之逐秦王,掷匕首,"嗔目裂眦,发植穿冠",被断股重创后,还"倚柱而笑,箕踞以骂",也是高峰体验。耶稣受难于十字架,希特勒自杀于地下室,戈尔巴乔夫被软禁六十多个小时,阿波罗飞船上的宇航员登上月球,中国女排获得"五连冠",等等,无疑都是创造高峰体验。

应当指出,创造高峰体验以及创造快感,甚至包括创造激动态,都不是每一个创造过程都要出现的。有的创造过程只呈现创造萌动态和创造悠动态,不呈现创造激动态。换句话说就是,有的创造过程在创造萌动态时或创造悠动态时,新的创造物就出现了,创造过程就结束了,无需或不必经过创造激动态。比如某种欲念的产生和消失,某位官僚冗长乏味的报告,某些事情的不了了之,等等。

## 4 创造变态

创造变态是相对于创造常态而言的。创造常态指的是常见的、一般的、普遍的、秩序化的创造态;创造变态是罕见的、特殊的、反常的、非秩序化的创造态。和呈现创造常态的创造过程相比,呈现创造变态的创造过程,从创造物的参与、创造效能的释放和发挥,到新的创造物的生成,都有神奇、怪异、荒诞、乖谬、滑稽等等反常现象相伴随。然而,和创造变态无疑也是一种创造态一样,呈现创造变态的创造过程所生成的,具有神奇、怪异、荒诞、乖谬、滑稽等等特点的新的创造物毫无疑问也都是符合创造律的、具有创造价值的新的创造物。

太阳黑子的异常活动、恒星世界的变星爆发、突从天降的神秘火球、百年不遇的旱灾水灾等等,是非生物界的创造变态。发现于中国山东沂源县的叶上结果的银杏树,位于德国新勃兰登堡区由橡树、松树和山毛榉"三位一体"璧合而成的天然树;一笋长出七根竹子,苹果生在西瓜蔓上等等,是植物的创造变态。出生于苏联某赛马俱乐部的双头三腿马,发现于中国湖北神农架林区的变色鹿,群蜂袭击委内瑞拉,墨西哥"彩蝶盛会",法国五十头牛集体跳崖等等,是动物的创造变态。

作为地球上最高级的生命体,人的创造变态呈现着比其它生物非生物更为复杂更为丰富的情形。在生理方面,有非洲"猴女"、意大利"野女"、秘鲁"狼孩"、辽宁"猪孩"、鞍山女"毛孩";有三耳八肢女婴、没有皮肤的男童、生六个胃的男病人、长四个肾的女职员、头上长角的八旬老翁;有墨西哥的"乌鸦人"、中国福建的"蟹人"、津巴布韦的"鸵鸟人"、长尾巴的阿拉伯尼坦斯人;有只饮不食的小学生、三十九年不寐的农民、连续工作九十六个小时的工人、向后逆行逾万

里的老头;还有人身储电、体内喷火、眼睛分泌彩色丝线、耳朵里长出稻秧,等等,等等。人体特异功能现象是生理和心理共同起作用的创造变态,包括特异认字、超常透视力、辨别方向和磁性、辨认遗留信息、思维传感、特异致动、意念移物、突破空间障碍、特异书写等。另外,气功态也是生理和心理共同起作用的一种创造变态。

人是智慧的创造物,智慧的大本营是大脑神经系统。因此,人的创造变态更多的表现在精神上和心理上,而精神变态和心理变态又导致了行为的变态。精神病患者、脑疾患者和药物中毒者的思维、情感及言行是典型的创造变态。一般正常人有时也会或多或少地、或强或弱地产生偏离常态的心理现象,这些心理现象往往导致人们产生反常的、各式各样的、大大小小的变态行为。

显然,创造变态和创造常态没有严格的绝对的界限。换句话说就是,世界上 没有绝对的创造常态,也没有绝对的创造变态,创造变态中有创造常态,如精神 病患者也有安静平和、道貌岸然如常人的时候; 创造常态中有创造变态, 如正常 人的光怪陆离、奇异惊险、呓语频频的梦境。正如美国精神病学家费希尔所言:"梦 是正常的精神病,做梦是允许我们每个人在我们生活的每个夜晚都能安静地和安 全地发疯。"{[美]汤普森(R. F. Thompson)主编:《生理心理学》,金建明等译, 科学出版社,1981)创造常态和创造变态彼此依存,互相转化。母鸡司晨,公鸡 下蛋,骡子产驹,是由创造常态转化为创造变态;缠足放开,戒掉毒瘾,改掉怪 癖是由创造变态转化为创造常态。创造变态时间久了,重复得多了,人们习惯了, 就会变成创造常态。初跳"迪斯科"的人,开始时被视为"变态",几乎受到全社 会的遣责;后来见得多了,接受了,跳开了,"迪斯科"便成了创造常态。同样, 创造常态时间久了,重复得多了,人们厌恶了,也会成为创造变态。祥林嫂最初 给人们讲述她的阿毛被狼吃了的故事时,是创造常态;后来她反复不断地絮叨同 一个故事时,就成了创造变态。另外,对创造常态和创造变态的判断和评价,也 因时间、地域、人种、民族、社会环境、价值观念等等的不同而不同。"无故寻愁 觅恨,有时似傻如狂","行为偏僻性乖张"的贾宝玉,在他同时代的许多人看来, 无疑是离经叛道的"变态",而在现代人看来,则是颖慧独步的向传统礼教挑战的 "常态"。欧美一些国家风行的裸体运动,在崇尚自由的西方人看来,是开放自身、

走向自然的"常态",而在注重伦常的东方人看来,则是有伤风化、有损文明的"变态"。嘴唇、鼻翼上钻孔戴环,身上刺花纹、腿部铆铜套等等奇异风俗,在一些民族心目中是"常态",在另一些民族心目中是"变态"。这样的例子不胜枚举。

对于正常人的创造变态的研究,可以说从古希腊哲学家柏拉图的《斐德若篇》就开始了。柏拉图将创造变态称为"迷狂",认为"迷狂"有两类:一类源于疾病;一类源于对神灵的模仿。法国哲学家伊波利特·丹纳则把天才和迷狂联系在一起。意大利精神病专家伦布罗佐甚至用癫痫理论来分析天才,认为天才就是癫痫,癫痫就是天才——中国也有类似的"十个才子九个癫"的说法。美国美学家桑塔亚那指出:"历史上的大智者都曾受惠于某种程度的呆滞并多少有些疯癫。他被封闭在保护性的愚昧无感觉之壳中,使他免于精疲力竭和被这个太复杂的世界搞晕了头;但同时,那层外壳也使他与他的许多最切近和最崇高的兴趣融为一体。他被他心中那些兽性的梦之滑稽所逗乐;他为自己的激情奔放的梦癔而沾沾自喜,这类愉悦有时使他看上去和蔼可亲。因为极高的智慧必定仍然是野性的;它以强烈的热诚去争战,同时又时而显出呆相来。"{[美]乔治·桑塔亚那(George Santayana)著:《理性生活》,龙子超译,商务印书馆,2006}这段话是很有见地的。

在精神病学家弗洛伊德看来,任何一个正常人都是潜在的精神病患者,因为任何一个正常人都有性欲,即被称为"里比多"的原始本能。区别是否患有精神病也即是否处于创造变态的标志就是看其"里比多"是否得到满足、转移和升华。"只要一个人的性欲可以从外部世界的实际对象那儿得到满足,他就是健康的。一旦他的这个对象被剥夺了,又没有别的替代物,他就会得神经症。"{[奥地利] 西格蒙德•弗洛伊德(Sigmund Freud) 著、约翰•里克曼(John Rickman)编:《弗洛伊德著作选》,何明明译,四川人民出版社,1986)弗洛伊德认为艺术的本质就是人的本能冲动的转移,即性欲的满足、"里比多"的升华。

略去弗氏的有缺陷的泛性论不谈,仅就创造效能(自然包括弗氏的性本能,但绝不仅仅是性本能)释放和发挥的方式而言,弗氏的见解有不少值得重视和借鉴的地方。创造效能的释放和发挥无非两种方式:常态的和变态的。艺术家是通过艺术作品来排遣、转移、升华自己的性力、爱欲、情感、幻觉、理想、幽思等等的,一旦常态的方式不能或不足以实现这种排遣、转移和升华时,艺术家就自

觉不自觉地必然要选择变态的方式来实现。具体的创造变态自然是五花八门、多种多样的。小说家施蒂弗特、画家梵高选择的是病态中创作;竹林七贤、"诗仙"李白选择的是醉酒后吟哦;扬州八怪、卡夫卡、加缪、海勒选择的是荒诞和黑色幽默;查拉、布勒东、皮卡比亚、萨尔瓦多·达利选择的是达达主义和超现实主义;屈原、托尔斯泰、海明威、三毛等最终选择的是自杀,等等。

笔者说过,呈现创造常态的创造过程会生成新的创造物,呈现创造变态的创 造过程也会生成新的创造物。就艺术家而言,创造变态情况下出现的新的创造物 往往比创造常态情况下出现的新的创造物,要更新异、更别致、更艺术,从而创 造价值指数也更高一些。正是创造变态——具体讲是精神病态,才使只画了十年 画的梵高成为后期印象画派主要代表的梵高(我们当然不是希望和鼓励艺术家们 都变成精神病患者)。"他的精神病逐渐占有他的心灵,他想把我们带到他的痛苦 心灵之中",于是有了《自画像》《邮递员罗伦》《夜间咖啡馆》《向日葵》等传世 之作。在这些作品里,"他用螺旋形和波浪形的笔触来表达他内心激动的风暴。他 的疯狂成为他的双刃武器,它解放并且激发了他的艺术家的天资,因为没有它禁 高也许什么也不是而只是一个画店的尽职的雇员。如果说疯狂把梵高从平庸和令 人厌烦的生存中拯救出来的话,那么它只不过充分地控制了这个人而已——正如 梵高把它写在自己一封绝妙的信里所说的:他是一个'爱好伟大'的人。"{[德] 德斯佩泽尔(Ernst Gombrich)、福斯卡(Horst Waldemar Janson)著:《欧洲绘 画史》,杨宏仁、曹幸男译,上海人民出版社,2001}同样,没有"三百六十日, 日日醉如泥"的李白,也就不会有"斗酒诗百篇","沉湎至尊之前,啸傲御座之 侧",写出想象瑰丽、激情奔放的不朽诗作,并让杨国忠磨墨、高力士脱靴的李白。

站在本节的角度来看,笔者前面讨论过的创造动态中的创造激动态,就也可视为创造常态中的创造变态。果戈理举一把小阳伞在大街上手之舞之,郭沫若趴在地上和地球亲吻,曹禺写《日出》时,情绪爆发,曾经摔碎了许多可纪念的东西,"我绝望地嘶嘎着,那时我愿意一切都毁灭了吧,我如一只负伤的兽扑在地下,啮着咸丝丝的涩口的土壤。"(《日出•跋》)这些反常行为,难道还不够"变态"吗?

这里牵涉到创造静态、创造动态(包括创造萌动态、创造悠动态和创造激动

态)同创造变态的关系问题。作为概括在"创造态"这个大概念中的小概念,创造静态和创造动态是一对范畴,创造常态和创造变态是另一对范畴。两对范畴有区别,也有联系,可以说是交叉互渗,你中有我,我中有你,创造静态和创造动态可以是创造常态,也可以是创造变态;创造常态和创造变态可以是创造静态,也可以是创造动态。这得根据具体的创造物、具体的创造过程以及不同的参照系做具体分析。处于创造变态的精神病患者也可能呼呼熟睡(创造静态),也可能狂喊乱叫(创造动态);呼呼熟睡的正常人(创造静态)也可能正在做着离奇古怪、险象环生的恶梦(创造变态)。精神病患者的变态行为也有"萌动"到"悠动",再到"激动"的过程;正常人的心理也可能萌动、悠动,甚至激动"变态"的欲望和想法,甚至可能进一步将这些欲望和想法外化为萌动、悠动、激动的变态行为。

如果说作家艺术家的"变态"(必须指出,更多的有巨大成就的作家艺术家并未"变态"),可以带来有价值的新的创造物——新颖别致的艺术作品的话,一般人的"变态"则往往会给自己、家庭和社会带来不同程度的危害。人们将多种变态行为概括地总称为"人格失常"或"性格失常"。它包括反社会人格、性变态、妄想性人格、精神分裂性人格、酗酒、吸毒等。人格失常和创造律中的文明积淀律相抵触,比如反社会人格,其行为就有如下特征: A 极端的自我中心,只求欲望的满足,不考虑行为后果的危害性。B 不能忍受生活中的挫折,只要自己感到需要,可以不择一切手段。C 缺乏责任感与起码的道德观念,不以文明的社会规范和行为标准来判断是非,对自己的变态行为从不产生内疚感。D 缺乏正常人的感情,对人冷酷无情,又无正义感,无法与他人建立正常的交往和友谊。E 从来不承认自己是病态,认为大家都在迫害他。由于不符合文明积淀律,因而人格失常者要受到全社会的责备、制约和疗救,尽管疗救起来困难重重难以见效。

# 五 创造过程

## 1 过程的意义

创造过程是创造的程序和轨道,是创造时间的承载者;创造物只有经过创造过程,才能生成新的完整形态的创造物。也就是说,新的创造物只有在参与创造的创造物经过一定的程序,通过一定的轨道,花费一定的时间后,才能整体性地最终形成。没有创造过程,就没有新的创造物,现有的创造物也将失去意义。所以,创造物与创造过程生死攸关,创造过程是创造物赖以存在的必要条件;现有的创造物只有进入创造过程才算得上创造物,新的创造物只有经过创造过程才能获得诞生的机会。宇宙的生成是一个创造过程,生命的起源也是一个创造过程,人的思维及吃饭、睡觉、工作、交往、婚恋、死亡等等,也无一例外地都是经过一定的程序、通过一定的轨道、花费一定的时间的创造过程。

创造过程为创造物释放和发挥创造效能提供了机会、条件、时间和空间。创造的过程也就是创造物释放和发挥创造效能的过程。对于有感觉、有思维的高级生命体而言,创造效能的释放和发挥,必然有或弱或强、或短暂或持久的创造快感或创造痛感相伴随——(创造痛感似乎可以概括在创造快感之内,为了叙述简便,下面我们只提创造快感)。这是因为,有感觉有思维的高级生命体作为能动的创造物一进入创造过程,肌体的各个功能器官就必然要随着创造效能的释放和发挥而感应而运作而张弛,大脑中枢神经系统也会因接收、处理和反馈信息而兴奋而活跃而通达。这生理的和心理的一切,无疑会使创造主体产生"喜、怒、哀、惧、爱、恶、欲"(或"喜、怒、忧、思、悲、恐、惊")及舒服、惬意、快活、痛苦、难过等等情感。动物在捕食猎物、追逐异性、抚育儿女过程中会发出种种愉快的哼叫,甚至会摇尾振翮,手舞足蹈。由于智慧的介人,人类的创造快感自然和动物的源于本能的创造快感有质的不同,从而丰富、复杂、强烈、持久得多。然而,和动物的源于本能的创造快感有质的不同,从而丰富、复杂、强烈、持久得多。然而,和动物的源于本能的创造快感只有在创造过程中才能获得和满足相同,人类的有智慧介人的创造快感也只能通过创造过程才能获得和满足。没有创造过程,

人的以智慧为主要特征的创造效能就无从释放和发挥,创造快感也就无从谈起。

"路漫漫其修远兮,吾将上下而求索"——上下求索的过程,即是艰辛的创 造过程。"与天奋斗,其乐无穷;与地奋斗,其乐无穷;与人奋斗,其乐无穷。" ——与天、地、人奋斗的过程,也就是"其乐无穷"的创造过程。政治家只有不 停地投入权力角逐才能体会到斗争的乐趣;发明家超越凡人的优秀品格也只有在 发明的过程中才能得以全面的展现;艺术家也只能在不断的艺术创作中,获得所 渴望的最大的精神上的愉快和满足——创作的中止,意味着艺术生命的结束。称 得上作家的人都会有这样的感受:写,往往意味着一个痛苦的历程;然而不写, 往往会更痛苦。写作不仅仅是"苦闷的象征",而且还是"痛苦的宣泄"。"因为自 己心中有非说不可的话,不吐不快,为了把心里话说出来,才拿起笔写小说,写 文章。"(《巴金论创作》,上海文艺出版社,1983)当然,作家艺术家的"痛苦", 无疑是一种快乐的痛苦,和一般人因鸡毛蒜皮、小是小非引发的痛苦档次不同, 不可相提并论、同日而语。司马迁"意有所郁结,不得通其道"(《史记•太史公 自序》),因而"发愤著书"——发愤著书的过程也就是宣散"郁结"的过程。"嘉 会寄诗以亲,高群托诗以怨。至于楚臣去境,汉妾辞宫:或骨横朔野,魂逐飞蓬; 或负戈外戍, 杀气雄边; 塞客衣单, 孀闺泪尽……凡斯种种, 感荡心灵, 非陈诗 何以展其义?非长歌何以骋其情?"因故"摇荡性情,形诸舞咏"(钟嵘《诗品序》)。 "形诸舞咏"的过程,也就是作家艺术家"摇荡性情"的过程。可见,创造过程 与情感的宣泄和体验是互为依托、不可分离的。

一般人在日常生活中只要稍加留心,就会发现:生存的苦乐,生活的况味,美妙的体验等等,大多表现在创造过程中。吃饭并不仅仅是为了填饱肚皮,吃的过程正是一种品味审美的过程;跳舞也不仅仅是为了健美身体,跳的过程正是一种释放和交流情感的过程;男女爱情中的酸甜苦辣,正是在彼此倾慕、追求、思恋、误会、等待、理解等等一系列的过程中才充分地得以生发和体现的。

美国哲学家 A•怀特海于 20 世纪 50 年代前后创立了一种被称为"美国进步哲学"从而"受到普通美国人的欢迎"的"过程哲学"。在"过程哲学"眼中,世界是一种能动的过程,自然界、社会、人、物质(分子、原子)等,都是在一定条件下由性质和关系构成的"机体",机体的特征是活动,从而表现为过程。这个过

程,是创造进化的过程。"在机体论看来,惟一的持续性就是活动的结构,而这种结构是进化的。"因而,过程哲学强调从整体上研究机体的结构、各部分之间的关系,以及造成机体的条件。

受过程哲学影响,西方艺术界出现了强调过程的艺术流派。这个流派有两个分支:概念艺术和地景艺术。前者旨在强调艺术作品的构思过程,认为所有的计划和决定都在构思的过程中完成了,动手制作只不过是例行公事。因此,重要的是这个活动过程,而不是成果。后者力图突破传统的艺术观念和绘画工具的束缚,把静止的画面变为活动的过程。于是便把大地作为画布和背景,只对自然物进行适当的处理和加工,试图追求一种空间与形态、材料与表现、自然与人工和谐一致的艺术效果,使人对自然环境产生一种新奇的感受。

过程哲学渗透到神学领域,产生了"过程神学"。怀特海认为,人们应当从"过程"的角度思考世界,不应把它视作静止的实体。上帝不仅是创世主,而且是救世主,他参与了现实世界的"形成的过程"。因此,上帝不仅是世界万物创造过程的源泉和基础,而且上帝无所不在、无所不知、无所不能,居临于万物之中。怀特海的这种思想导向了"万有在神论"。

"过程神学"及"万有在神论"笔者当然不能苟同。笔者肯定和欣赏的只是过程哲学用"过程"的角度思考世界,将世界看成是一个创造的进化的过程的观点。显然,这样的观点和笔者的创造过程的观点在一定程度上是吻合的,怀特海所谓的"机体"似乎也可以纳入笔者的"创造物"概括之内。然而,创造论毕竟不同于过程哲学。笔者强调创造过程的重要性,绝不意味着像过程哲学那样将创造成果放在次要的可以忽略的位置。恰恰相反,创造论特别重视和珍惜创造成果,即新的创造物的诞生和形成,这是创造律所规定的创造过程的终端性标志,也即是创造物进入创造过程,释放和发挥创造效能的目的所在。没有新的创造成果问世,这个创造过程也就失去了意义。

在创造论看来,新的创造物的出现,同样是创造过程的一部分。对于一个创造过程自身而言,原有的创造物的投入,新的创造物的生成,可视为这个创造过程的始点和终点。如农民的春耕播种和金秋收获。相对于另一个创造过程而言,这一创造过程的始点或终点就可能是另一个创造过程的终点或始点,甚或是创造

过程中的某个点。春耕播种可视为浸种备耕、整地下种等创造过程的终点;金秋 收获则可视为碾打入仓、交售公粮等创造过程的始点。如果将农民兄弟从年初到 年终,或者整个一生的辛苦劳作视作一个创造过程的话,春耕播种和金秋收获就 无非是处在这个常年或一生的创造过程之中的普普通通的两个点。

就高级生命体获得的创造快感而言,尽管痛苦和欢乐大部分体验在创造过程中,但绝不是说,创造成果出现时,创造快感就减弱或消失。恰恰相反,伴随着新的创造物的诞生,创造快感往往相应地达到了高潮。前面笔者讲过的创造激动态和创造高峰体验,指的也就是这样的情形。其道理,一是新的创造成果的出现,本来就是这个创造过程的一部分,尽管是最后的一部分;二是创造过程进展到后期,创造效能的释放和发挥相对而言也往往接近极致,创造主体的生理结构和心理机制也相应地活跃和兴奋到极致,其创造快感自然要以高潮的形式涌现,尽管涌现的时间相对于整个创造过程而言显得十分短暂。生过孩子的人或观看过生孩子的人,就不难理解这样的情形。

因而,笔者不赞赏将"过程"的重要作用夸大到绝对、惟一和无限的程度。 夸大到绝对、惟一和无限的程度,"过程"也就因不出现新的高价值的创造物而失 去了存在的意义。比如,建筑师只在脑子里盖房子,音乐家只在脑子里谱新曲, 小说家只在脑子里想小说等等,那么,世界上就不会有高耸入云的新楼房,不会 有美妙动听的新乐曲,不会有引人入胜的新小说——这将是一幅多么悲惨的情景!

就创造快感而言,建筑师、音乐家和小说家,如果将创造过程只局限于自己的脑海之内,即只在脑子里"想"一遍,并不将其"物化",即不将其以新的创造物的形式奉献给人类社会,其创造快感即使能获得,充其量也仅仅是局限于思维领域的很小的一部分。巨大的创造快感与其说产生于"想"的过程,毋宁说产生于"做"的过程,即"想"和"做"交融在一起的过程。壮丽和辉煌永远属于那些既敢"想",又能"做"的创造者。

在了解了创造过程的意义之后,下面笔者将进一步探讨和创造过程密切相关的创造时间与创造空间、创造促进与创造抑制及创造主与创造从等几对范畴。

## 2 创造时间与创造空间

创造时间是对创造过程持续性和顺序性的表征,也即表示从创造物进入创造过程到新的创造物全面整体地生成之间花费、占用了多少时光。创造空间是对创造过程广延性和条件性的表征,也即表示一个创造过程涉及、影响到多么大的范围,需要具备怎么样的条件。简言之,创造时间意味着创造过程的久暂,创造空间意味着创造过程的大小。创造时间和创造空间同创造过程的关系极为密切:任何一个创造过程都要花费和占用一定的创造时间,任何一个创造过程也都得在一定的创造空间内展开和完成。没有不花费创造时间不处于创造空间的创造过程,也没有独立于创造过程之外的创造时间和创造空间。

创造时间和创造空间是相互联系相互制约不可分割的。创造时间的流逝和持续意味着创造空间的存在和广延,创造空间的存在和广延必然伴随着创造时间的持续和流逝,两者有机地统一于创造过程之中。具有不可逆的"一维性"的创造时间,和具有长、宽、高三个方向的"三维性"的创造空间,共同构成了四维的立体的创造过程。

站在宏观的角度,即将我们面对的宇宙作为一个巨大的创造过程,那么,创造时间和创造空间就是绝对的、无限的。因为宇宙无限——创造物无限、创造过程无限、创造无限——创造时间和创造空间当然无限,即所谓的无始无终,无边无沿。不站在宏观的角度,即就某一个具体的创造过程而言,创造时间和创造空间就是相对的、有限的。太阳生成有它的一定的创造时间和创造空间,人类的所有活动也都有其相对的、有限的创造时间和创造空间。笔者一般情况下所讲的创造时间和创造空间,也都是相对的、有限的创造时间和创造空间。

下面笔者分开来谈。

### ●创造时间

关于创造时间的讨论, 可以围绕三个问题展开。

首先是创造时间的持续性。

创造时间的持续性,指的是任何创造过程都得花费、占用、经历、延宕一段时光,这段时光可能很久长,如若干亿年的地球的形成、人类的起源;也可能很短暂,如刹那间的长空闪电、基本粒子旋转。长也好短也好,久也好暂也好,总

归都得持续和经历一段时间。创造过程的长短,决定了创造时间的久暂;反过来,创造时间的久暂,也表示了创造过程的长短。我们可以通过研究创造过程的长短来观测创造时间的久暂,也可以通过分析创造时间的久暂来确定创造过程的长短。

由于创造过程的长短和新的创造物的价值指数密切相关,创造时间的久暂就成为衡量和测定创造物创造价值指数的一个重要因素。对于人类创造而言,创造价值指数的大小高低,决定于创造量和创造质的多少优差,其中创造量的多少就是由创造时间决定的。一般来讲,在相同的创造条件下,如果创造质相对稳定,创造时间越长,创造量就越多,创造价值指数就越高。比如两个或若干个采煤工人,在同一个煤层,使用同样的工具,身体素质、技术水平、精神状况等都基本相当,那么,谁采的时间长,谁采的煤就多,谁的创造价值指数就高。

其次是创造时间的顺序性。

创造时间的顺序性,指的是创造时间总是一维的、不可逆的,总是按过去→现在→未来的顺序和方向前进的。"子在川上曰:逝者如斯夫!"时光不会倒流,过去的永远属于过去。创造时间的顺序性,决定了创造过程的顺序性,也即是说,任何一个创造过程都会随着时间的顺序的流逝而经历发生、发展、新的创造物最终形成而宣告结束这样一个次序。"离离原上草,一岁一枯荣",一棵原上草能从"荣"长到"枯",而不能从"枯"回到"荣"。人生从婴儿开始,经少年、青年、中年到老年,绝不可能倒回来由老年而中年而青年而少年。个体生命的创造过程只有和创造时间的流逝相一致的顺序性的一次,死神的光临便意味着此生命的创造时间的完结和创造过程的结束。"长生不老""再活一世"的想法,不过是人类美好的愿望而已。所以,珍惜创造时间,也就是珍惜生命;浪费创造时间,无异于糟蹋生命。

往者已矣,来者可追,要紧的是把握住现在——积极地全身心地投身于高价值的创造过程之中,积极地及时地充分地释放和发挥自己的创造效能,力求出现具有较高的创造价值指数的新的创造物——这当是创造时间的顺序性给予人们的一个十分重要的启示和警策。

再次是创造时间的规定性和可选择性。

创造时间的规定性和可选择性是针对具体的创造物和不同的创造过程而言的。

有的创造过程的创造时间是天然规定的,是在非人力所能影响或影响甚微的种种自然的创造条件的综合制约下所形成的时间机遇和时间顺序。如日月亏食,其创造时间就是天然已定的——当太阳和月亮同在黄道和白道的交点附近的某一范围即"食限"之内时,便不可避免地要发生日月亏食。现代天文学已能够准确地推算并预报出日月亏食的创造时间:某年某月某日日食,那年那月那日月食,甚至可以将初食、偏食、全食到复原的具体时、分测算出来并公布于世。再如农谚"谷雨前后,点瓜种豆",即是说点瓜种豆的创造时间是每年二十四节气中的"谷雨",即公历4月20日前后那几天。此时大气转暖,雨量增加,"土膏脉动",适宜播种和出苗。错过了这个创造时间,即误了农时,就不利于农作物的出苗和生长,也就要影响到创造成果的取得——秋天的收获了。

自然界创造中的非生物创造、植物创造,除创造变态的情形外,其创造时间 大体上都是天然已定的、有规律可循的。立夏处暑,立秋霜降;五月牡丹,腊月 梅花,等等。而动物,尤其是人类,其创造时间既有天然规定的一面,也有可供 选择的一面。人呱呱坠地之后,最多在这个世界上逗留一百年左右的光阴(绝大 多数人百岁以下便"挥手从兹去"了,只有极少数人能超越百岁),这是自然规定 的,谁也无法超越,任何人都别无选择。(想长生不老而乞求灵药者如秦始皇、汉 武帝,死得反而更早。至于采用速冻的办法将活着的病人冷冻于冰箱,期待若干 年后再解冻救活,乃是极罕见、极个别的科学试验,与大多数人无缘。)

人们可以选择的只是和一些具体的创造过程相联系的具体的创造时间。比如,某次会议什么时候召开,开多久;某项措施法规什么时候出台,何时中止;某部作品什么时候开始动笔,写多久脱稿,等等。这些具体的创造时间的选择,是要动脑子用智慧的(选择本来就是智慧的最重要的组成部分),谁的智慧运用得好,谁的创造时间就选择得好,谁创造的新的创造物的创造价值指数就高。

据国外一些学者研究,人释放和发挥创造效能的最佳年龄即创造价值指数最高的年龄,主要集中在三十岁至四十岁这段黄金时间。它因创造主体进入不同的创造过程即从事创造的领域的不同而有些差异: 化学是二十六岁至三十岁,诗歌是二十五岁至二十八岁即三十岁以前; 数学、物理学、技术发明是三十岁至四十岁;心理学是三十岁至三十九岁; 音乐、绘画是三十五岁至三十九岁; 小说创作

(主要指长篇)是四十岁至四十四岁,一般来说,科学家创造活动的高峰是在三十五岁左右。过了更年期,即五十岁后到六十岁左右还会有一次高峰,即"第二创造高峰"。第二创造高峰过后,人的高价值指数的创造效能就渐渐趋于衰竭了一一当然不排除个别性的例外。

盛年不再来,一日难再晨;少壮不努力,老大徒伤悲。抛弃创造时间的人,必然被创造时间抛弃。——创造时间的规定性和可选择性如此严肃殷切地昭示和警告着人们;创造最是趁年华!

### ●创造空间

关于创造空间,我们也可以将注意力集中在三个问题上。

一是创造空间的广延性。

创造空间的广延性指的是创造过程具有三维立体的特点。创造过程是创造物参与其中释放和发挥创造效能的过程。参与创造过程的创造物是相当广泛的。宇宙是一个系统,世界乃一个整体。宏观地看,火星参与了木星的创造,木星也参与了火星的创造; 黄山上的迎宾松参与了海湾战争的创造, 海湾成争也参与了黄山迎宾松的创造。只是在火星的创造过程中, 木星释放发挥的创造效能没有火星本身释放发挥的创造效能大; 在黄山松的创造过程中, 海湾战争释放和发挥的创造效能没有黄山松自身释放和发挥的创造效能大(反过来也一样)而已。我们不能说火星的旋转没有对木星产生丝毫的影响, 我们也不能说海湾战争带来的大气污染没有对黄山松产生丝毫影响, 而影响总是相互的。由于创造物的广泛参与,任何一个创造过程都是广阔的,都可以延着长宽高三维六个方向广泛地伸展, 一直伸展到无限。宇宙无限,创造物无限,创造过程也就无限。所以,创造空间的广延性实质上就是创造过程的无限性、宇宙的无限性。

创造空间的广延性启示人们,认识创造过程的时候,应当站在宏观的、整体的、系统的、立体的高度来把握。我们只拥有一个地球,大家都是宇宙村的居民。 美国的航天飞机登月成功,不单单是美利坚民族的荣耀,也是全人类的荣耀;中国人民抗洪救灾的胜利,不单单是地球东方一个国家的胜利,也是全世界的胜利。 任何一个民族都不应该划地为牢、做茧自缚、固步自封、夜郎自大地将自己孤立 于世界文明之外。事实上,许多创造过程,诸如改善生态环境、治理大气污染、减少灾害损失、驱散战争阴云、防止瘟疫流行及将来的太空移民、宇宙开发等等,都需要全世界各个民族各个国家团结一心,携手合作。创造属于全人类,文明属于全世界。

### 二是创造空间的条件性。

创造空间有广延性的一面,即创造过程有无限延伸无限膨胀的一面,也有非 广延性的有条件的有限度的一面。讲创造空间的广延性,参照系是无限广阔的宇 宙;讲创造空间的条件性,参照系是有限的具体的创造过程。创造空间是无限性 和有限性的统一。

具体的某个创造过程能够涉及的空间范围,构成了这个创造过程赖以完成的条件。换言之,完成某个创造过程所需要的条件,就是某个创造过程的创造空间。 创造空间的条件性,和创造过程的有限性,相互重叠,浑然一体。创造空间的条件性,也就是创造过程的条件性;创造过程的有限性、也就是创造空间的有限性。

由尼罗河流域肥沃的土地、优越干爽的气候、稀少的雨量等等所构成的创造空间,是灿烂的以金字塔和字母表为代表的古埃及文明赖以产生和形成的条件。由丰腴的黄土,温、亚热带的有利气候及适当的降水等所构成的创造空间,又成为以使用青铜器和铁器为特征的中国黄河流域农业文明产生和发达的摇篮。部落之间的殊死争战、气候转劣、丛林里疟疾流行等等条件的恶化,又使曾经在南美的某些地区繁荣一时的玛雅文明失去了合适的创造空间而消亡。

我们每一个人都生活在一个相对有限的空间里,这相对有限的空间,就是我们的创造条件。我们不可能双脚一跺,平地腾空,到月亮上去踢足球;我们也不能两眼一闭,念句咒语钻到地心里去搞试验;我们甚至不能够自由自在地选择一个可心如意的生存大环境。我们的创造空间有时紧张、窄迫、龌龊得可怜。这样的空间条件,自然要影响到创造过程的进展和高价值的新的创造物的出现。

### 三是创造空间的可造性。

对于人类创造而言,创造空间不但具有条件性,而且具有可造性,也就是说,智慧的人类可以为自己的创造过程创造一个合适的创造空间。人工自然便是人类将天然自然加以改造,从而为自己的生存和发展所创造的空间条件,如人造森林、

人工草场、动物饲养场、水产养殖场、城乡生态系统及利用天然自然物制造的金 属和非金属材料、物品、工具等。

对一般个体创造者来说,大范围的生存环境似乎是难以选择和创造的,但小范围的生存环境却是可选择的可创造的。比如,可以选择一个合适的工作单位和适于发挥自己特长的职业,可以交一些志趣相投的朋友,可以尽量将自己的居室布置得幽雅、洁静、舒适一些,等等。

对优秀的创造主体来说,创造空间的可造性意味着创造环境的拓宽,而创造环境的拓宽,往往为智慧地发挥创造效能提供了种种可以料想的和意想不到的创造契缘。据说,爱因斯坦大学毕业后,曾在苏黎世市吉拉斯姆街创立了一个"奥林匹亚科学院"——在希腊神话中,奥林匹亚是神仙云集的一座圣山。其实,这个所谓的"科学院",不过是志趣相投的几位青年学者的经常性聚会。他们在一起探索学问、研究问题,海阔天空,畅所欲言,且数年如一日。爱因斯坦后来能够创立划时代的相对论,和"院士"们聚会海聊对他的启发、激励分不开。这个"奥林匹亚科学院",便是爱因斯坦等人创造的一个别开生面的创造空间。这个创造空间,成为爱因斯坦整个创造生涯的一个重要的组成部分。难怪这位创造巨人在临逝世的前两年,还在给友人的一封信中动情地写道:"奥林匹亚科学院啊!我永远忠诚于您,热爱您直到生命的最后一刻!"

## 3 创造促进与创造抑制

创造时间和创造空间相结合,构成了创造条件。创造条件是对创造过程施加影响的各种因素的总和。实质上,创造条件也是参与创造过程、释放和发挥了创造效能的创造物,只是其参与、释放和发挥的程度有限,对创造过程的进展和新的创造物的生成起的作用有限。换句话说,创造条件乃是参与创造并对新的创造物生成起到一定的影响作用的创造物。

创造条件不外乎自然条件、社会条件和创造主体自身条件三大类。自然条件 如江海湖泊、日月星辰、山原沙地、林木花草、鸟兽虫鱼、风云雷电等,即包括 光、热、水、气、土、生物在内的地球表面上的和外层空间的一切自然因素。人 工自然可视作自然因素和社会因素的结合。社会条件是人类文明创造的总和,包括民族、人种、政党、国家、文化传统、风俗习惯、科技水平、生产方式、经济基础、上层建筑、意识形态等等。创造主体的自身条件,包括内部结构、外部形体、生理基础、心理机制等。

创造条件对创造过程的影响无非两种:促进和抑制。笔者把能够对创造过程产生有利影响的创造条件叫做创造促进,把能够对创造过程产生不利影响的创造条件叫做创造抑制。创造促进可使新的创造物的创造价值指数增高;反之,创造抑制则可使新的创造物的创造价值指数降低。借用物理学术语,创造促进是减熵,创造抑制是增熵;借用系统论术语,创造促进是正反馈,创造抑制是负反馈。

创造促进的情形很好理解。地球大气圈及高热摩擦是陨石雨的创造促进;气 候骤然变冷,地形地貌改观,热带植物锐减,天体异常灾变等,是恐龙灭绝的创 造促进;土壤肥沃,气候温和,雨量充沛是农作物的创造促进;良好的生态环境, 优越的政治制度,和谐的社会关系,是人类生存发展的创造促进,等等。

理解创造抑制也不困难。山原夹挡,坝闸拦截,是江河奔流的创造抑制;狂 砍滥伐,水土流失,是森林植被的创造抑制;竹子开花死亡,肌体功能退化,是 熊猫繁衍的创造抑制;严重的环境污染,疫疾大面积流行,自然灾害频仍等,是 人类生存发展的创造抑制,等等。

创造促进和创造抑制常常因创造过程不同而变换位置,即同样的创造条件,在此创造过程是创造促进,在彼创造过程则是创造抑制。如"随风潜入夜,润物细无声"的潇潇春雨,对农作物和农民兄弟来说是创造促进;对激烈比赛中的运动会、正在建设中的工程、路上的行人等,则是创造抑制。计划生育,对人口的增长是创造抑制,对一个国家的经济繁荣、人民生活水平的提高则是创造促进。一般情况下,群体中的社会刺激因素(如沟通、竞赛、评价等)是创造促进,它能使个体创造者的创造速度和创造数量有所增加,即有利于创造效能的释放和发挥及新的创造物的生成。一个人在群体状态下或在与他人竞争的状态下要比单独一个人工作成效高。当然也有相反的情况,如有的学生平时学习很好,一上考场却头晕目眩,精神紧张,考得一塌糊涂;有的人平日口齿伶俐、快人快语,一上讲台却结结己巴、语无伦次。这时候的社会刺激因素(公开竞争、众人监督、集

体评价等),对这位考生这位演讲者就不是创造促进而是创造抑制了。

对有些创造过程而言, 创造促进和创造抑制是相互转化的。饮少量的酒可以 舒经活络,兴奋神经,御寒暖体;也可以浇愁散闷,助兴添欢,活跃气氛,显然 是创造促进。但一味地大量饮酒,则会伤身乱性,导致言行失控,及至丧生殒命, 又成为一种创造抑制了。农作物需要阳光照射,然而照个不歇,一连几十天甚至 上百天炎阳中天,成了旱灾,创造促进就转化成创造抑制了。对于智慧的人类创 造而言,强烈的创造抑制往往会转化为更强烈的创造促进。人无压力轻飘飘,井 无压力不喷油。创造巨人大多是思想超前的不合时宜者,价值高的创造往往同社 会适应性成反比,同来自方方面面的压制、打击、指责、刁难的强度成正比。布 鲁诺在被控告为"异端"、开除教籍、飘零异国多年、最后被烧死在罗马鲜花广场 的情况下毫不屈服地坚持日心说; 纳尔逊•曼德拉坐了二十八年监狱, 依然矢志 不渝地为废除种族隔离政策、争取南非黑人的政治自由而奋斗。"文王拘而演《周 易》; 仲尼厄而作《春秋》; 屈原放逐, 乃赋《离骚》; 左丘失明, 厥有《国语》; 孙子膑脚, 兵法修列: 不韦迁蜀, 世传《吕览》: 韩非囚秦,《说难》《孤愤》: 诗 三百篇,大抵贤圣发愤之所为作也。"(司马迁《报任安书》)崇高的信念、顽强的 意志、坚韧的毅力、超人的智慧等等之综合,大概是这些"贤圣"们将不平、不 幸、逆境、灾祸等创造抑制转化为创造激励、创造发愤——创造促进的内在动力。

在人类的创造过程中,常常会出现创造主体运用理智和意志的力量主动实行抑制的情形。这种"抑制"的实施,往往是为了更大更强更好更有效的"促进",或者说,这种"抑制"只是形式上表面上的抑制,实质上根本上还是"促进",更有价值的"促进"。创造主体通过发挥智慧的力量,"在几种不同倾向的需要发生冲突时,抑制、牺牲某些虽强烈而较低级的倾向,以保护、发展另一些虽微弱而较高级的倾向,从而把人的行为、道德水准递送到一个更高的平面上。"(《创作心理研究》,鲁枢元著,河南文艺出版社,2015)用笔者的话说,就是通过这种智慧的"抑制",使人的创造效能不在低价值指数的创造过程中空耗虚掷,而集中地释放和发挥在具有高价值指数的创造过程中。政治家讲究"制怒",所谓"小不忍则乱大谋";军事家一般也都具备沉着冷静,遇战不慌的素质,"谈笑间,樯橹灰飞烟灭"。文学家在创作中一般也都很注意对自己情绪的抑制,所谓"热感情,冷处

理"。美国意象派诗人艾兹拉·庞德用"半人半马的怪物"来形容诗作,以为它的底部是蓬勃的热情和冲动的活力,上部则应是冷静的思维和清醒的理智。他还把写诗比作"骑在马上打枪",诗人要有一边催动坐骑、一边控制枪法的高超本领。"诗人之所以是诗人,就在于他具有一种持久的感情,同时还有一种特殊的控制力。"(《严肃的艺术家》,《现代美英资产阶级文艺理论文选》,罗式刚、麦任曾译,作家出版社,1962)另外,还有气力上的抑制——"好钢用在刀刃上";技巧上的抑制——勿卖弄,勿油滑;结构上的抑制——不能因小失大,因片断的放纵失去整体。"写完后至少看两遍,竭力将可有可无的字、句、段删去,毫不可惜。"(鲁迅:《答北斗杂志社问》)等等。

创造促进和创造抑制相互对立又相互依存地同时存在于一个创造过程之中, 创造促进中有创造抑制,创造抑制中有创造促进,参与创造的每一个创造物都有 促进和抑制两个并存共生互相牵制的方面。火车在铁轨上行驶,笔直的铁轨是创 造促进;而铁轨和火车轮子必然产生摩擦,又是创造抑制。一个国家和民族的历 史文化传统,就明显的表现为既是创造促进,又是创造抑制,作为创造促进,它 意味着任何新生文化都不会从天上掉下来,都不是无源之水、无本之木,都必须 也必然以现有的文化传统为基础、为前提;外来文化要在其国土上站住脚跟,拓 宽地盘,也必须和本国的传统文化相结合、相融汇。传统文化以其丰厚的文明积 淀,成为新文化生根开花、发扬光大的土壤基础、江河源泉或参照母本。也就是 说,在新文化的创造过程中,传统文化不但以创造物的身份参与其中,而且还起 到了一定的甚至很大的促进作用。这种促进,或者来自传统文化中的优秀成分(民 主性、进步性、开放性、科学性精华)的生命活力,或者来自传统文化中的落后 成分(专制性、保守性、封闭性、神秘性糟粕)的反作用。作为创造抑制,意味 着传统文化时时处处都对新文化的产生和发展起着框范、限制、压抑甚至扼杀的 作用。这种抑制,来自传统文化专制、保守、封闭、落后的一面,而这一面和其 民主、科学、开放、进步的一面相比,往往显得更有力、更强大。"它是在数千年 的历史上形成的、抗拒过各种环境变迁压力的稳定系统。它规模庞大,有一套完 整的自我调节系统和抗变能力,这就使它具有惊人的历史惯性。即使是在它赖以 建立的经济基础被摧毁之后,也仍然继续在人们的观念和文化的其他方面产生影

响。"(张相轮:《科学艺术和谐论》,第 71—72 页。)所以,新文化产生和形成的过程,必然要有长期的,有时平和有时剧烈,有时甚至是血与火的矛盾和冲突。然而,矛盾再复杂,冲突再剧烈,道路再曲折,新文化都必将战胜和取代旧文化——这是一条创造铁律。尽管对传统文化的战胜和取代是有肯定、有否定、有批判、有选择的"扬弃",而非一概砸烂,全面否定的"抛弃"。

## 4 创造主与创造从

创造主和创造从是相对而言的。任何一个创造过程,都不是单一的某一个创造物能够独立承担和完成的,必然有两个,或两个以上的众多的创造物参与。在参与创造的众多的创造物中,必定有起主要、引导、核心、中坚作用的创造物;又有起次要、从属、非核心、非中坚作用的创造物。前者笔者将其定义为"创造主",后者便是"创造从"。质言之,创造主就是在一个创造过程中释放和发挥创造效能最强最多最持久的创造物,创造从就是在这个创造过程中释放和发挥创造效能最强最多也非最持久的创造物。

在银河系中,银心及核球是创造主,围绕银心旋转的银盘、旋臂、银晕、银 
冕及包括太阳系在内的人类肉眼能见到的见不到的所有天体都是创造从。在太阳 
系中,太阳是创造主,九颗大行星、两千九百五十八颗小行星、四十八颗天然卫 
星及为数众多的慧星、流星体、星际物质等都是创造从。在一个国家的政治生活 
中,执政党是创造主,执政党之外的其他党派、民众团体、群众组织、都是创造 
从。在执政党内部,领导集团是创造主,一般党员是创造从。在领导集团内部,由少数人组成的领导核心是创造主,其他成员是创造从。在领导核心内部,某一个主要人物(通常是党的总首脑、总头目,当然也有例外)是创造主,其他核心成员是创造从。

区分创造主和创造从要和具体的创造过程相联系。有的创造物在此创造过程中是创造主,在彼创造过程中是创造从;相反,有的创造物在此创造过程中是创造从,在彼创造过程中则是创造主。一片森林,在某一区域的生态环境中可能扮演着创造主的角色,而在全球的生态环境中起的作用就不很大或者很小而成为创

造从。一只蜜蜂,在蜂的王国里只是一个不起眼的甚至微不足道的创造从,而在它自己的采集花粉的辛勤劳作中,则是创造主。

在具体的创造过程中,创造主和创造从是相互依存,难以割舍的。一个单位 不能只有领导没有群众,一篇文章不能只有题目观点没有论据论证。只有创造主 没有创造从,创造主就不成其为创造主;只有创造从没有创造主,创造从也就随 之失去了意义。创造主是创造从的创造主,创造从是创造主的创造从。当指出某 创造物是创造主时,实际是就等于说其他创造物是创造从;反之,当说某某创造 物是创造从时,实际上也就等于承认在某某创造物之外还存在着创造主。

创造主和创造从又是相互转化、相互取代的。比如在一个猴子王国,某猴子 因其身强体健、机灵勇猛而在竞争中获胜,成为猴王、创造主。大大小小的群猴 都得听从它的指挥,扮演创造从的角色。然而,猴王不可能永远是猴王,随着日 月流逝,这个猴王迟早会因伤残病弱等因素,在新的竞争中败北,而被更强健、 更机灵、更勇猛的猴子取代。这样,原来是创造从的某猴子就上升为猴王,转化 为创造主;原来是创造主的猴王就变成一般的猴子,降为创造从。在人和火之间, 一般情况下,人是创造主,火是创造从,人用火烧水、做饭、照明、取暖。然而 一旦失火,酿成火灾,火往往就变成不讲情面、肆无忌惮的创造主,人则变成了 创造从,扑之不灭,逃之不及,就有被火焰吞噬烧死的危险。

创造主和创造从还是相互矛盾相互制约的。其表现,大体有以下几种情形:第一,创造主创造促进,创造从创造抑制。如某团体内领导核心要干某件事情,绝大多数成员却不愿意干,于是不服从、不配合。第二,创造主创造抑制,创造从创造促进。如某团体内绝大多数成员都积极地要干某件事情,领导核心则不积极、不同意,于是便推拖、压制、刁难、打击、扼杀。第三,部分创造主和创造从创造促进,部分创造主和创造从创造抑制。如某件事情,一部分团体成员愿意干,领导核心中也有人主张干;另一部分成员却不愿意于,领导核心中也有人不主张干。这样的情形,不是一方妥协,就是双方分裂,成为互相矛盾、互相对立、互相制约的两派。第四,作为一个群体,群体内的创造主和创造从均处于创造促进(或创造抑制),却由于群体之外的创造物进入创造过程且发挥强有力的创造效能,形成创造抑制(或创造促进)。比如某个团体正在搞一台露天文艺演出,充当

创造主的演员们很积极,充当创造从的观众们也积极,不料忽然间狂风大作,暴雨倾盆,或者一群野牛冲进场地,那么,这台露天演出就非中断不可。

笔者说过,创造主和创造从的区分是以释放和发挥创造效能的量度多少和强度高低为标准的。如果创造主和创造从释放和发挥的创造效能的量度、强度相等或大体相等。两者又处于相反的创造方向,即一个是创造促进,一个是创造抑制,那么,就会出现一种创造过程暂时"停滞"的情形。这样的情形,可以称其为"创造平衡"。创造平衡是短暂的僵持、暂时的稳定,是创造动态中的创造静态。如拔河比赛,双方用力相当,谁也不能将大绳中间的红色标志拉向己方。又如面对强敌,统治集团内部往往出现主战主和两种对立的意见。主战派和主和派双方势力对等时,就形成让最高决策者难以决断的"创造平衡"。再如恋爱中的双方,男的要"征服"女的,女的要"征服"男的,信誓旦旦,殷勤绵绵,你穷追不舍,我赌气不理……一时间,出现了谁也"征服"不了谁的"创造平衡"。显然,在创造平衡时,由于释放和发挥的创造效能相当,创造促进和创造抑制、创造主和创造从的界线就不分明了。此时,创造主也是创造从,创造从也是创造主;创造促进等于创造抑制,创造抑制也等于创造促进。

当然,创造平衡是相对的、暂时的,不平衡才是绝对的、长期的。任何平衡都不能维持太久而不被打破。拔河比赛总会有输赢胜败,主战主和总得选择其一,男女恋爱也总会有一方"让步"而被对方"征服"。此时,创造不平衡便代替了创造平衡,创造促进和创造抑制,创造主和创造从的界线又趋于分明。创造促进或大于强于、或小于弱于创造抑制;原来的创造主或者继续充当创造主,或者转变为创造从;原来的创造从或者继续处于创造从的位置,或者上升为创造主。不平衡到平衡再到不平衡的螺旋式上升的矛盾运动,推动了创造过程的进展,新的创造物也就通过这样的矛盾运动最终生成。

# 六 创造效能

### 1 创造效能的实质

创造效能的实质是创造物本身具备的,主要来自其内部结构的本质性能量。 简言之,创造物的创造效能就是创造物的本能。

显然,笔者讲的本能,不是通常意义上的本能,而比通常讲的本能概念涵义广。通常意义上的本能指的是动物在进化过程中形成而由遗传固定下来的,对个体和种族的生存有重要意义的行为,如鸡孵蛋、鸟筑巢、蜂酿蜜、婴儿哭叫咂奶等,这样的行为是不学就会的。笔者要讲的本能,包括但不仅仅是上述的动物本能。笔者讲的本能,指的是每一个创造物都具备的,主要源于其内部结构的本质性能量。也就是说,不管是动物、植物、微生物,还是非生物,总之是任何创造物,都具有主要来自其内部结构的本质性能量,都具有本能,这样的本能,就是创造物的创造效能。

之所以称"创造效能",而不称"创造本能",主要是为了突出一个"效"字,即成效、效用、效应、效果,也即创造物一旦释放和发挥自身具备的本质性能量,就必然要产生效果。这样的效果本身就是新的创造物,同时也参与、影响、决定着其他新的创造物的生成。

创造效能可以从两个方面来考察:内部结构和外部影响。

### ●内部结构

千差万别的创造物,具有千差万别的内部结构,千差万别的内部结构决定了 创造效能的千差万别。没有不具备内部结构的创造物,也没有哪一个创造物不具 备内部结构。空气的内部结构不同于岩石的内部结构,岩石的内部结构不同于绵 羊的内部结构。因此,空气的创造效能不同于岩石、绵羊的创造效能,绵羊的创造效能也不同于空气、岩石的创造效能。也因此空气是空气,岩石是岩石,绵羊 是绵羊。

仔细考察,创造物的千差万别的内部结构,实际上是在创造物内部进行着的 千差万别的创造过程。创造效能实质上也即是创造物内部的创造过程所生成的以 能量的形式呈现出来的新的创造物。

以水为例。水的内部结构是 H<sub>2</sub>0,即两个氢原子和一个氧原子化合在一起。氢二氧——化合在一起的这种结构,决定了水只能是无色、无味、透明,具有导电、容热、溶解它物等性能的水,而不会是可以燃烧的油、到处跑叫的狗,或其它什么东西。水的结构,也就是 H<sub>2</sub>和 0 相化合的创造过程,参与这个创造过程的最主要的创造物是 H<sub>2</sub>和 0。如果其他创造物也大量地参与进来,或者参与进来的创造物的数量比例发生变化。比如,不是两个氢原子和一个氧原子,而是三个氢原子和一个氧原子,或一个氢原子和十个氧原子等等,则意味着 H<sub>2</sub>0 的结构起了变化,生成的新的创造物就不是水,而是其它什么东西,由此产生的创造效能也就不是水的创造效能,而是其他创造物的创造效能。如重水,即氧化氖,其结构为 D<sub>2</sub>0。尽管氖是氢的同位素,重水的创造效能就与水的创造效能差异很大,熔点、沸点,比重均不相同,重水可用于核反应堆,作中子的减速剂,水则不具备这样的创造效能。即使同一元素,同样的数目比例,参与创造的方式不同,生成的新创造物也往往不同,从而具备的创造效能也不同,如由碳(C)原子结构而成的石墨和金刚石。

构成某创造物的各元素,即参与某创造物内部创造过程的各创造物,依然有其内部结构,也即有其内部的创造过程。这样的创造过程是无穷的、无限的。水是由 H<sub>2</sub>0 构成的,其中的 H<sub>2</sub>,又是由三种同位素氕、氘、氚所构成,构成的过程便是氢及其创造效能形成的创造过程。氕、氘、氚内部又有其各自的结构即各自的创造过程,有原子、原子核和电子、中子、质子、光子等基本粒子作创造物参与其内部结构的创造。基本粒子并不"基本",电子、中子、质子、光子等亦有其各自的内部结构、各自的创造过程。即有更微小的创造物参与其内部结构的创造。这些更微小的创造物是规范粒子、轻子、介子、重子、超子等。基本粒子之间主要存在着强、弱、电磁和引力四种相互作用,这四种相互作用是作为创造物的基本粒子的创造效能的不同方式的释放和发挥。这样的不同方式的释放和发挥形成

了基本粒子千差万别的内部结构,导致了粒子的产生、湮灭和相互转化——又是一系列的创造过程,从而使基本粒子成为基本粒子,原子成为原子,元素成为元素。创造物本能即创造效能的根源就在这里。

和非生物相比,生物的内部结构更为复杂。任何一个生物体都由带有遗传信息的核酸(脱氧核糖核酸或核糖核酸)和在结构及功能上有重要作用的蛋白质构成。也就是说,参与生物体内部结构形成的创造过程的创造物主要是蛋白质和核酸。

蛋白质是由多种氨基酸分子以不同的排列方式结合而成的长链状高分子化合物。其创造效能主要是: (1)提供生物体内部结构的骨架; (2)促进生物体内的各种化学反应保持高速度并井然有序地进行; (3)提供生命现象所需要的各种激素,如肾上腺皮质激素、胰岛素、催产素等。

核酸是由数十个乃至数百万个核苷酸通过磷酸二脂链连接聚合而成的生物大分子。(核苷酸也是化合物,由碱基、成糖和磷酸构成。)在形成核酸大分子的创造过程中,核苷酸参与的创造方式极为复杂,排列顺序千差万别。单核苷酸序列构成核酸的一级结构。以此为基础,多核苷酸经螺旋、卷曲、折叠等不同方式继续投入创造过程,形成核酸的二级、三级,及四级结构。不同的结构形式,具有不同的创造效能。根据成糖和碱基参与创造的不同程度和不同方式,核酸可分为脱氧核糖核酸(简称 DNA)与核糖核酸(简称 RNA)。

DNA主要存在于真核细胞的细胞核、原核细胞的拟核,及线粒体、叶绿体之中,或以游离状态分布于某些细胞的细胞质中。大多数已知噬菌体、部分动物病毒和少数植物病毒也含有 DNA。DNA 的创造效能主要是储藏、复制、传递遗传信息。染色体(生命基因的载体)中的主要成分便是 DNA。DNA 的结构控制着蛋白质的合成,它可以按照某种特定的顺序(遗传密码)将大量的杂乱无章的氨基酸构成特定的蛋白质;并通过蛋白质的各种各样的创造效能使生命体充满活力。

RNA 存在于一切细胞的细胞质和细胞核中,也存在于大多数已知的植物病毒和部分动物病毒及一些噬菌体之中。其创造效能,主要表现在三个方面:(1)转移核糖核酸,在蛋白质的生物合成过程中,起携带转移活化氨基酸的作用;(2)信使核糖核酸,是蛋白质合成的模板,通过密码决定肽链中氨基酸的排列顺序;(3)

核糖体的核糖核酸,同蛋白质一起构成核糖体,成为细胞合成蛋白质的主要场所。

脱氧核糖核酸和核糖核酸这些创造效能的释放和发挥,导致了生物体出现以新陈代谢和自我复制为主要特征的最基本的生命现象。换句话说就是,生物体的生命现象,源于生物体的内部结构——核酸和蛋白质的创造过程及其创造效能的释放和发挥。核酸和蛋白质结构方式即创造过程及其创造效能的释放和发挥的方式和程度复杂多样,千差万别,决定了生物体生命现象的复杂多样,千差万别。

核酸和蛋白质是生物体结构和功能的基本单位——细胞的主要组成部分。所有生物都是由细胞构成的,每个细胞本身也都是一个独立的生命单位。生物的分类是根据细胞的不同结构,即其内部的不同的创造过程进行的。没有明显细胞核的,称原核生物;有明显细胞核的,称真核生物。微生物便是一群形体微小、构造简单的单细胞或多细胞原核生物或真核生物。简单的内部结构,决定了微生物的创造效能的释放和发挥必然具有简单、原始、短暂的特点。

随着极其漫长的创造进化,细胞的内部结构由简单而复杂、由低级而高级。内部结构越复杂越高级,释放和发挥出来的创造效能也就越丰富、越强大。植物的创造效能优于微生物的创造效能:种类比微生物种类多得多、刺激感应性强得多、繁殖的方式也更丰富、更复杂、更进化。同样,动物的创造效能又优于植物的创造效能:种类是植物的几倍(植物已知数为三十余万种,而动物约一百余万种);对外界的反映不仅仅是简单的刺激感应性,而是进化到比较复杂的感觉、知觉甚至表象的阶段。如水母的感觉细胞有了一定的感光能力,水螅的触手有了一定的触觉能力;无脊椎动物如蜜蜂具有一定的知觉能力,能运用这种能力建立一定形式的蜂巢,能通过舞蹈语言传递蜜源方向的远近等信息;类人猿在看过红色小球后能从七种颜色中挑出红色小球来,看过几颗核桃后能从装核桃的袋子里取出同样数目的核桃来——反映出灵长类动物已具备一定程度的"表象"能力。这种"表象"能力,无疑是产生思维的基础,或者说,"表象"本身就是一种低级的思维。

人是高级的生命体,人的内部结构比动物、植物、微生物不知要复杂多少倍。 构成人体的细胞多达无数亿。许许多多形态和创造效能相似的细胞和细胞间质组 成人体内的四大组织(或称四大结构)即上皮组织、结缔组织、肌肉组织和神经 组织。这四大组织又以不同的方式构成能释放和发挥不同创造效能的功能单位,即器官,如脑、脊髓、心、肺、胃、肠等,这些组织和器官又以完成不同的一种或几种生理功能为标志构成不同的创造系统,如运动系统、消化系统、循环系统、泌尿系统、内分泌系统、生殖系统和神经系统等。每个系统都有不同于其他系统的内部结构,都是一个别致的创造过程。这些创造过程互相渗透、密切配合,协调成一个整体。人的创造本能即创造效能,既在各个系统得到释放和发挥,又作为新的创造物通过各系统的协调(尤其是中枢神经系统的协调),整体性地表现出来。

如果说人体内的各个器官、各种组织、各个系统,一般动物尤其是高级动物 也都部分或全部具备的话(动物的有些器官或系统甚至比人类还强健、还发达,如鹰的眼睛、狗的鼻子、马的运动系统、鼠的生殖系统都优越于人类)。人的大脑神经系统则是其他任何动物不可比拟、无法匹敌的。人凭借自己的脑袋优越于众生,称雄于世界。在人的脑袋中,大脑神经系统最高级、最复杂也最发达,它由左右两个半球构成,左脑抽象思维占优势,长于对语言性信息分析和理性处理;右脑形象思维占优势,长于对非语言性信息进行直观的笼统的处理。大脑的两个半球表面覆盖着一层灰质,即大脑皮层。大脑皮层集中分布着一百亿左右的由神经细胞和神经纤维构成的神经元。神经元之间错综复杂的联系及组合形式形成高层次的复杂多样的神经回路。复杂多样的神经回路及其错综复杂的联系、沟通与中断,构成大脑的创造过程即思维过程,思维的成果即生成的新的创造物便是智慧。换言之,人的思维功能主要来自大脑皮层神经回路的错综复杂的内部联系。尽管联系的具体情形人类目前还不十分清楚,甚至可以说知之甚少,但有一条可以肯定:大脑皮层神经回路的错综复杂的内部联系是大脑的创造效能赖以产生的生理机制;而智慧,便是大脑的创造效能的释放和发挥了。

人之外的任何动物都不具备可以和人的大脑皮层相比肩的高级的中枢神经系统,即不具备高层次的错综复杂的神经回路,因而动物的脑袋里不会产生智慧,尽管它们的神经系统也在释放和发挥创造效能。动物对外界的反映,由最简单的刺激感应性,到简单的感觉、知觉,最后到比较复杂的表象也就停止了。而人类并不在表象阶段止步,她要继续前进,要将知觉和表象概括抽象为概念。再进一

步,还要运用概念进行判断、推理、分析、综合,并结合想象、灵感等形成智慧。最后,还要将智慧外化,投入到外在的新的具体创造过程中去,力求出现打上智慧烙印的高价值高品位的新的创造物。这一切,人之外的任何动物都是望尘莫及的。

### ●外部影响

笔者说创造效能是主要源于创造物内部结构的本质性能量,并不等于说外部因素对创造物的内部结构不产生丝毫影响。事实上,任何内部结构都无法彻底摆脱外部因素的参与和影响。世界上没有孤立存在的创造物,任何创造物都和别的创造物相联系、相矛盾、相比较、相参照。世界上也没有孤立的创造过程,任何创造过程都和别的创造过程相渗透、相交叉、相纠缠、相对抗。因此,与其说创造效能来自创造物的内部结构即内部的创造过程,毋宁说创造效能来自创造物内部结构和外部影响的"化合"。或者说,外部因素作为创造物(虽然不是创造主而是创造从),也参与了创造物内部的创造过程。在创造效能的组成部分里,外部影响理应占据一席之地,甚至是相当重要的一席之地。尽管外部因素的影响只有通过或作用于内部结构才能发挥其效应。

水的内部结构是 H<sub>2</sub>O,然而仅凭 H<sub>2</sub>O,没有其他的外部创造物参与,水的创造效能就无从发挥。它的无色、无味、透明的性质是在和有色有味不透明的创造物相比较中呈现的;导电、容热、可以溶解它物的性能的释放和发挥更是离不开其它创造物——要有电可导、有热可容、有其它创造物可供其溶解等等。生命体内部结构的主要成分是核酸和蛋白质,但绝不仅仅是核酸和蛋白质,还有为生命活动提供能源的碳水化合物,即糖类;有对生物新陈代谢产生有利或不利影响的脂类;有起溶剂作用、影响生命存在的水和无机盐;有能够使生物获得源源不断的能量的三磷酸腺苷,等等。

动物的创造效能更离不开外部因素的影响。植物是动物的主要食物,没有植物 也就没有动物。动物要饮水,要晒太阳,要吸收新鲜空气,没有水、空气、阳光, 也就没有动物的生命。动物还是一个群体,单个动物无法生存。任何一个具体动 物的创造效能的释放和发挥都有赖于另外的其他动物的创造效能的释放和发挥。 (即就是单个的家禽家畜,也得靠人来饲养)。动物甚至有自己的"社会"形态,据说其"社会"还分工细密、等级森严;鸡、狗、鸟类都有自己的"口头语言",海豚、蝙蝠、大象都能发出超声波或其他音波互相通讯。

人是智慧的动物,智慧本来就具有社会性。如语言即所谓"第二信号系统",就既是交际的产物,又是智慧的结晶。世上若只有一个人,就不会产生语言;世上若有一群人,这群人若不愿"动脑子",同样不会产生语言。交际和智慧使人类组成社会——交际需要智慧,智慧离不开交际。因此,与其说人的创造效能来自个体的人,毋宁说人的创造效能来自社会的人。事实上,人的所谓本能行为,无不打上了社会的烙印,或者说根本就不存在所谓的纯粹的本能行为。即就是初生婴儿,也无法摆脱社会因素的影响。怀孕其间,他的生长要受母亲情绪的影响,母亲的情绪当然离不开社会因素(所谓的"胎教",也是一种社会性教育);他一出世,便成为人类社会中的一员,吃奶、抓挖的第一对象一般是他的母亲,而他的母亲正是一个"社会人"。因而,从根本上说,一个人的创造效能,乃是由此人本身的内在结构(尤其是中枢神经系统的结构)和其他人即社会因素共同决定的。社会环境作为创造物参与了每一个具体人的创造效能的释放和发挥。

还应指出,几十万年的漫长岁月,使人类的许多社会性品格已逐渐渗入、融化、积淀在人体的内部结构中,成为人的内部结构的重要组成部分,并随着人类的生理机制的遗传而遗传。这样一来,人的某些社会性创造效能,就成为人的不学也会的创造本能。瑞士心理学家荣格提出的"集体无意识",讲的便是这样的情形。荣格认为,集体无意识的存在不取决于个人后天的经验。人的心理通过进化而被预先确定,因而个人是同过去联结在一起的,不仅与自己童年的过去,更重要的是与种族的过去相联结,甚至年代更久远,乃至与有机界进化的漫长过程联结在一起。集体无意识储藏着所有潜在的原始意象,人从他的祖先(包括人类祖先、前人类祖先和动物祖先)那里继承了这些意象,以先天的潜在的形态存在于人脑中,使人们采取与自己祖先同样的方式来把握世界并做出反应。荣格将原始意象又称作"原型",如出生意识原型、死亡原型、英雄原型、魔鬼原型等等。从外部因素对内部结构影响和渗透的角度来看,荣格的观点无疑是有见地的、有价值的。

除社会因素对人的创造效能产生影响外,自然因素,即人之外的生物界、非生物界对人的创造效能也会产生这样那样、或大或小的影响。比如,气候温差的变化往往影响人的情绪,从而影响人的思维。幽静雅致、绿意盎然的环境,往往能使人的大脑清晰敏捷、创造激情喷发;而从小生活在熊巢狼窝的熊孩、狼女,则往往连人的一些最基本的创造效能都丧失了,倒具备了熊、狼的一些创造效能,如学熊叫、吃生肉、爬着行等等。

### 2 创造力

需要有一个定义。

前人的定义都将创造力限定在人类创造的范围内。如:

"创造力是创造主体在创造活动中表现出来并发展起来的各种能力的总和,主要是指产生新设想的创造性思维和新成果的创造性技能。"(王加微、袁灿编著:《创造与创造力开发》,浙江大学出版社,1986)

"创造力是创造思维和创造活动的总称。创造力的品质是经由教育、环境的作用、机遇和主体的求索精神对先天条件的开发程度决定的。智力水平、能力水平,动力水平,以及过程因素、方式因素和显象因素的整体发挥水平就是这种开发程度的量度。"(雷江旺著:《创造教育》,西安交通大学出版社,1989)

"创造力是人在创造过程中所表现出来的思维和技术能力。创造能力包括以下几个含义:(1)有效地组合现有知识并使其产生新的作用的能力;(2)大脑产生创造性设想并使其得到实施的能力;(3)根据先前自己所获得的知识、经验和情报等,重新组合而创造出新的知识、新的思想以及新的观念的能力,即创造性设想的能力;(4)运用个人或集体所拥有的知识,转换成有效的内容,并加以实现的能力。"(中国社会科学院文献情报中心、重庆出版社合编:《社会科学新辞典》,重庆出版社,1988)

笔者的定义比较简约:创造力是创造效能的释放和发挥。

笔者的定义显然超越了人类创造的范围(当然也将人类创造包括在内),从而和上述几个定义不同。世界上的一切事物均是创造物,凡是创造物均具有创造效

能,创造效能必然要释放和发挥,释放和发挥创造效能,便构成创造物的创造力。 太阳是创造物,具有创造效能,太阳具有创造力;月亮是创造物,具有创造效能, 月亮具有创造力;江河海洋、风雨雷电、窗外的树木花草鸟兽虫鱼,桌上的书籍 报刊、香烟火柴墨水瓶等等,都是具有创造效能的创造物,因而都具有创造力。

前面笔者分析过,创造效能实质上是源于创造物内部结构的本质性能量,所以,可以将创造力视为创造物的本源力或本质力。再进一步分析,创造物的内部结构实质上是在创造物内部不断进行着的创造过程。既然是创造过程,就必然有创造物参与和新的创造物生成。任何创造物都不是孤立的,都要和其他创造物发生这样那样的联系,对其他创造物产生这样那样的影响;联系和影响的过程就是相互作用的过程——相互作用的结果必然使所有的创造物的形状、性能、创造态(方向、速度等)发生种种变化,呈现的便是一种"力",一种创造力。质言之,创造力乃是创造效能的表面化、对象化和外在化。创造力使此创造物的创造效能通过彼创造物的创造效能的释放和发挥而显示、而外化。

创造物内部结构的千差万别,构成了创造效能及其释放和发挥方式的千差万别,从而使创造力千差万别。换言之,创造物内部的创造过程的复杂多样,参与创造的创造物之间的相互作用复杂多样,从而使创造物的创造力复杂多样。根据创造效能乃是创造物内部结构和外部影响相"化合"的事实,笔者将创造力相对地分为"创造单力"和"创造合力"。

### ●创造单力

创造单力是相对于创造合力而言的,是指源于创造物内部结构的创造力。每一种创造物都具有不同于其他创造物的内部结构,因而,每一个创造物都具备不同于其他创造物的创造单力。分析不同的创造单力,可以区分不同的创造物。比如,土星和水星的内部结构各不相同,在九大行星中,土星密度最小,体积是地球的七百四十倍,质量是地球的九十五倍;水星密度最大,体积仅为地球的 5.6%,质量为地球的 5.58%。内部结构的不同,使土星和水星具备不同的创造力。土星有磁场和辐射带,并有美丽的土星光环;水星有磁场(强度不同于土星磁场),但没有辐射带,也没有美丽的光环。而水星的"凌日现象",即水星轨道的近日点有

每世纪快四十三角秒的反常进动,土星则不曾有。分析测算磁场辐射力的强度,或分析测算"凌日现象"的反常进动力,能使人们很容易地将土星和水星区别开来,而不会将土星当作水星,或将水星误为土星。

榕树的内部结构比除虫菊的内部结构要复杂得多,因而榕树的创造单力(生长力)必然大大优于和强于除虫菊。骆驼的胃上附生有二十至三十个作储水用的水脬,野牛家猪就没有,因而骆驼的忍饥耐渴力使野牛家猪望尘莫及。

作为地球上最高级的生命体,人的内部结构(尤其是中枢神经系统)更为复杂, 人的创造力也相应地呈现出更为复杂的情形。不过,就单个人,或人体内的某一 系统、某一器官而言,创造单力的概念依然适用。如人的视力、听力、性能力及 和骨骼、肌肉系统相关的运动力,和血液、心脏系统相关的循环力,和肠胃系统 相关的消化力等,都可视作创造单力。和他人、和群体,和社会(创造合力)相 比较,一个人的种种能力之总和,也可视为创造单力。通常讲的某某人能力强, 某某人能力弱,一般也都指的是创造单力。

### ●创造合力

创造合力是相对于创造单力而言的,是创造物内部结构和外部影响"化合"后所产生的创造力。由于任何创造物的内部结构事实上都不能排除来自外部因素的影响,都不是孤立的纯粹的内部联系,从而决定了任何创造效能事实上都是综合能、化合能;所以任何创造力事实上都是创造合力。相对地参照地看,存在着创造单力;绝对地综合地看,创造单力便不复存在,任何"单力"都是一种合力。

非生物界普遍存在着碰撞力、摩擦力、静电力、万有引力等,都是一种创造合力。场态也是一种创造合力。如万有引力场所表明的就是宇宙间任意两个创造物都具有相互吸引的一种"合力"现象。这种创造合力,使宇宙间所有的创造物都相互吸引、相互制约,构成一个统一的整体。这个整体,规定、框范、影响着各个创造物之间的创造过程和创造行为。电磁场是电场与磁场的总称。电场是电波的合力,磁场是磁波的合力,电磁场又是电场和磁场的合力:变化的电场在其周围激发磁场,变化的磁场在其周围激发电场。这种相互作用、相互激发,导致电磁波以合力的形式向四面八方传播。

宇宙间的圈态也是一种创造合力。如地球圈层中的大气圈,就是由包围地球的氮、氧、氩和二氧化碳等多种气体"合力"而成的空气层。按照各创造物在大气圈中释放和发挥创造效能的强度、方式的不同即各创造物的创造力相互作用的强度、方式的不同,人们又将大气圈划分为不同的层次,如对流层、平流层、中间层、热层和外大气层;均匀层、非均匀层;电离层、非电离层等。

生物界的创造力也都是创造合力。植物的生长力是植物激素、光合作用、水分代谢、矿质营养、呼吸作用、抗性、感应性及生态环境等的综合或化合。动物的生活力是动物的感觉力、运动力、摄食力、繁殖力及气候条件、地理环境、动物群体作用等的综合或化合。

人的创造力的成分组成比动物、植物要复杂、精妙得多。从人体内部结构来看,有:(1)运动力——骨、关节和肌肉的创造效能的释放和发挥;(2)消化力——由口腔、食道、肠胃、肛门等组成的消化道和由唾液腺、肝脏、胰腺、胃腺、肠腺等组成的消化腺的创造效能的释放和发挥;(3)呼吸力——呼吸道(由鼻、咽、喉、气管和支气管组成)和肺的创造效能的释放和发挥;(4)泌尿力——肾脏、输尿管、膀胱和尿道的创造效能的释放和发挥;(5)内分泌力——有异管腺体(唾液腺、汗腺、皮脂腺等)和无异管腺体(垂体、甲状腺、肾上腺、胰岛素等)的创造效能的释放和发挥;(6)生殖力——睾丸、输精管、卵巢、子宫等生殖器官的创造效能的释放和发挥;(6)生殖力——率丸、输精管、卵巢、子宫等生殖器官的创造效能的释放和发挥;(7)循环力——心脏、动脉、静脉及淋巴系统的创造效能的释放和发挥;(8)感觉力——外感受器(眼、耳、鼻、舌、皮肤)和内感受器(大动脉管壁上的压力感受器、化学感受器及其他各种的脏器官里的感受器)及大脑皮层感觉区的创造效能的释放和发挥;(9)思维协调力——由脑、脊髓构成的中枢神经系统和由中枢神经发出并统摄的遍布全身的神经支干的创造效能的释放和发挥。

这九种来自人体内部结构的创造力,可视作人的本能力或基本力。它们即可看作是创造合力(系统内众多的功能器官都在发挥作用),又可看作是创造单力(整一地和体内其它系统相比较)。同时,它们彼此之间亦没有严格的界限,也是相互影响、相互渗透、相互制约、相互作用的,依然是一种"创造合力"。运动力影响消化力——体力劳动、体育锻炼可帮助消化、增进食欲。消化力制约运动力——

肠胃患病、食欲不振的人运动力必然会减退甚至丧失。生殖力需要内分泌力提供 激素,内分泌力又需要循环力提供养料、排去废物。而这种种基本力又都需要思 维力来调节、统摄和指挥。

前面讲过,外部因素是必然要参与和影响人的创造效能的释放和发挥的,因此,人的创造力实际上还应包括自然因素力和社会环境力。这些外部影响力主要是:宇宙空间力、生态环境力、地理条件力、人种亲合力、民族凝聚力、国家强制力、社会约束力、党团作用力、文化熏染力、道德规范力、科技刺激力、家庭感情力、学校教化力、亲友帮助力,等等。

人的创造力就是上述来自创造物内部结构的、外部影响的;本身的、自然的、 社会的种种力的综合和化合。综合与化合后的创造力是整体性的创造合力,它不 等于众多的各个创造单力简单地相加,其强度和价值指数大于和高于众多的创造 单力之和。

人的创造力和非生物的创造力相比较,区别在于人的创造力是一种有感觉有思维的生命力,非生物的创造力是一种无感觉无思维的自然力。人的创造力和人类之外其他生物(尤其是动物)的创造力相比较,人的创造力是一种以思维力和社会力为重要组成部分的创造合力,其他生物(即使是比较高级的动物)的创造力是一种不具备思维力和社会力的创造合力。

深入考察,社会力也是一种思维力;或者说社会力根源于思维力。——我们说人是具有社会性的创造物,或言人的创造性具有社会性,其主要依据或标志是人能够制造和使用劳动工具进行劳动,能够创造语言文字并利用其进行交际,从而形成社会。制造和使用劳动工具、创造和利用语言文字,无疑都是人的极为发达的大脑神经系统的创造效能的释放和发挥,即思维力——智慧创造的结果。动物不能制造和使用劳动工具,不能创造和利用语言文字,是因为动物不具备极为发达的大脑神经系统,不具备思维力,不能够进行智慧创造的结果。所以,思维力是人的最基本、最核心、最重要的、最突出的创造力。思维力具备与否,是区分人的创造力和非人的创造力的惟一的根本性的标志。具有思维力的创造力是人的创造力,没有思维力的创造力是非人的、动物的或其他生物、非生物的创造力。

人的思维力是一种创造合力。这种创造合力大体上由四种基本要素构成:感

知力、记忆力、想像力和选择力。作为创造合力的思维力实际上就是智慧创造,智慧便是思维的结晶,思维的力量便是智慧的力量。关于智慧和智慧创造笔者在下一节将作重点分析。

## 3 智慧

智慧是人类的骄傲。在人类的创造效能中,智慧起着创造主的作用。惟有智慧,才使人类和非人类最终区别开来。智慧大体上有四个基本要素或组成部分:(1)感知;(2)记忆;(3)想象;(4)选择与外化。

### ●感知

感知是智慧的初级阶段,包括感觉、知觉、表象、概念以次递进的四个层面,和联觉、直觉、灵感三种特殊形式。

感觉是人的感觉器官、神经组织和大脑皮层相应部位对来自体外创造物的信息刺激所产生的初步反映。创造物的信息刺激作用于人的外感受器,产生视觉、听觉、嗅觉、味觉和触觉;作用于人的内感受器,产生饥觉、渴觉、性觉、运动觉、肌体觉等。感觉也是创造物,是外部刺激和内部器官相互作用的结果。感觉是认知的起点,从而也是思维的起点、智慧的起点。没有感觉,外部世界和人的大脑器官无从联系,大脑皮层无事可做,智慧创造当然无从谈起,在外部世界和人的智慧之间,感觉是一块敲门砖。

如果说作为认知起点的感觉具有表面性、具体性和直接性的特点(只是对个别创造物的表面现象或其个别性质的反映)的话,知觉就高一个层次了。它是大脑器官对各个创造物、各种表面现象及其各种性质的综合反映。其内容比感觉复杂,结构比感觉完整。知觉具有整体性、理解性、恒常性等特点,亦有空间知觉、时间知觉和运动知觉之分。如果说感觉是敲门砖,知觉便是通向智慧殿堂的甬道。

表象比知觉又高一个层次。知觉靠近感觉,依然是对外部创造物直接的反映, 表象则具有间接反映的性质,可在创造物不在时(即此时此刻外部创造物并没有 作用于感觉器官)保留或呈现出创造物的种种印象。表象建立在知觉的基础上, 是对创造物多次感觉、知觉后的形象概括,反映着创造物的大体轮廓和主要特征,是感觉、知觉向概念过渡的桥梁和中介。如果说知觉是通向智慧殿堂的甬道,表象便登上了这个殿堂的台阶,甚至可以说已跨入门槛了。

概念是感知阶段的最高层次,它已不仅是创造物具体形象的反映,而是一类创造物共同特征的概括和抽象的反映。人的大脑神经系统,具有将感觉、知觉、表象获得的种种感性材料加以比较整合的创造效能,于是一类创造物的本质属性被抽取出来,且用适当的词汇加以表征,就形成概念。概念实质上已是智慧的细胞、基石或组成部分。在新思想、新理论的创立过程中,概念具有十分重要的意义。一门科学,要有几个基本概念作为它的逻辑出发点,如本书第一章对"创造"的定义。若干个新概念,往往能导致一种新理论的问世。

联觉又称"通感",是感知系统中的一种特殊形式。它来自各种感觉间的相互作用,意味着一种感觉引起另一种感觉,或一种感觉的作用借助于另一种感觉的同时兴奋而得到加强,从而联合成为较完整的知觉。联觉的生理机制是和各种感觉器官相对应的大脑皮层功能部位的交错互渗。在联觉中,视知觉往往处在创造主的地位,如看到红、黄、橙等色引起暖的感觉,看到蓝、绿、紫等色引起冷的感觉,看到某种食物引起香甜的嗅觉、味觉等。联觉也是智慧的起点,许多智慧的创造物都源于联觉或利用了联觉。如诗句"泉清入目凉"(视——触知觉)、电视教学(视——听知觉)、跳跳糖(触——味知觉)、卡拉 OK (视——听——触——动知觉)等。

直觉也是感知的一种特殊形式。直觉具有直观性、直接性、跨越性等特点,它意味着对外界创造物的感知可以不经过感觉直接进入知觉,或不经过感、知觉直接进入表象和概念。直觉是智慧的一部分,它往往能够一下子透过创造物的表面现象,直接地或朦胧或清晰地感悟到创造物的内部结构或某些内在性质。许多充满智慧的创造都来自直觉或与直觉有关。科学家常常依靠直觉进行选择,作出预见,提出新的概念、新的思想、新的理论。如关于平行问题的三种不同公理,就是欧几里得、罗巴切夫斯基和黎曼三位数学家各自凭直觉发现和提出的。难怪爱因斯坦说他"相信直觉和灵感";也难怪克罗齐片面地断言"艺术即直觉";甚至出现将直觉的作用无限夸大的理论,如柏格森的直觉主义。

灵感和直觉关系密切又相互区别。直觉包含着或部分包含着灵感,但不等于灵感。关于灵感,笔者前面叙述创造激动态时曾有所涉及,认为灵感是智慧创造的"脉冲"形式,即大脑神经系统刹那间像一颗质量巨大的"脉冲星",发射出短而强的高频率高效能的智慧射电。这样的比喻性概括,严格讲还算不上准确的定义。然而权威的能够概括灵感本质的定义至今还未见到。有学者认为,"灵感是显意识与潜意识通融交汇的结晶。"这个定义不乏深刻之处,但似乎也不周延,因为"显意识与潜意识通融交汇的结晶"未必都是灵感。在形象思维和抽象思维过程中,亦不乏显意识与潜意识通融交汇的情形。然而定义无定论不等于灵感不存在。灵感无疑属于智慧创造的一部分,甚至是闪光的具有较高创造价值指数的一部分。具有突发性、偶然性、独创性和模糊性特征的灵感,往往使人的大脑神经系统茅塞顿开、豁然贯通,产生所谓的"信息真髓跃迁现象"——"神动天随,寝食咸废,精凝思极,耳目都融,奇语玄言,恍惚呈露"——"忽如一夜春风来,千树万树梨花开"!抓住灵感,配合其他智慧手段,新的具有突破性的创造物的出现便为期不远,即将应运而生了。

### ●记忆

记忆是产生于人类大脑神经系统的一种创造效能。这种创造效能能够将感知过、想象过的信息、形象、概念、经验、知识等储存并重现出来。记忆渗透于整个感知系统,并和感知一起,构成想象的基础。记忆也渗透于整个想象系统,并同感知、想象一起,构成选择的基础。

记忆的生理机制是大脑的神经联系。识记、保持、再认和重现是记忆的基本过程和基本环节。识记意味着由外部信息刺激引起的神经冲动,通过一定的渠道进入大脑,在大脑的有关的神经元之间形成暂时联系。保持意味着由于反复作用,这些暂时联系得以巩固,并在大脑皮层上留下痕迹。再认和重现(回忆、追忆)意味着这些暂时的联系、这些痕迹在相应的刺激影响下再度活跃、再度兴奋。据研究,人脑具有巨大的记忆能力,一个脑记忆储量是一千万亿个信息单位,可以容下三四个美国国会图书馆(世界上最大的图书馆之一,藏书达两千万册)储藏的知识。

根据"痕迹"在大脑皮层保持时间的长短,记忆可分为瞬时记忆、短时记忆、长时记忆。根据内容和渗入领域的不同,记忆可区分为感觉记忆、知觉记忆、表象记忆、概念记忆;形象记忆、抽象记忆,联想记忆及情绪记忆、意志记忆等。如以视觉记忆、听觉记忆、味觉记忆等为内容的感觉记忆(和瞬时记忆相吻合),就是将来自外界创造物大量的原始状态的信息予以暂时储存,以便运用知觉、表象、概念等手段做进一步的精细加工。因此,感觉记忆无疑是整个智慧创造的前提或序曲。再如表象记忆(和暂时记忆或长时记忆相吻合),乃是感知过的创造物的印象、形象、主要特征等,在大脑中的保留或复现。儿童出生六个月左右出现表象记忆,能认知和辨别母亲及熟人的面貌。人们追念、回忆经历过的事情,也主要依靠表象记忆。表象记忆是将感知上升到想象和选择的中介,只有经过表象记忆,人们才能将感知过的东西变成知识和经验,从而为更复杂、更高级的智慧创造提供准备。

记忆是智慧的一部分,记忆力是创造力的一部分。每一个智慧创造,自始至终都有记忆相伴随、相参与。人类世界大大小小的创造物无不与记忆有关,那些取得令人瞩目的创造成果的思想家、科学家、文艺家、发明家,无不具备良好的甚至惊人的记忆力。唐代的韩愈读书背文,"功力兼人";清代的沈涛背诵《十三经》"如瓶泄水";茅盾熟记《红楼梦》一百二十回,随便那一回,都能一字不差地背诵出来。还有,华罗庚能熟记默写整板整板的计算式;茅以升能背诵圆周率到小数点后面一百位……许多少年也只因记忆力惊人而被誉为"神童"。

当然,记忆只是智慧的一部分,而且是价值有限的一部分,价值指教更高的创造有待于人们利用记忆、发挥记忆,即将记忆作为已有的创造物,投入到新的创造过程——想象和选择中去。一个人可以将一部辞典背得滚瓜烂熟,但此人如果不懂得应用,不能够将所熟记的辞条用来搞科研写文章,那么这个人顶多只是一部"辞典"而已。而且这部"辞典"对一个社会来说,从信息量的储存到功能效用的发挥,未必顶得住一台电脑机器人。将记忆作为工具,投入新的创造,才是记忆的目的。奥地利物理学家马赫五岁时曾在郊外看到过一架隆隆作响的风车,脑子里便留下了风车车轮的齿轮装置带动磨石的齿轮装置的强烈印象。后来在他的科研工作中,这个印象每每浮现于脑海,成为一种刺激、一种动力。俄国作家

屠格涅夫有天晚上去划船,忽然看到从一间小屋的窗户里探出来一个标致姑娘的头颅,于是形成这位姑娘的形象记忆,并引起屠格涅夫进一步思索:这个姑娘是谁?她是怎么样一个人?她为什么在这间小屋里?她跟老太婆是什么关系?思索品味的结果,便是短篇小说《阿霞》的问世。如果屠格涅夫不展开进一步的智慧的思索,那么,关于这个标致姑娘的形象记忆,就只是屠氏脑海神经组织的瞬间的一晃而过的暂时联系而已,而绝不会生发为一篇优秀的文学作品。大概许多人都有过对这个姑娘的形象记忆,而只有屠格涅夫写出了《阿霞》,根本原因在于,屠格涅夫将这个记忆作为进一步创造的起点、前提和动力,而不是仅仅作为"记忆"而已。

正因为记忆是智慧的一部分,且又是新的智慧创造的"基因",因而智慧的人类就应当:第一,尽量使有用的记忆持久——设法强化暂时的神经联系,加深"痕迹";第二,尽量使记忆准确,使其内容不至于歪曲、遗漏和附会上其他杂质——精确暂时的神经联系,随时比较取舍,防止混淆;第三,做好迅速提用记忆的准备——将记忆的内容系统化、条理化、熟练掌握和灵活运用提用记忆的方法技巧。能否做好提用记忆的准备,能否熟练掌握和灵活运用提用记忆的方法技巧,乃是衡量人或机智聪明或愚笨迟钝的一个重要因素。

### ●想象

如果说感知是智慧的初级阶段,那么,想象就是智慧的中级阶段。一般认为,想象是在感知和形象记忆的基础上形成新形象的心理过程,是大脑皮层旧有的神经联系重新组合构成新的联系的过程。笔者这里讲的"想象"比这个"一般认为"要宽大得多。"一般认为"基本上是将"想象"限定在形象思维范围内,或者说想象不过是形象思维的同义词。笔者要讲的"想象"则既包括形象思维,又包括抽象思维,还包括形象思维和抽象思维交揉互渗化合在一起的意象思维及联想与猜测、幻想与假设、梦想与解析等等。

形象思维就是用形象来思维或主要用形象来思维。形象思维和感知阶段的表象相联系。表象是形象的同义词,乃是外界创造物留在大脑皮层上的"映象"。形象思维的实质就是将这些原始的、分散的、粗糙的"映象"在大脑皮层加减化合

成新颖的、整体的、精美的形象,就是用形象"想"形象,用形象"造"形象。 尽管加减化合是一个反复进行的过程,但总的轨迹,总的趋势是由旧的形象上升、 脱胎、成长为新的形象。新的形象比旧的形象更生动、更丰富、更典型、更有寓 义。

文学艺术的创作和欣赏主要依靠形象思维。"日暮苍山远,天寒白屋贫。柴门闻犬吠,风雪夜归人。"这是唐代诗人刘长卿的一首五言绝句。诗中依次用了日、山、天、屋、门、犬、风、雪、夜、人,十个形象。这十个形象本来只是分散的单个的"材料",诗人通过形象思维将其优化组合,一组有丰富蕴涵的新的形象便有机地整体地呈现出来。读者读这首诗的时候,脑海里也会浮现出暮日、寒天、白屋、柴门等一组形象——读者脑海里浮现出来的形象当然又和诗人脑海里的形象有区别,是读者经过再创造后的形象,从而体会出一种生计维艰的人世况味。不单单是作诗赏诗,其它艺术的创作与欣赏也概莫能外。达•芬奇的《蒙娜丽莎》来自模特儿蒙娜丽莎的微笑和生母卡特琳娜的微笑。贝多芬创作交响曲《命运》时,脑海里一定涌现出自己一生坎坷多难的历历情景,和英雄"扼住命运咽喉"的壮丽画面。这样的例子比比皆是。

形象思维人皆有之。人本身是形象的人,面对的一切是形象的一切,完全彻底地摆脱形象的思维几乎不可能。建筑师搞设计,脑子里必然有新楼房的形象;数学家搞运算,必然有图形算式参与其中;天文、地质、物理学家搞研究,离不开各式各样的构造模型。即使是以抽象思维为主的哲学家,也离不开形象思维的辅佐和参与:高深玄妙的观点,得用鲜活生动的形象来说明;枯燥干涩的思索,需要有情有趣的形象活动来调节、来滋润。而抽象思维的"细胞"——概念,也是以形象为根源。一切概念最初都来自形象,都包含着、携载着原始的形象信息。

抽象思维是用概念来思维或主要用概念来思维,是将感知阶段形成的概念进一步"抽象"的思维。"抽象"的方式大体有三:第一,由判断到推理。判断是展开了的概念,是用一个或若干个概念判别和限定另外一个概念或若干个概念。推理是对己有的判断(前提)作出新的进一步的判断(结论)。第二,由分析比较到综合概括。分析是将己有的整体性的概念群(大概念)的各个组成部分及其特性(小概念)分解出来;比较是对比分解出来的若干个小概念,确定其异同关系、

主从关系、本质与非本质关系。综合是把大概念或概念群的各个组成部分重新联系起来,或将各概念所代表的创造物的个别特性或个别方面结构成新的整体;概括是将用概念反映出来的、具有相同的一般特性的创造物统摄、联系、连接起来。分析比较是综合概括的前提,综合概括是分析比较的目的。第三,系统化、条理化。系统化是将进入大脑的各种概念、各种信息、各种思维成果、优化组合成一个整体的、相关的、有序的、动态的系统。条理化是将系统内的各种知识按逻辑次序分门别类,排队编码,以便准确迅速地检索和取用。

语言文字是抽象思维的基本工具。如判断就表现为一个由主词、宾词和系词组成的结构简单的句子,而推理则呈现为一个或若干个结构复杂的句子。分析比较、综合概括,以及系统化、条理化,都是以具有一定词义的语言(即概念)和句子,为细胞、为基础、为手段的。思维过程中所使用的语言的词义的概括化程度是抽象思维水平高低的标志。

和抽象思维中必然渗入形象思维一样,形象思维中也必然有抽象思维参与。 只有形象思维没有抽象思维的文艺创作,或只有抽象思维没有形象思维的理论思 考,世界上都不存在。只是在形象思维过程中,"形象"是创造主,"抽象"是创 造从;在抽象思维过程中,"抽象"是创造主,"形象"是创造从罢了。如笔者前 面提到的刘长卿的诗句"风雪夜归人",这个"归人"就是两种思维交流融合的产 物。首先,"归人"是人,形象的人;其次,"归人"又不是一般的人,而是从一 般人中抽象概括出来的"归"人。

意象思维便是形象思维和抽象思维交融互渗的思维,所谓意象,乃是有意义的形象,是经过抽象的形象,是情感、思想的具象化。意象具有形象性、暗示性、多义性等特征。将积淀在大脑里的不同意象按时间顺序叠加在一起组成一个较完整的意义单元,形成前后映射关系,即前一个意象影响对后一个意象的理解,便是"意象叠加"。把若干个本来毫无关系的意象随便地串连在一起,叫"意象随意并置",把一个或几个意象随意转换成另一些毫无联系的意象,以便取得突兀怪异的效果,叫"意象随意转换";两者结合起来,便是"意象的自由联想"。意象思维在文艺创作(尤其是诗歌创作)中得到比较广泛的应用。如勃勒东的诗句:"带翼的章鱼将最后一次为由今天一小时一小时制成帆篷的船舶导航,这是举世无双

的壮举,此后你会感到在你的头发中正升起有白有黑的太阳。"

联想是在大脑中进行的,由一个创造物想到另一个创造物的智慧活动。这里的创造物包括形象、意象、概念、理论等等。联想有各种各样的划分法。按其过程和结构的繁简程度,可分为简单联想和复杂联想。

简单联想由接近联想、相似联想和对比联想组成。接近联想是指在时间和空间上彼此接近的创造物之间所形成的联想,如由墨水瓶联想到钢笔、稿纸、文章。相似联想又叫"类似联想",是指在性质上或在形式上相类似的创造物之间所形成的联想,如由猫想到老虎、豹子。对比联想又称"相反联想",是指在具有相反特征或相互排斥、相互矛盾的创造物之间所形成的联想,如由荒漠想到绿洲、由英雄想到懦夫、由光明想到黑暗等。

复杂联想包括关系联想和意义联想。关系联想是指在创造物之间由于因果、 条件、递进等比较复杂的关系而形成的联想;如由感冒联想到发烧,由环境污染 联想到生物保护,由讲师升级联想到教授待遇等。意义联想是指在不同的创造物 所蕴涵的内在意义之间形成的联想,如由文学作品蕴涵的潜移默化的教育意义联 想到校外辅导站、书刊市场整顿;由"五四运动"的深远的历史意义联想到志士 仁人的血泪、中华民族的苦难,等等。

按照发生和展开的方向,联想又可分为顺向联想、逆向联想、侧向联想、散射联想、辐合联想等。

顺向联想是按时空顺序的由小到大、由低到高、以次递进的联想。如由少年 联想到青年、中年、老年;由树根联想到树身、树干、树冠。逆向联想也可称"反 向联想",是反时空顺序的,或走向创造物反面的联想。如由煤气灶联想到炭火灶、 柴火灶及原始人的篝火;由成功时的春风得意联想到失败时的沮丧消沉等,侧向 联想可以同眼睛的侧视能力相类比,是将此创造物同其旁边的甚至是距离很远的 没有多大关系的创造物连接沟通起来的联想。如阿基米德由水溢出浴缸联想到比 较各种物体体积的方法,画家石鲁从尿缸中呈现的颜色,联想到一幅画的色彩基 调等。发生于春秋战国时期的"围魏救赵",也是运用侧向联想的典型范例。

散射联想是从一个整体性的创造物出发,联想到分散的许多创造物。(好比从"圆心"扩散发射到"圆周"。)如求得某一问题的各种解法,思考某一事件的各

种可能性结局,提出某一疑难的各种假说,等。辐合联想是从众多的分散的创造物出发,联想到整体性的某一个创造物(好比由"圆周"辐凑、集合至"圆心"。)如从某一难题的各种解法、各种参考答案中求得最佳解法、最正确的答案。散射联想又称"求异联想"或"探险联想",是开放性联想,联想的结果是多元的、不确定的;辐合联想又称"求同联想",是闭合性联想,联想的结果是一元的、确定的。

猜测是凭借联想而对未知的创造物作出的推断和估计。猜测具有或然性。即有的猜测经过验证符合或基本符合创造物的实际情况,有的猜测经过验证不符合或基本上不符合创造物的实际情况。前者如对海王星的预言,后者如对火星上存在智慧生命的推断。

联想和猜测是孪生姊妹。二者融合在一起,就是所谓的"猜想"。联想无疑是智慧的重要的组成部分,猜测则是这个部分中颇具神秘感颇带诱惑性的一部分。 科学上的高深玄妙的猜想往往使一代又一代科学家为之殚精竭虑,求索不息。如 著名的数学上的"哥德巴赫猜想",拓朴学上的"四色猜想"等。

幻想是在脑子里想象目前世界上还没有的、一下子还不能实现的又企望实现的创造物。憧憬、空想、瞑想,可视作幻想的同义词或近义词。幻想既具有虚妄性,又具有可能性,还具有诱导性。幻想往往转化成创造欲念(或者说幻想本身就具有创造欲念的性质),从而进一步外化为创造行为。人类的许多幻想通过外化为创造行为进而一步步变成现实。比如,生活在15世纪、16世纪意大利文艺复兴时期的达•芬奇就曾幻想人也能够像鸟一样在空中飞翔。这种幻想大概当时许多人都有,但达•芬奇不但在脑子里"想",还动手画了不少草图。这些"空想图"对后来的人们产生了积极的影响,其中一种成了现在的"全日空"(全日本航空公司)的徽章。三百多年后,即1903年,英国的莱特兄弟终于将世界上第一架飞机送上蓝天。达•芬奇的幻想变成了现实。再如,"千里眼""顺风耳"是中国古典小说《西游记》和《封神演义》中的神话人物,也可以说是中国古人的两个幻想,在人类发明了互联网和智能手机后,这两个幻想,可以说都变成了现实。有些幻想则几乎没有可能成为现实,如有人幻想自己长生不死;或者能够像孙悟空那样,有七十二番变化等等。

假设和幻想不无类似之处。不过,幻想和形象思维靠得近一些,假设则主要靠抽象思维。脑子里对某创造物呈示的现象(或现象形态的创造物),产生预拟的看法、解法或假定的解释说明,便是"假设"。这样的假设通过语言文字外化于世,便是"假说"。假说若被证实,便成为科学理论;否则就只是"假说"而已。1903年,汤姆逊提出了"面包夹葡萄干"的原子模型假说,认为正电荷散布在整个原子中,就像葡萄干散布在整个面包中一样。后来,卢瑟福等人用 a 粒子冲击原子,发现有些 a 粒子不是沿直线前进而是偏转很大,有的甚至反弹回来。在汤姆逊的"面包夹葡萄干"里,没有足够大的障碍物足以使粒子发生如此显著的偏转。于是,卢瑟福提出了一个类似于太阳系结构的原子模型假说;原子中央是一个重的带正电荷的原子核(足以使冲来的粒子发出偏转或反弹),电子绕原子核旋转,有如行星绕太阳转。这个假设很快被证实,成为科学理论。汤氏的"面包夹葡萄干"就只好依然被放在"假说"的位置上。

梦也是一种"想",是人在精神松弛的睡眠状态中,大脑里产生的一种不受意识支配、无目的、消极的不随意想象,因而可将梦称作"梦想"。梦想的生理机制是一些没有被完全抑制的大脑皮层细胞群仍在兴奋、在工作。梦想往往能使以往残留在大脑皮层上的某些痕迹复活,亦能将过去、现在、幻想,理想中的创造物(形象、意念、情景等)无规律、无次序、无逻辑地联系在一起。从精神分析的角度来看,梦想乃是潜意识的外化,是人的内心深处的情感体验;它显示着潜意识的倾向和力量,能够使人们更深入更全面地认识自身。

对梦想的解析也是一种智慧的想象。这种想象的外化便是对东拉西扯、离奇古怪的梦境予以符合逻辑的意义上的分析与阐释。奥地利心理学家、精神分析学派创始人弗洛伊德坚信"梦的确具有某种意义,而一个科学的解梦方法是有可能的。"于是,我们看到了他的不乏精辟见解的巨著——《梦的解析》。美国的斯特恩·鲁宾逊和英国的汤姆库伯特认为:梦的提示可以使人们知道并了解隐藏于内心深处的焦虑与不安、努力工作的企图、偏颇生涩的知识以及更为深邃的意识与自觉,人们在梦中将更为清晰地看到并分析出自己所处的利害环境。于是,他们采用"符号释梦法",即依据许多"梦学理论家"的提示,试图从生理的、心理的、心灵的角度,找出梦中的事物与现实事物之间的象征对应关系,寻找其间意义上

的暗示与联系——合作撰写了十分畅销的《析梦辞典》一书。

对于科学家、发明家、文学艺术家而言,梦想及其解析往往能够带来意想不到的有益的启示,从而导致颇有价值的新的创造物的诞生。心理学家奥托·卢威梦见了一个可能证明他的有关神经刺激互相传送理论的实验,醒来后他便完全按梦中所示作了这个实验,取得成功,并因此获得诺贝尔奖。星占学家休·马克雷格由梦中获得了编制一份标明从1800年到2000年月亮所处位置图表的正确方法(此前许多科学家对此一筹莫展),按梦中所示的方法,马克雷格将此表绘制出来,经证明准确无误,便收在他的《月历表》一书中。小说家狄更斯时常梦见一场逼真的风暴,以至每每将他从梦中惊醒,"仿佛惊涛骇浪还在我这安静的斗室内震荡喧嚣,……我要把目睹的一切如实地写在纸上。"于是,便有了在《大卫科波菲尔》中关于一场暴风雨的生动描绘。如此这般的梦的启示、梦的描绘,在作家的创作现象中,虽不是相当普遍,也不是绝无仅有。

### ●选择与外化

选择与外化是智慧的高级阶段。一个人如果只将脚步停留在感知、记忆和想象阶段,而不朝着选择与外化迈进,那么,这个人还算不上一个完全的智慧人。 人的创造效能集中地突出地体现在选择与外化阶段。如果说感知、记忆、想象交流聚会成一个巨大的"水库",那么,选择与外化就是这个水库的闸门和泄洪道;如果将感知、记忆、想象比喻为大河奔流时的蔓延与汹涌,选择与外化就是这条大河入海时的宣泄与澎湃——尽管这样的比喻未必十分恰当。

选择意味着对由感知、记忆、想象得来的,形成并积淀在脑海中的各种概念、观点、知识、理论、办法、方案、态度、意向等等,进行一番去伪存真的鉴别与评判、去粗取精的滤汰与扬弃,和机警、果断、明睿的挑选与抉择。由于自然的、社会的、历史的、自身的种种创造条件的限制,人们获得的建立在感知、记忆、想象基础上的各种精神创造物,未必都是真实的、精当的、具有较高的创造价值指数的;同时,世界日新月异,生活变化不居,知识在爆炸,学问在更新,昨天看来是真实的、精当的、具有较高创造价值指数的,今天看来就未必。这一切,都需要对原有的和新进入脑子里的各种大量的精神创造物进行鉴别、评判,滤汰

和扬弃,留下真实的、精当的、高价值、高品位的智慧,舍弃虚假的、粗糙的、低价值、低品位的"智慧"。然后,在真实精当的、高价值高品位的智慧中,再根据目前面对的创造过程的需求,挑选、抉择出最合适、最需要、最简捷、最能获得高价值成效的智慧予以外化。

在一个创造过程的关键时刻,能否进行高价值高品位的正确的智慧选择,是 衡量庸俊智愚的重要标志。选择适当,创造过程会朝着创造主期望的结局发展; 选择不当,创造过程的结局则往往和创造主的愿望相反。一着不慎,满盘皆输, 下棋如此,其它创造也是如此,诸葛亮应该说是满脑子的智慧,"运筹帷幄之中, 决胜千里之外",然而千虑一失,初出祁山,便选择了一个夸夸其谈的马谡作先锋, 结果丢了街亭,误了战机,造成重大损失。拿破仑无疑可归入创造巨人的行列, 他指挥作战的天才常常令人拍案叫绝,然而在滑铁卢战役中却遭到最终的惨败。 惨败的重要原因,便是拿破仑在战机和用人上选择失当。

选择和外化紧密地联系在一起,无选择的外化是无智慧的外化,无外化的选择是无意义的选择。外化是精神状态的创造物向实物状态的创造物的转化,意味着智慧从脑壳里走出来,作为创造物进入本体之外的创造过程,并成为这个创造过程所生成的新的创造物的一部分,甚至是重要的,或占主导地位的一部分。外化的途径不外乎三条:符号化、实物化和行为化。

符号化是通过语言、文字、算式、色彩、线条、图案、音符、旋律等"符号"将经过选择的智慧表示出来。思想家只有将自己的思想讲出来(如孔丘、苏格拉底)或写出来(如卢梭、伏尔泰)才算是思想家;数学家只有将自己选择的算式列出来(如华罗庚、陈景润)才算是数学家。画家、音乐家同样,一幅幅用线条和色彩构成的传世佳作,使张大千成为张大千,徐悲鸿成为徐悲鸿;一首首用音符和旋律组成的动人的乐曲,使莫扎特成为莫扎特,德彪西成为德彪西。普通人也一样,日常对话,写信作文,都要选择适当的字、词、句及其结构、格式、情调等等;即使是盲人,聋哑人也要在盲文、手语中进行选择。

实物化,是通过制造出某种实实在在的物体,将选择后的智慧表示出来。发明家主要靠实物显示自己的发明,没有具体可见的、立体可摸的实物,就没有资格做发明家。比如,如果不制造出浑天仪和地动仪,张衡就只好主要是文学家的

张衡了。同样,德国人本茨和英国人戴姆拉如果只在脑子里将"汽车"思考一番,选择一番,而不动手制作,那么,世界上第一辆汽车的发明权就是另外的人了。 今天我们谈到张衡、本茨、戴姆拉时之所以依然充满着敬意,就是因为他们的名字和浑天仪、地动仪、汽车等实物联系在一起,通过这些实物,我们看到了他们的卓越智慧。不仅是发明家,物理、天文、地质、生物等学科领域的科学家也都需要借助实物模型来展示自己的思想观点和研究成果。裁缝的技能表现在衣服上,厨师的水平体现在饭菜上,没有款式新颖、做工精致的衣服,没有色、香、味、形、器、意、养俱佳的饭菜,裁缝和厨师的智慧就是"空中楼阁",不可捉摸了。事实上,实物也是一种符号,是一种具体的、立体的、可见可触可用的"符号"。实物符号往往和语言文字、色彩音响等符号融合在一起发挥作用。

行为化是将经过选择的智慧用面部表情、四肢动作及各种各样的活动表示出来。任何行为都离不开符号和实物。符号化、实物化是行为化的基础、工具、对象和依托;其实质,也是一种"行为化"。比如一个人在众多的异性中选择了其中一位作为爱的对象,那么他必然以对话、书信(语言符号)和礼品(实物符号)及眼神、形体动作(行为符号)等来表示自己的爱慕之情。选择怎么样的行为,以及选择怎样的时机展示这些行为,构成了爱的智慧的重要内容。同样,政治行为表现着政治家的智慧,军事行为体现着军事家的智慧,科学家的科学试验、思想家、作家的著书立说更是一种高价值、高品位的智慧行为。

"天才"现象和上述智慧的基本内容密切相关。所谓"天才",即是在内部结构(主要是大脑的生理机制)和外部影响(创造促进大于创造抑制的社会、自然条件)基本相同的情况下,表现出超出一般人的智慧从而做出卓越贡献的人。天才的实质是智慧的超群。智慧超群(或超常的智慧力)得具备下列基本要素:细致、敏捷、全面的感知力;准确、迅速、牢固的记忆力;丰富、广阔、深刻的想象力;机警、睿智、果断的选择外化力。四个要素缺一不可,综合成一个整体,才能算作天才。只具备一两个要素,即只在一两个方面强于他人,就还算不上智慧超群,从而距"天才"还有一段不小的距离。

## 4 动机•兴趣•情感•意志

动机、兴趣、情感、意志属于不可忽略的创造效能的组成部分。这些组成部分能够对智慧产生或强或弱、或大或小、或持久或短暂的影响,从而关系到创造主体创造效能的释放和发挥、创造过程的进展、新的创造物的生成。

### ●动机

动机是产生于大脑中的由于某种创造需要所引起的行为倾向。动机和创造欲念意义接近。如果说稍有区别的话,那就是动机的创造效能更强一些,它往往直接导致创造行为;创造欲念的创造效能相对而言弱一些,不一定直接导致创造行为。动机可以说也是一种创造欲念,一种和创造行为联系密切的创造欲念;而创造欲念不一定都构成动机。创造欲念可以在大脑里一闪而过,不一定去实现;动机在大脑里不会一闪而过,而要反复、酝酿、停留一段时间,且往往要通过外化成创造行为去实现。

根据创造需要的不同情况,动机可有多种划分。一种动机主要来自创造主体内部结构的需要,如肚子饿了,产生进食的动机;身上冷了,产生取暖的动机。一种动机主要来自和创造主体有关的外部因素的需要,如房子破旧了,产生翻修的动机;某团体解散了,产生重建一个的动机。有的动机主要指向实物状态的创造物,如看到某件衣服不错,决定去买一件来穿;有的动机主要指向精神状态的创造物,如认为某种信仰很崇高很美妙,决意为之奋斗不息。有的动机在脑子里停留时间很短,就外化成具体的创造行为,如想去看望某位朋友,很快就去看了;有的动机在脑子里酝酿好久才外化成创造行为,如要除掉某个政敌、情敌,所谓"君子报仇,十年不晚";有的动机甚至终生都在脑子里酝酿,如对真理、正义的追求及对理想社会的向往等。

凡具有大脑神经系统的创造物都会产生动机。非生物、微生物、植物及低等动物不具备大脑神经系统,当然不会有动机。高等动物有大脑神经系统,自然会产生动机。豺狼会产生猎取食物的动机,猿猴会产生寻找异性的动机。然而,人之外的任何动物的动机都是源自通常意义上的本能需要的非智慧的动机,只有人的动机是既源自本能需要,又源自社会需要(尤其是源自社会性需要)的智慧的动机。

动机是目的的出发点,是创造行为的源动力和内驱力。动机能够激励和推动人

们积极地投身于某创造过程,积极地释放和发挥创造效能,以达到预期的、想达的目的——某种新的创造物的出现。

### ●兴趣

兴趣是和一定的情感体验相联系的、对探究某种创造物或从事某种创造活动 所产生的积极的心理倾向。兴趣的生理机制是大脑神经系统对某种来自外部的刺 激所产生的一种特殊性兴奋。这种兴奋是具有大脑神经系统的动物都具备的。如 猫对老鼠感兴趣,狗对骨头感兴趣。和人之外的动物建立在生物本能基础上的兴 趣不同,人的兴趣所赖以产生的基础,既有生物本能的因素(如对食物、异性感 兴趣),又有智慧因素(如对新的思维、新的观点感兴趣)和社会因素(如对文艺、 体育、宗教活动感兴趣);或者说人的兴趣源自生物的、智慧的、社会的因素的化 合——人的本能因素已不可剥离地打上了智慧的、社会的烙印。

作为创造效能的一部分,兴趣对人的创造行为、创造过程影响甚大。对感兴趣的创造物,人们总是主动地、愉快地去接近它、研究它;对感兴趣的创造过程,人们也总是主动地、愉快地去参与、去投入。说"兴趣是成功的一半",不免有些夸张,但兴趣能对成功起到诱发、促进、催化、加速等重要作用,则是毋庸置疑的。

兴趣也有主从之分。主兴趣也称中心兴趣,人们一般对自己所选择、所从事、所爱好的专业的兴趣便是主兴趣,如科学家对科研感兴趣,文学家对作品、对写作感兴趣等。从兴趣也称非中心兴趣,人们对自己爱好的专业之外的创造物和创造过程的兴趣就是从兴趣,如工作之余的收藏、集邮、钓鱼、养猫养狗、打牌下棋等。创造巨人一般都是知识渊博、兴趣广泛的人。如马克思就爱好这样的格言:"人类的一切东西,对我都不是陌生的。"歌德不光在诗歌领域贡献卓著,还对感觉生理学和生物学感兴趣,且有重要贡献。达•芬奇也不光画画得好,还对建筑、雕塑、自然科学及现代发明感兴趣。

根据不同的内容指向,还可将兴趣划分为实物兴趣和精神兴趣。实物兴趣是指 对实物状态的创造物感兴趣,如人对服装、食品、工具、财物等方面的爱好和倾 向性,精神兴趣是指对精神状态的创造物感兴趣,如人对理性思考、科学技术、 文艺创作、社会交往等的爱好和倾向性。实物兴趣是精神兴趣的基础,精神兴趣也离不开实物兴趣相伴随,尽管精神兴趣在层次上高于实物兴趣。

### ●情感

情感是具有大脑神经系统的创造物对来自外部创造物的刺激所产生的比较强烈的身心体验。情感是感觉和情绪的化合。我们将外部创造物的刺激作用于人或动物的感官所引起的反映称作感觉;如果这种反映和人或动物本来具备的创造欲念和创造动机相联系,出现或吻合或抵触的情形,人或动物就会产生肯定性情绪体验或否定性情绪体验,这便是情感。肯定性情绪体验意味着愉快、欢喜、欣慰、爱恋、向往等;否定性情绪体验意味着愤怒、憎恶、厌烦、恐惧、悲伤等。

情感是人和动物都具备的。动物情感虽是源自生物本能的非智慧情感,却不乏动人的情形。如面对屠刀,牛羊的眼里会浸满泪水,发出凄惨的哀鸣;鸳鸯、天鹅总是雌雄成对地生活、栖息,一只遇难了,另一只会苦守多日,徘徊不去。人的情感和智慧联系在一起。人的任何一种情绪体验,都有智慧参与其中。喜爱、快乐等肯定性情感,往往来自人们对某些创造物的接纳、欢迎、趋同等肯定性态度;反之,憎恶、愤怒等否定性情感,往往来自人们对某些创造物的排斥、反对、悖离等否定性态度。肯定性态度和否定性态度,显然都建立在感知、记忆、想象及选择与外化即智慧的基础上。亲人离世后,人们往往要悲痛好长时间,这悲痛无疑要和回忆亲人的言行举止、音容笑貌的心理过程,即"记忆"相联系。一个创造过程未开始或刚开始或在进行中,人们往往憧憬此创造过程结束新的创造物生成即成功时的种种情景,并因此而喜悦、而激动、而陶醉不已。这样的情感体验,自然有美好的智慧的"想象"参与其中了。

作为人的创造效能的组成部分,情感效能的释放与发挥所构成的创造力,其强度与带来的效应使人无法测计。强烈的情感体验可以导致不同寻常的巨大的创造行为。就说男女之爱吧,这种铭心刻骨的集酸甜苦辣于一体的情感体验,古今中外,激励、迷醉、颠痴、疯狂了多少红男绿女、才子佳人!因为爱,有人自杀,有人杀人;有人奋然崛起,有人沮丧沉沦;有人因失恋而创造出一部名著,如歌德与《少年维特之烦恼》;有人因苦恋而决斗,断送了一代天才的青春,如普希金。

### ●意志

如果说动机、兴趣、情感一般动物也都程度不同地有所具备的话,意志则是 人类所特有的一种极为复杂的心理活动。这种心理活动意味着人能够自觉地积极 地确定创造目的,并将自身具备的各种创造效能(尤其是智慧能)外化为强有力 的创造行为、从而克服种种困难;达到和实现预定的创造目的。

目的性、果决性、坚韧性和自律性是意志的显著特征。

目的性意味着意志支配下的人的创造活动必然是目的明确的活动。没有明确目的也就没有人的意志可言,目的规定着、导引着创造行为的方向,是意志所要达到的结果。人类的绝大多数创造,如政治家搞政治运动、科学家搞科学实验、文学家写作品、工人做工、农民种田、学生上学等等,都是有目的的创造,因而也都是意志创造。目的是积极想象的产物,它确立在创造行为之前,以表象或概念的形式反映和存贮在人的大脑中,并时时激励、鼓励创造者去外化它、实现它。数学家的目的是解开一道道像"哥德巴赫猜想"那样的难题;天文学家的目的是探索宇宙奥秘,让遥远的星际世界降福祉于人类;中国人民的近期目的是实现现代化和民族复兴,让中华民族强盛于世界之林。这些宏伟目标,体现着意志的力量,激励着、鼓舞着人们为之攀登不止、奋斗不息。

果决性意味着经过一番智慧的思考后,能够迅速准确地选定目的,并果断坚决地付诸于创造行为来实现这个目的。守寡的卓文君将落魄书生司马相如迅速选定为如意郎君,且不顾父母的阻挠,连夜私奔,是果决的意志行为;许多人背叛自己的家庭,抛弃妻儿家产,毅然投身于自己选定的追求光明的事业,也是果决的意志行为。有句话叫做"心动不如行动",如果将迅速准确地选定目的称作"心动",那么,果断坚决地付诸于创造行为就是"行动"。"心动"是内在的,"行动"是外在的。意志的果决性即表现于"心动",更表现于"行动"。没有"心动",当然不会有"行动";然而没有"行动","心动"也就失去了一大半意义。"心动"和"行动"共同构成意志的果决性,两者不可或缺,不可分离。

坚韧性意味着创造目的确定后,创造主体能够以坚定不移、百折不挠、顽强 不屈的精神风貌去奋斗、去实现。古今中外各行各业,做出较大贡献的人杰俊秀, 无不是顽强意志的具备者。印度的"圣雄"甘地选定了以非暴力抵抗为手段、争取民族独立的目的,为此他苦行、流血、绝食、坐牢、直至献出自己的生命。罗素为撰写《数学原理》,付出了废寝忘食的十年的艰辛。李时珍为了《本草纲目》问世,三十年风餐露宿,三十年孜孜矻矻······前途是光明的,道路是曲折的;面包会有的,困难也会有的;迎接你的有鲜花,也有荆棘;有艳阳明月,更有冰霜雪雨。天上掉馅饼的情形太稀罕了,伟大的创造成果,总是百般折磨又特别倾心于那些意志坚韧者。

自律性意味着创造主体投入一个创造过程后,能够有效地控制自己,约束自己,排除干扰,集中精力,战胜诱惑,理顺情绪,全神贯注,全力以赴以实现最初选定的创造目的。邱少云严守纪律,宁肯被火烧死也不暴露目标;唐玄奘矢志取经,面对色相诱惑,六根不迷;科学家放弃休息搞试验,文学家甘于寂寞爬格子,等等,都是意志的自律性在起作用,都是有效地控制了自己——使自己的创造效能集中地秩序地朝一个方向释放和发挥,而不至于精神抛锚、思绪紊乱、力量分散。

目的明确、行为果决、坚韧不拔、自律不懈,构成了意志的基本品质;四个方面互相联系、互相渗透、互为条件、不可割离。

意志在人类的创造中作用重大,人间的许多不可思议、难以想象的奇迹,都可通过对意志的考察而得到解释,都可视为意志创造的奇迹。然而,我们不同意将意志和人的其他创造效能割裂开来,也不同意将意志的作用夸大到无限。鼓吹生命意志论的叔本华、宣扬权力意志论的尼采,都将意志拔高到世界的本原和本质的地位,认为人的意志可以创造万物、主宰宇宙。这样的观点不能解释意志的主体——人类出现以前的,和人之外的无意志的生物、非生物的创造现象,显然是错误的。

# 七 创造价值判断

## 1 创造质与创造量

创造质是创造物内部所固有的规定性,这种规定性使此一创造物同其它创造物区别开来。仔细考察,创造物内部所固有的规定性,其实就是创造物内部结构的特性,也即是创造物内部的创造过程的特性。创造物内部的创造过程所生成的新的创造物,以及这个创造物所具备、所呈现的新异性和独特性,便是创造质。

甲醚和乙醇的分子式都是  $C_2H_6O$ ,即每个甲醚或乙醇分子中都包含两个碳原子、六个氢原子和一个氧原子。作为创造物,碳二  $(C_2)$ ,氢六  $(H_6)$  和氧一 (0) 以不同的参与方式(即原子间的排列顺序不同)构成两个不同的创造过程,也即形成两种不同的内部结构,从而使生成的创造物——甲醚和乙醇呈现不同的创造质:甲醚是气体,几乎不溶于水;乙醇即酒精,是液体,能以任何比例与水混溶。

创造质和创造物具备同一性。任何创造物都具有创造质,不具有创造质的创造物不存在;创造质又是创造物的创造质,脱离创造物的创造质同样不存在。猿猴有猿猴的创造质,人类有人类的创造质;男人有男人的创造质,女人有女人的创造质,老王有老王的创造质,小李有小李的创造质。发热发光,具有强大引力是太阳的创造质。没有作为炽热气体球(表面温度约6000℃,中心温度约达1500万 K)的太阳,也就没有发热发光、具有强大引力的太阳。不断的发明创造,是爱迪生的创造质。没有大脑聪慧、毅力超人、工作刻苦的爱迪生,也就没有被称为"发明大王"的爱迪生。因此,完全可以说,特定的创造质,就是特定的创造物本身。

创造量也是创造物所固有的一种规定性,这种规定性意味着创造物规模大小、程度高低、速度快慢、品类多少等等,都可以用数量的形式表示出来。和创造质必然是创造物的创造质一样,创造量也必然是创造物的创造量,没有不具备创造量的创造物,也没有哪一个创造物不具备创造量。任何创造物都具有创造质和创造量两个方面,都是创造质和创造量的统一。如果说创造质是创造物的内部结构,

创造量就是对这种内容结构的"量化";如果说创造质是对创造物内部的创造过程 所生成的新的创造物的新异性、独特性的揭示,创造量就是对这个创造过程所生 成的新的创造物的重复性、积淀性、形式多样性的揭示。

水的分子式是 H<sub>2</sub>O,这种氢二氧一的结构决定了水的创造质,即具有无色、无味、可溶它物的特性。然而水不光具有创造质,还具有体积、重量、纯度、温度、水压及流速等,这便是创造量了。人的以智慧为主的创造效能的释放和发挥显示着人的创造质,但人的智慧有高有低,创造效能有大有小,释放和发挥的形式多种多样,这便是创造量所涉及的范围了。考察创造物的创造质,即是所谓的定性研究;考察创造物的创造量,即是所谓的定量研究。定性研究为定量研究提供前提和基础,定量研究又使定性研究精确化、系统化、合理化。

创造质和创造量密切联系、不可分离。创造质总是具有一定创造量的创造质, 创造量也总是具有一定创造质的创造量。一定的创造质决定一定的创造量,并规 定着创造量的范围,创造量以创造质为基础、为主体。而一定的创造量则是创造 质存在的必要条件,超过一定的创造量的界限,创造质就会发生变化。

从创造价值判断的角度来分析,创造质和创造量各有其侧重点。考察创造质,主要考察其新异性,新异的成分越多,创造质越好,创造价值越大。比如某产品,就说电视接收机吧,彩色的比黑白的新异程度高、新异的成分多,因而彩色电视机创造质优、创造价值大。同是彩色电视机,遥控的、平面方角的、自动搜台的、立体音响的又比一般的新异程度高、创造质优、创造价值大。再进一步,数码的、液晶的、高清晰、又轻又薄可以悬挂在墙上的,又比此前流行的新异程度高,从而创造质优、创造价值大。考察创造量,则主要考察其重复性、累积性。在一定的限度内,在创造质相对不变的情况下,创造物重复的次数越多,即同类同种的创造物累积得越多,创造量越大、创造价值越大。比如,在彩色电视机问世之前,黑白电视机是惟一的选择,于是,生产得越多,创造量越大,创造价值越大。在多功能、高清晰的彩色电视机问世之前,一般彩电生产量越大、创造量越大,创造价值越大。

这里显然有一个创造度的问题。在一定的创造度内,创造质和创造量成正比, 从而与创造价值成正比。越过了一定的创造度,创造质和创造量成反比,从而也 与创造价值成反比。黑白电视机生产到供大于求的饱和程度,如果继续生产,其创造量越大、创造质越差,创造价值越小。可见,创造度,与其说是创造量达到某种饱和的界限,毋宁说是创造物创造价值的极限。在这个极限内,增加创造量,意味着创造价值增大;超过这个极限,增加创造量,意味着创造价值缩小。创造度的形成,是各种创造条件、各种创造因素诸如创造物自身素质、社会需要程度等综合作用的结果。

## 2 创造价值指数

创造价值指数是衡量创造物价值大小高低的尺度。换言之,创造物创造价值 的大小高低通过其创造价值指数反映出来,创造物价值指数高,创造价值大;创 造物价值指数低,创造价值小。

决定创造价值指数的要素主要是:(1)新异值;(2)创造量;(3)创造度。

新异值反映的是创造物新颖、独特的程度,是决定创造价值指数高低的最重要的核心因素。新异值从新旧创造物比较中得来,是新的创造物的新异成分和原有创造物的新异成分之比。可以用公式表示如下: N=(E/E+P)×999‰。

公式中,N 代表新异值,E 是新的创造物新异成分之总和,P 是原有的同类创造物新异成分之总和,999%是新异值和创造量之间的比率,即在创造价值指数中,新异值占千分之九百九十九,创造量只占千分之一。

创造物的新异成分可化解为若干个新异因子,每一个新异因子占一个数值。比如,某电冰箱生产厂家推出一种新型电冰箱,其新异成分为: (1)两边开门; (2)风冷无霜; (3)箱外取冷饮; (4)节电无声; (5)自动报腐; (6)电脑调控。其六个新异因子占数值 E=6,市场上原有电冰箱的新异成分(和最初的单门单温电冰箱相比)只有双门、双温两项,即两个新异因子,其数值 P=2,这样,新型电冰箱的新异值便是: N=(E/E+P)x999%=6/6+2x999%=0.74925。再如一部新出版的小说具备人物典型、性格鲜明、情节曲折、细节动人、文字优美、结构别致、装帧新颖、印刷精美等八个新异因子,即 E=8,已有的同类题材的小说只具备性格鲜明、情节曲折2个新异因子,即 P=2,两相比较,新出版的

小说的新异值:  $N=(E/E+P) \times 999\% = 8/8 + 2 \times 999\% = 0.7972$ 。

创造量也是决定创造价值指数高低的重要因素,是对创造物重复、累积程度的反映。创造量大体上由同质同构的创造物的整体个数×1%构成。比如,某种新型电冰箱生产了一万台,其创造量便是 M=10000×1%=10。由于创造量要受到创造度(d)即饱和极限的限制,因而创造量对价值指数的影响便以创造度为阈限。创造度以内,创造价值指数(C)与创造量(M)成正比,创造度以外,创造价值指数(C)与创造量(M)成正比,创造度以外,创造价值指数(C)与创造量(M)成反比。这样便可得到两个公式: C1=N×M(d 以内)、C2=N/M(d 以外)。

比如,假设某种类型的电视机新异值为 20,其创造度是 100 万台。某厂家生产了 80 万台,其创造价值指数便是  $C1=20\times800000\times1\%=16000$ 。另外一个厂家超过了创造度,生产了 150 万台,那么其创造价值指数就是  $C1=20\times1000000\times1\%=20000$ 、 $C2=20/500000\times1\%=0.04$  C1+C2=20000.04。

显然,创造度对创造价值指数来说是一个很要紧的因素。一般来讲,创造度由社会需要程度即需求关系决定。价值规律的作用使创造度大体维持在一个标准水平上。由于社会在不断发展,需求关系在不断变化,创造度相应地也会发生变更。比如,过去人们对牛肉的需求量很低,相应地牛肉的创造度就比较低,现在人们对牛肉的需求量大幅度提高,牛肉的创造度也就随之大幅度提高。同样,过去人们生活朴素,穿平布就很不错了,因而平布的创造度很高;如今人们的生活水平提高了,不再喜欢穿平布了,平布的创造度就大幅度降低了。

对创造价值指数的考察,还要注意几个基本问题:

第一,创造价值指数主要应用于人类创造,但不仅仅适用于人类创造,非人类创造同样适用。由于非人类创造的创造度主要以人类社会的需求量为标准,因而非人类创造的创造价值指数必然要受到人类创造活动的制约和影响。比如田鼠的创造,作为生态平衡所需要的食物链的一个环节,无疑有其创造价值指数。但其创造价值指数不得高过人类为它们规定的创造度,即人类社会的需求量,高过这个创造度,田鼠便成了灾,人类就要消灭它,抑制它。

第二,创造价值指数具有针对性。不同的创造物具有不同的创造价值指数, 对创造价值指数的比较也只能在同质同构同种同类同系统的创造物之间进行。人 和人的创造价值指数可以比较,人和水中的鱼、山上的树、天上的星、地下的岩浆的创造价值指数就不好比较。即就是人类所创造的创造物的创造价值指数,也要区分不同情况:实物形态的创造物有实物形态创造物的创造价值指数;精神状态的创造物有精神状态创造物的创造价值指数。满足人们精神需要的创造物的创造价值指数和满足人们物质需要的创造物的创造价值指数就不好比较。比如一部思想理论著作或一部文学艺术作品和一亿斤粮食或一万吨煤炭的创造价值指数就因属于不同的创造系统而难以判断其谁高谁低。

第三,创造度对创造价值指数影响甚大,而创造度又是由社会需求量决定的。 有些创造物尤其是精神产品如科学发现、技术发明、理论建构、艺术创作等,往 往具有超前性,即尽管目前社会还不需要,将来社会却需要,甚至很需要。还有 的创造物,过去社会需要,现在社会及将来社会更需要,如出土文物。对这两类 创造物的创造价值指数,我们可以从三个层面来分析,即过去值、现在值和将来 值。对于具有超前性的创造物,由于目前社会还不需要,其现在值可能会很小, 由于未来社会可能很需要,其将来值又很大。对于文物遗产而言,过去值可能不 怎么大,而现在值和将来值则大或甚大。创造论是面向未来、创造未来的学说, 我们既注重过去和现在,更珍视未来。因此我们竭诚鼓励、特别欢迎那些具有将 来值的、超前的、新异的、创造价值指数高的创造物。

# 3 创造类别 (A)

由于世界的本原是创造,生命的本质是创造,世界上的万事万物都是创造物,因而创造活动便无限丰富、无限复杂。要将无限丰富、无限复杂的创造活动系统地准确地分门别类,是一件很费功夫又难尽人意的事情。本书结合创造价值判断的要求,权且将创造价值类别按两个系列划分。第一个系列包括生存创造、发展创造、感情创造和思想创造。第二个系列包括巨人创造、智人创造、凡人创造和群体创造。

下面先从第一个系列谈起。

### ●生存创造

生存创造是一切有生命的创造物面临的首要问题。只有首先解决了生存问题, 使生命得以维持和延续,其它创造才有可能。因而生存创造无疑构成了其它一切 创造的前提和基础,是一切生物最基本的创造活动。

微生物的生存需要氨基酸、糖类、脂类、水等营养物,没有这些营养物,微生物就无法存活。对有利刺激的趋近,对不利刺激的回避,既可以看作微生物的一种基本的生命现象,也可看作微生物本能地保护自己的一种生存创造。

植物有自养和异养之分。多数自养的绿色植物需要阳光、水分、二氧化碳和无机盐供其吸收,否则就无法存活。少数异养的非绿色植物需要现成的有机物供其分解,否则同样无法生存。因此,植物的光合作用、水分代谢、矿质营养、呼吸作用、繁殖发育及抗性即对寒冷、干旱、高温、水涝、盐渍及病虫害等不良环境条件的抵抗能力和感应性——对外部因素的强化刺激的应变能力等等,都是植物生存创造的表现。植物没有感情,没有思想,没有语言,无须交际,不可能构成"社会",因而植物的一切活动都在生存创造的框范之内。

动物(指人之外的动物,下同)的生存创造主要包括下列基本内容:摄食、饮水、呼吸、繁殖、保暖、睡眠和自卫。由于动物不能将无机物合成为有机物,只能以植物、动物或微生物为营养,因而摄取食物便成为动物首先的、最重要的、构成其整个生命的基本内容的生存创造。野生动物的食物源由天然食物链提供,人工饲养动物的食物源由天然食物链和人类共同提供。和摄食密切相连的是饮水和吸氧,断绝水源和新鲜空气和断绝食物源一样,无异于置动物于死地。摄食、饮水、吸氧的问题解决后,紧接着便是雌雄交配和生养后代,这就需要筑建巢穴以保暖并藉此防御外敌的侵袭。由于每一种动物都是天然食物链中的一个环节,都有时时被它种动物作为食物吃掉的危险;因而动物必须具备一定的自卫能力,即能吃掉对方就吃掉对方,吃不掉对方就尽可能地保护自己不被对方吃掉。同时,动物还需要足够的睡眠以恢复体力。

动物和植物的不同之处在于: 植物是纯粹的生存创造; 动物除生存创造之外, 还有发展创造、情感创造, 甚至低级简单的思维创造。然而动物的发展创造、感 情创造以及低级简单的思维创造是以生存创造为中心, 围绕着生存创造而进行、 而展开的,和人类的同名称的创造有根本的性质上的不同。动物的绝大部分活动都属于生存创造,其它创造只占动物整个创造活动的很小很少的一部分。

人类的生存创造和动物的生存创造不无相似之处。人要生存,必须首先解决吃饭、穿衣以及住所、性交、睡眠和吸取氧气等问题。不首先解决这些基本问题,其它创造诸如政治、宗教、文化、科研、娱乐等等都无从谈起。正如马斯洛所言:"一个缺少食物、自尊和爱的人会首先要求食物,只要这一需求还未得到满足,他就会无视或把所有其它的需求都推到后面去。""如果一个人极度饥饿,那么,除了食物外,他对其它东西会毫无兴趣。他梦见的是食物,记忆的是食物,想到的是食物。他只对食物发生感情,只感觉到食物,而且他只需要食物……这样的人真可谓单靠面包为生。"{[美]亚伯拉罕•马斯洛(Abraham Maslow)著:《马斯洛人本哲学》,张维邦译,商务印书馆,2005}"仓廪实而知礼节,衣食足而知荣辱。"(《管子•牧民》)丰衣足食是国家强盛的基础的基础。从古至今,人们历来十分重视衣食创造,认为"五谷者,万民之命,国之重宝"(《范子计然》)、"衣食当须纪,力耕不吾欺"(陶渊明《移居二首》)。直到今日,国家决策层还把解决十多亿人的温饱问题作为实现"人权"的首要问题,并以用世界二十分之一的土地养活了世界四分之一的人口而感到自豪。

温饱问题解决后,接下来的生存创造便是男女性生活。温饱使生命活着,性生活使生命代代延续。中国古代的圣哲贤达已明白性欲和食欲一样是每个人应该获得满足的基本的生存创造。所谓"食色,性也"(《孟子·告子上》)、"饮食男女,人之大欲存焉"(《礼记·礼运》)、"男女居室,人之大伦也"(《孟子·万章上》)等等。男女交配以及以此为纽带建立起来的家庭使人们产生了对于住所的需求,因此,住所创造便成为人类生存创造的一部分。同时,还有一个安全问题,即有效的防御和抵抗来自外部的侵犯和伤害,以保障生命得以维持和延续的问题。因此,安全创造也是生命创造的一部分。住所、穿衣、吃饭等创造都部分地和安全创造重合在一起。

必须指出,人类是有感情有智慧的创造物,人类不会像植物、动物那样仅仅 为生存而创造,人类的生存创造必然有感情和智慧渗入其中,是将智慧、感情和 生存融合在一起的创造。这是人类的生存创造和植物、动物的生存创造的根本区 别所在。智慧和感情渗入生存创造的情形比比皆是:吃饭要熟食,且不仅为了填饱肚子,还讲究个色香味形器意养;穿衣也不仅为了御寒保暖,还要追求款式新颖、美观大方;性生活也不仅仅是为了传宗接代、延续生命,而是更多地溶入了智慧追求、感情纠葛和审美趣味。

这里我们还得涉及一下亦被称作"生存主义"的存在主义。作为 20 世纪一个重要的哲学流派,存在主义思想是庞杂的、矛盾的,但又不乏深切之处。在存在主义看来,"存在"就是"亲在",就是"我""在世";"我""在世"是其他一切存在的根据,整个外部世界都是"我""在世"的结果。"我"如何"在世"呢?通过纯粹的内在的主观体验而"在世"。于是,"存在先于本质",即人首先作为纯粹的主观性而存在,即"我"首先得"在世",然后才有可能经过自由选择,造就自己("我")的本质。用创造论的观点来看,存在主义将人的存在归结为人的内在的主观体验,虽然偏颇,却和强调人的智慧创造有某种程度上的接近与吻合,这便有了一定的积极意义。然而,创造论不同意"存在先于本质"的说法,因为人的存在是创造,人的本质也是创造,存在和本质直接同一,存在就是本质就是创造,没有谁先谁后之分。

存在主义思想家(主要是萨特),还将存在划分为"自在存在"与"自为存在"两大类。"自为存在"是指作为意识存在的人,是"自我",即"我""在世";"自在存在"则是"自为存在"以外的存在,是一片荒谬混沌的虚无。人不断地由"自为存在"被抛入"自在存在",即不断地走向和陷入荒谬和虚无。人就是存在与虚无。虚无意味着自由,自由使人不幸。人与自然相疏远,与社会相对立,与他人相冲突,与自身相分离,陷入孤独的困境。出路在于选择,而选择又总是盲目而毫无实际结果的,因此,人生不过是一场徒劳无益的悲剧而已。

我们没有篇幅也无意于和萨特先生进行对话与辩论,我们只想说明,在创造论看来,"自我"之外的世界并非处处荒谬、一片混沌,不幸、疏远、对立、冲突、分离、困境等等伴随着生存创造,但绝非是生存创造的全部。幸福、亲近、和谐、协作、结合、美满等等,也和生存创造相伴随。选择是智慧创造的最重要的组成部分,选择之外化能够带来或大或小的创造效应,并非盲无目的且无实际结果。任何创造尽管价值指数有高有低,但都在为社会增加着财富,为人类积淀着文明,

绝不是徒劳无益。从创造的意义上说,人生无所谓悲剧,也无所谓喜剧,人生是创造的"正剧"。"我""在世"是创造,你"在世"、他"在世"也是创造;我们大家的"存在"、意味着实实在在的有价值的创造。创造伴随着痛苦,同时也伴随着欢乐。创造价值越高,痛苦越大欢乐越大。伴随着痛苦与欢乐的价值创造使人生丰富、充实、珍贵而荣光。

### ●发展创造

生存问题解决后,面临的便是一个发展的问题。吃饱了,喝够了,有衣穿了,有房住了,家庭建立了,安全保障了,等等之后,总还得再干点其它什么事情,比如交际呀,娱乐呀,读书学习呀,钻研技术呀,追求成功呀,等等。这些都在发展创造概括之内。

动物的发展创造主要是交际和娱乐。生存需要是动物交际的内在动力和行为基础,口头语言和形体动作语言是动物赖以进行交际的工具。交际使动物联系起来,构成动物"社会",以便更有效地摄猎食物、抵御外敌的侵犯,保护生命和繁衍后代。交际还使动物社会产生最高统治者,使蜂群有蜂王,蚁群有蚁王,猴群有猴王,羊群、鹿群、牛群有羊王、鹿王、牛王。动物的最高统治者一般由动物群中最强壮的勇猛善斗的雄性个体担任。通过激烈竞争以选择首领是动物交际创造中的一项重要内容。动物的娱乐创造如嬉戏、打闹等,也和动物的生存创造相关联,嬉戏、打闹的过程,与其说是娱乐玩耍的过程,不如说是磨练猎取食物的技艺、积累保护自己的经验的过程。

人类的发展创造比动物的发展创造要宽阔广泛、丰富多彩得多。而且,人类 的发展创造虽然也建立在生存创造的基础之上,却不像动物那样仅仅是为了生存 创造的需要。人类的发展创造有超越生存创造的趋向。

交际的需要使人类创造出语言文字。语言文字作为交际的工具又将人类的交际活动不断地推向新的层面。交际的目的一是为了显示自己的创造效能、创造价值,使交际对象承认自己、尊重自己;二是为了联合起来,形成一种创造合力,以便更有效地投入并完成某项创造活动。交际不是无偿的,也不是单向的,交际是双向或多向的有偿的创造欲望的满足。从这个意义上讲,交际的实质是交换,

是实物形态或精神形态的创造物的交换。任何交换行为都可以找到期待某种回报的创造动机,而且事实上也都得到了回报,尽管回报的方式多种多样——不仅仅是实物回报,感恩、感激、精神愉悦、心理平衡等等也是回报。人类通过交际创造,构成"我为人人,人人为我"的团结和谐互助协作的社会创造态。

娱乐创造也是人类发展创造的主要内容。娱乐给予人的主要不是实物满足而是精神满足。考察艺术活动、体育比赛的起源,不能不追溯到原始初民的简单粗放的娱乐行为。换句话说,娱乐创造乃是艺术活动、体育比赛的源泉之一。人类的娱乐创造溶进了更多的精神的、智慧的、感情的因素,这是任何动物的娱乐创造都无法匹敌的。人类的娱乐创造除从事某项娱乐专业如歌唱、舞蹈、体育、竞技者之外,大部分人并不以锻炼和提高某种娱乐技巧为主要目的。主要目的乃是消遣,即通过种种快乐有趣的活动,如跳舞、下棋、打牌、垂钓、游玩、看电影电视、欣赏文艺节目等等,使身心得到休息调整,并从中领略和享受到某种快活的趣味。人生好玩耍,一闲对百忙,许多贡献卓著的良才俊秀,都是既会工作又会娱乐的创造者。

如果说寻求职业即谋求生存的基本手段还属于生存创造的范畴的话,获得职业之后的继续追求,如读书学习,丰富精神世界,钻研技术,以求革新发明,发奋自励,以图出类拔萃等等,就属于发展创造的范畴了。广义的发展创造可以覆盖生存创造之外的一切创造。

著名心理学家马斯洛先生认为发展需要是建立在人的基本的生存需要之上并和基本需要相区别的更高层次的全新的需要。人最初因一系列基本需要而产生动力;当这些基本需要得到满足,他就会走向更高的层次,会因更高级的需要而产生动力。他将发展需要概括为十四个方面,它们是:(1)完整;(2)完善;(3)完成;(4)正义;(5)活跃;(6)丰富;(7)单纯;(8)美;(9)善;(10)独特;(11)轻松;(12)乐观诙谐;(13)真实、诚恳、现实;(14)自我满足。这十四个方面同样重要,彼此无等级之分。在马斯洛先生看来,发展需要的顶点是自我实现的需要,用我们的话说就是自我实现是发展创造的极致。的确,人有"一种想要变得越来越像人的本来样子、实现人的全部潜力的欲望"。这大概是人之所以为人的天性使然,"人类总是不断地寻求一个更加充实的自我,追求更加完美的自

我实现。从自然科学意义上说,这与一粒橡树种子迫切地希望长成橡树是相同的。"因此,"一个人能成为什么,他就必须成为什么。"{[美]亚伯拉罕·马斯洛(Abraham Maslow)著:《动机与人格》,杨继绳译,北京大学出版社,1999}

然而,问题在于,"与我们应该成为的人相比,我们只苏醒了一半。我们的热情受到打击,我们的蓝图没能展开,我们只运用了我们头脑和身体资源中的极小一部分。" {[美]安妮·达洛(Annie Dillard)著:《大约在自然之年》(Pilgrim at Tinker Creek),许钦文译,上海译文出版社,1995} 马斯洛相信绝大多数人都有创造、自发关心别人、好奇、不断成长、爱别人和被人爱的能力,以及自我实现者身上所具有的其他一切特点。同时,他也看到,和发展趋势相对立,人的本质中还有一种固步自封、甘于倒退、害怕发展、不能自我实现的趋势。鉴于此,马斯洛呼吁文明社会鼓励、褒扬、肯定人的不断发展以求自我实现的趋势,抨击、抑制、否定人的停滞倒退、不能自我实现的趋势。认为现代人的典范应当是那些能够充分发挥内在潜力,自然表露内在本性,积极进取、敢想敢说敢干的人,而不是那些或苍白懦弱、畏首畏尾:或毫无棱角、四平八稳的平庸者。

### ●感情创造

感情是情绪和情感的总称。是创造主体对来自外部的创造物的刺激所产生的 比较强烈的身心反应。作为外部刺激、神经系统、内外感觉器官等共同参与的创 造过程及其产物,感情具有激动性、深刻性、稳定性、持久性等特点,和爱恋、 怨恨、恐惧、悲伤,怀念等多种表现方式。

人是感情动物。感情创造浸润渗透于人类创造的各个领域,没有哪一种创造不带有感情色彩,只是感情因素在整个创造中占的比重或大或小,或强或弱,或深或浅,程度不同罢了。感情创造渗入生存创造,人们便对食物、服饰、住房、家具、异性等或喜爱或厌恶,或依依不舍,或念念不已。感情创造渗入发展创造,人们便对科学知识、文艺作品、交际活动、体育比赛、业余爱好等等,或一往深情,痴迷终生;或忍痛割爱,抱恨不已;或叹其不成,或怨其不精。感情创造也和思想创造交融互渗,没有对人类命运的沉重关切,没有对世界众生的一片深情,没有对美好社会的真挚向往,也就没有伟大高超的思想创造。

无情未必真豪杰。一个"情"字,倾倒了古今中外、古往今来多少英雄好汉、才子佳人!感时花溅泪,恨别鸟惊心。窗外潇潇雨,枝叶总关情。人类不能没有艺术,而艺术则是感情的结晶,艺术家无论大小,都是十足的"情种"。列夫·托尔斯泰说:"在自己心里唤起曾经一度体验过的感情,在唤起这种感情之后,用动作、线条、色彩、声音以及言辞所表达的形象来传达出这种感情,使别人也能体验到这同样的感情——这就是艺术活动。"马尔克斯说:"爱,是我惟一的思想体系。我在此强调:我所做的一切以及周围所存在的一切,我总能通过爱来理解。"陀斯妥也夫斯基说:"在那些漫漫的长夜里,我沉湎于兴奋的希望和幻想以及对创作的热爱之中,我同我的想象、同亲手塑造的人物共同生活着,好像他们是我的亲人,是实际活着的人;我热爱他们,与他们同欢乐,共悲愁,有时甚至为我的心地单纯的主人公洒下最真诚的眼泪。"大作品都是大爱、大恨、大悲、大喜、大苦、大欲的产物,也只有体验过大爱、大恨、大悲、大喜、大苦、大欲的产物,也只有体验过大爱、大恨、大悲、大喜、大苦、大欲的创造者才能创造出前无古人、后启来者、凌云超尘、不同凡响的大作品。

感情创造不仅仅是创造个体自身或与创造个体相关的少数人的事,有的感情往往酝酿、产生于并覆盖着维系着一个群体。团体有团体的感情,企业有企业的感情,民族有民族的感情,国家有国家的感情。比如民族感情,便是经过漫长历史逐渐形成的,具有共同语言、共同地域、共同经济基础和共同文化生活的相对稳定的社会共同体的共同的群体心理特征和情绪指向。这种心理特征和情绪指向具有自发性、自觉性和笼统性,它意味着群体成员对整个民族命运的关心,对民族文化传统的偏好和自豪,对骨肉同胞、民族英雄的亲近与爱戴,对外部敌人和民族败类的仇恨与唾弃。民族感情以及任何群体感情都有积极和消极两面性。民族感情的积极性构成了爱国主义的基础及民族团结与民族友好的纽带;消极性是容易导致封闭狭隘的民族主义、自我满足的小国寡民心理,和旨在侵略、控制、欺骗弱小国家的民族霸权主义。

#### ●思想创造

人是思想的探索者,人凭思想而存在、而活着。思想创造是人类的专利,人 之外的动物即使再高级,也只是以生存创造为主,涉及发展创造和感情创造,而 与思想创造无缘。思想创造像一道分水岭,将人类世界和人之外的世界区分开来。 诚如法国思想家帕斯卡在他撰写的哲学名著《思想录》中所言:"人只不过是一根 芦苇,是自然界最脆弱的东西;但他是一根能思想的芦苇。用不着整个宇宙都拿 起武器来才能毁灭他,一口气、一滴水就足以致他死命了。然而,纵使宇宙毁灭 了他,人却仍然要比致他于死命的东西更高贵得多。因为他知道自己要死亡,以 及宇宙对他所具有的优势,而宇宙对此却是一无所知。因而,我们全部的尊严就 在于思想。"

人类的思想创造可分为低级思想创造、中级思想创造和高级思想创造。低级的思想创造和下面笔者将要讲到的凡人创造部分吻合,是绝大多数正常人都具备的渗透在日常生活中的创造价值指数较低的小聪明或小智慧。低级的思想创造只是在前人提出来的现成的思想成果中进行选择,对生活缺乏睿智的发现,提不出属于自己的新鲜独到的思想。中级思想创造和智人创造部分吻合,是一部分人具备的创造价值指数较高的智慧创造,中级思想创造的特点是不囿于前人提出的现成的思想成果,对社会对人生有自己独到的体验和见解,对自己所爱好所从事的专业有不同寻常的发现,而且能够将这些发现迅速准确地表达出来,提出不同凡响的观点。高级的思想创造和巨人创造相吻合,是极少数人具备的创造价值指数很高的大聪明、大智慧。高级思想创造的特点是能够否定或超越前人提出的现成的思想成果,对人生、对社会、对世界都有属于自己的新鲜独特的深刻洞察和智慧发现,从而提出深邃丰赡、惊世骇俗、高屋建瓴、影响深远的思想体系。

低级、中级和高级思想创造构成一个巨大的智慧金字塔。低级思想创造是这个金字塔庞大的基础,中级思想创造形成金字塔的腰身,高级思想创造占据金字塔顶部,凝聚着、统帅着、导引着整个人类智慧。毫无疑问,在三个级别的思想创造中,我们最赞赏、最推崇高级思想创造。高级思想创造是人类智慧的精华,是人类最赖以值得自豪和骄傲的"资本",人类依凭高级思想创造使"万物灵长"的身份显赫强化,从而称霸和荣光于世界。

三个级别的思想创造是一个递进上升的序列,越往上走路越窄迫,难度越大。 绝大多数人终生都在低级的思想创造框范之内,都在小聪明、小智慧的小圈子里 挣扎。一部分人可以进入中级思想创造,推献出一定程度的超越凡俗的智慧结晶。 这样的创造者已是百里桃一、千里挑一了。能够进入高级思想创造的人更少,少得尤如龙脑凤髓。然而,一个中级思想创造可以顶成千上万个低级思想创造;一个高级思想创造可以顶成千上万个中级思想创造。高级思想创造是太阳,中级思想创造是群星,低级思想创造是云尘。没有高级思想创造,人类的精神世界将一片灰暗;没有高级思想创造,智慧的脚步怕至今还停留在荒漠泥淖中。

高级思想创造在中国有孔子、老子、朱熹、王阳明、毛泽东等人的思想体系; 在国外有苏格拉底、柏拉图、亚里斯多德、释伽牟尼、卢梭、伏尔泰、康德、黑 格尔、马克思、叔本华、尼采、弗洛伊德、萨特、海德格尔等人的思想体系。这 是一些思考世界的伟大的头脑,这些伟大的头脑使大千世界相形变小。孔丘先生 的以"仁"为核心的思想体系,覆盖中国大地两千多年,渗透、植根、生长于中 华民族的血液中、骨髓里,至今人们还在"发扬光大"。柏拉图的以"理想国"为 核心的思想体系,影响许多国家的政治机构长达二十多个世纪,其选贤任能、男 女平等的思想至今光彩不减当年。马克思的"科学共产主义"思想体系,鼓舞和 激励着受穷困折磨的亿万劳动者为理想社会浴血奋斗,其威力其声浪,曾使地球 为之倾斜。弗洛伊德的以精神分析为核心的思想体系又拉开了人们认识另一个世 界——人类的潜意识世界的序幕,人类的精神生活便由此而丰富、而深化……

思想创造没有终点,不会完结。水往低处流,人往高处走。在人类的精神世界里,许多座巍然耸立的高峰都已匍匐在创造者的脚下,还有更多的或潜在或显露的高峰正向人们招手。壮丽和辉煌属于顽强的、杰出的攀登者。

# 4 创造类别(B)

#### ●巨人创造

衡量巨人创造、智人创造和凡人创造的要素有两条:创造价值指数高低和影响力大小。所谓巨人创造,就是创造价值指数特别高、影响又特别广泛、特别深远的创造主体的创造。创造价值指数特别高,意味着对世界、对人类贡献特别大,影响特别广泛深远,意味着拥有成千上万的信服者和追随者,其思想、其行为长久地大面积地被人们传颂、赞赏、引用和效仿。影响力也是一种创造力,任何人

都不能摆脱他人的影响力,尤其是巨人的影响力。

巨人创造有以下几个特色,或者说可以分为以下几个大类:

第一,创造巨人都有自己的独特的思想体系(或信念依据),有的本来就是思想家、哲学家。其思想、其学说价值重大,影响深远,使许许多多的人为之倾倒,亦为后来的探索者开辟了道路;奠定了基础,提供了参照。如以建立批判哲学体系并提出"星云假说"而著称于世的康德,就是人类思想史上的一座丰碑。后来的思想家们都必须下力气研究他而不能轻松地绕过他。卢梭和伏尔泰都是启蒙运动时期的思想家,卢梭以《论不平等的起源》《社会契约论》和《忏悔录》等闻名,伏尔泰则以《哲学通信》(即《论英人书简》)芳世。卢梭的追求平等的思想,对财产垄断的抨击和宪政学说,使他成为现代文明社会的先驱者之一。伏尔泰则以自由民主思想和倡导自由主义而成为启蒙运动的卓越领袖。可以和康德、卢梭、伏尔泰排列在一起的创造巨人还有苏格拉底、亚里士多德、洛克、亚当•斯密、迪卡尔、孟德斯鸠、马尔萨斯、马克思、马斯洛;中国的老子、孔子、庄子、孟子、朱熹、王阳明,等等。

第二,很大一部分创造巨人属于贡献卓著、影响深远的宗教领袖和政治领袖。宗教领袖如创立基督教的耶稣和圣·保罗,创立佛教的释伽牟尼,创立伊斯兰教的穆罕默德,传播犹太教义的摩西等;还有为宗教教义的完善、宗教制度的改革、宗教思想的创新作出重大贡献的奥古斯丁、马丁·路德、君士坦丁大帝、加尔文、欧麦尔、阿育王、慧能,等等。政治领袖如古代世界最著名的征服者亚历山大大帝、罗马帝国的奠基人奥古斯都·凯撒、世界上第一个社会主义国家的缔造者列宁、倡导非暴力抵抗运动的"圣雄"甘地和结束战乱、统一中国的秦始皇嬴政,以及成功地发动大规模的征服战争的成吉思汗,等等。政治领袖在创造巨人中能够占有一个很大的比例,重要原因在于政治领袖一般都掌握着巨大的权力,巨大的权力也就意味着巨大的控制力和巨大的影响力。巨大的控制力和巨大的影响力构成对一个国家和民族乃至对整个世界文明进程产生巨大影响的巨人创造效应。显然,中国的汉武帝刘彻、唐太宗李世民、明太祖朱元璋、清圣祖玄烨以及孙中山、毛泽东、周恩来、邓小平等;外国的拿破仑。波拿巴、乔治。华盛顿、亚伯拉罕·林肯、乌尔班二世、伊萨贝拉一世、伊丽莎白女王一世、威廉大帝、塞鲁

士大帝、彼得大帝、明治天皇等,都可进入这样的巨人创造的行列。

第三,许多创造巨人都既是某一方面出类拔萃的"天才",又是学识渊博、兼通文理、横跨多种学科的"全才"。伟大的科学家牛顿最重大的贡献在力学领域,即提出了著名的影响极为深远的力学三定律。然而,在光学领域,牛顿发现了普通光是彩虹所有的不同色光的混合光,即把太阳光分析成彩色的光谱,并制造出第一台反射望远镜;在数学领域,牛顿发明了积分,成为这门学科的奠基人之一;在天文学领域,牛顿利用万有引力定律和运动定律,圆满地解决了动力天文学的主要问题,即准确预测星体和行星的位置和运动,因此,他成了所有的"天文学家之魁"。另外,牛顿对热力学、声学、物理学等学科都有杰出的贡献。爱因斯坦是 20 世纪出现的可以和牛顿相媲美的伟大的科学家,他的重大贡献是 1905 年提出的狭义相对论和 1915 年提出的广义相对论。然而爱因斯坦却是学哲学出身,曾获苏黎世大学哲学博士学位;他第一次获得的诺贝尔物理学奖,也不是奖给他的相对论,而是奖给他的光电效应论文。第二次世界大战后,爱因斯坦还成为著名的反对暴力、爱好和平的国际社会活动家。另外,爱因斯坦还有拉小提琴的天赋和机智幽默的口才。"人类伟大骄傲之子,世间无穷欢乐之泉",牛顿和爱因斯坦是巨人中的巨人,他们达到的高度,一般科学家很难达到。

这样说,当然并不意味着创造巨人只有牛顿和爱因斯坦两位。许多科学家、艺术家、发明家,虽然逊于牛顿和爱因斯坦,却依然如夜空里璀璨的星斗,人类文明的史册里将永远闪烁着他们的光辉。这些创造巨人是达尔文、哥伦布、伽利略、欧几里德、哥白尼、瓦特、法拉弟、莎士比亚、爱迪生、贝多芬、孟德尔、狄德罗、培根、开普勒、达•芬奇、毕加索、富兰克林、巴甫洛夫、列夫•托尔斯泰、雨果、巴尔扎克、泰戈尔、鲁迅、郭沫若等等,等等。

#### ●智人创造

智人创造是介于巨人创造和凡人创造之间的创造。其创造价值指数和影响力均低于创造巨人,高于创造凡人。创造智人一般都能在自己所从事、所爱好的专业领域里作出较大的贡献,对人生、对社会也都有较深刻较独特的理解和体验,且能够提出比较具体的新鲜观点,造成一定范围的影响面。

如果考察得再仔细一点,智人创造就还可再划分为高级智人创造,中级智人创造和低级智人创造三个等级。

高级智人创造接近于巨人创造,依然可以用智慧超群、出类拔萃来形容。如修正、发展了弗洛依德精神分析学说的荣格的"集体无意识"理论,阿德勒的"自卑与超越"的思想,和弗洛姆的人本主义心理学等。在中国,孙武、孙膑的"兵法",扁鹊、华佗的医术,惠施、公孙龙的辩学,荀子的性恶论,韩非的法制思想,董仲舒的公羊春秋学,司马迁的学术思想,陆九渊的心学体系,龚自珍的社会思想,洪秀全的革命思想,梁启超的变法思想,等等,都可以划入高级智人创造的范畴。获得诺贝尔各种奖金的科学家、文学家、政治改革家、社会活动家以及战功卓著的军事家、世界闻名的外交家、著作等身的翻译家、家喻户晓的艺术家、财富巨大的企业家,等等,都可以站在高级创造智人的行列之中。

中级智人创造逊高级智人创造一筹。有一定贡献和影响的专家、学者、教授、研究人员、作家、企业家、书画家、作曲家、歌唱家、舞蹈家、影视编导、优秀记者等,都可获得中级创造智人的桂冠。

低级智人创造又逊中级智人创造一筹,接近于凡人创造。各个行业的掌握相对高难一些技艺的能工巧匠、自学成才者,一般厨师、律师、教师、医生、编辑、记者等等。都可成为低级智人创造队列中的一员。

智人创造是巨人创造和凡人创造的中间纽带。创造巨人一般都要经过智人创造阶段,且是以智人创造为基础奋力跃入巨人创造的。创造凡人经过艰苦奋斗亦可上升为智人创造,智人创造的三个等级也并非不可逾越。以教师为例,一般教师、讲师可说是还处于低级智人创造阶段;晋升为教授,就步入中级智人创造阶段。再发展为国内外有影响的名教授,就进入高级智人创造阶段了。当然,笔者这里的讲师、教授都是名符其实的,而非那些徒有其名的挂牌者。

创造巨人和创造智人在日常生活中都是创造凡人,有时甚至不如创造凡人,但 他们可理解创造凡人。创造凡人却往往不能完整地理解创造智人和创造巨人,创 造智人和创造巨人的言行常常使创造凡人不可思议。

#### ● 凡人创造

凡人创造是世上大多数人具备的司空见惯的日常生活的创造,其创造价值指数比智人创造和巨人创造要低得多,影响也小得多,甚或谈不上什么影响力。凡人创造的内容包括吃饭、喝水、排泄、穿衣、睡觉、男女性生活,一般交往以及为了维持生存所从事的某项职业,如农民种地、工人作工、商人经商、学生上学、军人训练、警察执勤、司机开车,等等。

凡人创造也需要智慧——无须大智慧,小智慧足矣。恰当地运用小智慧,可以使凡人创造丰富多彩,有情有趣。比如,可以将自己的小家庭建设、布置得温暖一些、舒适一些、雅致一些;饭可以换着花样吃,衣可以买最时髦的穿,男女生活也可以努力到最和谐。还有,工作中找点小窍门,搞点小改进,使自己少花力气而成效增加或不减,人际交往中耍点小聪明,施点小手腕,占点小便宜,捞点小实惠,等等。凡人创造具有基础性、重复性和琐碎性。

凡人创造的基础性,是说凡人创造是人类一切创造的基本前提。任何人都得吃喝拉撒睡,创造智人、创造巨人都不能例外。只有通过凡人创造使基本的生存需要较好的解决之后,人们才有可能从事创造价值指数较高的创造。从这个意义上说,创造智人、创造巨人也都是创造凡人。

创造智人、创造巨人超越了创造凡人,又离不开创造凡人。创造凡人是创造智人、创造巨人赖以存在的群众基础;是智人创造、巨人创造所产生的影响力的接受者、吸取者和物化者。指挥千军万马的军事家,得有千军万马供其指挥,世上没有"光杆司令"的元帅;智慧超群的思想家得有芸芸众生做其"信徒",没有"信徒"的思想家算不上思想家。同样,艺术家创作出来的艺术品,还得有广大读者广大观众观看和欣赏,没有读者和观众的艺术家是虚拟的艺术家。

凡人创造的重复性,是说凡人创造意味着"相同"或相似的东西总是不断地出现。虽然在创造论看来,世界上没有绝对相同的东西,每个创造物都有其新异性,但其新异的程度有大有小,那些内部结构、外部形式、创造效能等基本一致的创造物,因其新异质差别、变化不大,我们仍然可以将其相对地视为相似或"相同"的创造物。这样的创造物若一再重复,只能意味着创造量相对地不断地增加,而创造质(即新异质)则相对地不断地缩小。饭,前天吃昨天吃今天吃明天吃后天还得吃;衣,前天穿昨天穿今天穿明天穿后天还得穿——虽然是必须的,却是

重复的。路口的修鞋匠,春夏秋冬,总见他嘭嘭嘣嘣,一双鞋一双鞋地修;楼下的烧水工,寒来暑往,总见他吭哧吭哧,一锅水一锅水地烧——未必是必须的,却还是重复的。犹如拽曳磨盘的驴子,创造凡人一圈一圈又一圈地走着至死才能走完的磨道。或许改进了,没有磨盘了,换成机器了,创造凡人就犹如轮轴上的一个齿牙,筛网上的一个"×"字结,随着整个机器的转动而转动而摇摆,日复日,月复月,年复年,直到自身或连同这台机器彻底报废。

凡人创造的琐碎性,是指这种创造面对的、经营的、生成的多是一些细小、零碎、繁杂的创造物。锅碗瓢盆,鸡毛蒜皮,米面油盐酱醋茶,抹布拖把肥皂水,家务劳动典型地反映着凡人创造的琐碎性。长期的繁杂的琐碎的凡人创造,容易使人变得眼光短浅、小肚鸡肠、锱铢必较、抠斤掐两、猥琐庸俗,自私而又自卑。有些人本来天赋不错,只可惜活得太琐碎、太小气,智慧的锋芒,被蝇头蚁爪之类的小创造磨去了光辉。有的人总在要小聪明,总想占小便宜,岂不知占得小便宜,意味着吃大亏——智慧未用到高价值的创造上,人生的品位降得很低。

人作为智慧的创造物来到世上,无非两种价值取向:追求卓越与追求平凡。追求卓越与人的创造本质相一致,追求平凡与人的创造本质相背离。因此,内心深处,没有人甘愿平平庸庸,碌碌一生。而不想出人头地、出类拔萃。问题在于,追求卓越的创造欲念常常被来自外部的和自身的创造抑制所封锁、所扼杀。谁冲破这种封锁与扼杀,使追求卓越的心愿得以外化和实现,谁就有可能进入创造智人或创造巨人的行列。否则,谁就将以终生庸碌而恨憾九泉。至于"追求平凡"的声称,说好了是一种心理自慰,说不好便是一种无能的懦夫式的逃遁。在创造论眼里,碌碌无闻的生命,无异于行尸走肉——不追求卓越,活着还有什么意义呢?甘愿平庸等于甘愿沉沦、甘愿倒退。甚至于比甘愿堕落还可憎可悲——堕落还有负价值,能刺激健全法制的创造,能引起社会疗救部门的注意;而平庸,则常常使你无计可施。大面积的平庸,意味着很难治愈的大面积的精神阳痿,这样的"阳痿"之于全社会,岂不悲夫!

#### ●群体创造

"三个臭皮匠,抵个诸葛亮""众人拾柴火焰高""一人一把土,堆成万丈山"

等民谚,已将群体创造的特点形象地揭示出来。所谓群体创造,就是若干个或无数个个体创造结构成一个整体创造,即将若干个或无数个创造单力化合为一个创造合力。形成创造合力的整体创造凝聚着巨大的创造效能,生成的创造物往往具有极高的创造价值指数和强大的影响力。正如古人所言:"单者易折,众则难摧""孤举者难起,众行者易趋"。也如歌里所唱:"团结就是力量,这力量是铁,这力量是钢;比铁还硬,比钢还强·····"

创造群体有大有小,大到一个政党、一个民族、一个地区、一个国家乃至整个人类;小到一个系统、一个团体、一个单位、一个企业、一个班组。创造群体由创造巨人、创造智人和创造凡人共同组成。凡人创造是群体创造的"细胞"。没有"细胞",形成不了整体——创造凡人的价值在此体现出来。少数创造巨人和创造智人在创造群体中往往扮演着创造主的角色,多数创造凡人则扮演着创造从的角色。优秀的创造主是能够发挥多数的创造从的创造效能的创造主,"乘众人之智,则无不任也;用众人之力,则无不胜也。(《淮南子·主术训》)不能够集中和发挥群体智慧的首脑领袖,算不上好首脑好领袖。

群体创造的必要性在于人类的许多创造活动任何创造单力都无法承担而必须依靠创造合力才能完成。凭一个人的能量,无论如何,登不上月球,也无法在火星上逗留;将来的太空移民,也不可能只移上去一两个创造者。改善生存环境,保持生态平衡,消除战争烟云,维护世界和平等等,都需要全社会、全人类齐心协力,共同创造。国家要强盛,不仅仅是最高领导层的事,每一个成员、每一个公民都有义不容辞的责任,十几亿人凝聚成一个效能巨大的创造群体,山能移,海能填,敢教日月换新天,繁荣富强,不在话下。

具有合力效应的群体创造,积淀和反映着人类的群体智慧,结晶并显示着人类征服世界的巨大力量。无论是早期组建和形成的家庭、氏族、部落,还是后来聚合而成的民族、国家、都凝聚着群体每一个成员的智慧,都合并着每一个成员的力量。如果说渔猎社会、农业社会是相对分散的个别的小的群体创造的活,工业社会、信息社会则是相对集中的系统的大的群体创造。如果说劳动密集型工业和资本密集型工业集中着一定的一般性的群体智慧的话,知识密集型工业及尖端复合产业就集中着大量的高超的群体智慧。

群体创造有个体创造(无论是凡人创造、智人创造、还是巨人创造)无法比拟的优势——尽管群体创造由许多个体创造组成,但群体创造效能总是大于许多个体创造效能之和。因此,聪明的人类自然要有意识地发展和强化群体创造。于是,便出现了美国的"硅谷",日本的"思想库",西德的"专家系统",中国的中关村科学城,以及名目繁多的学会、笔会、协会、大会、委员会、理事会、研究会、联合会;和各式各样的工程、公司、组织、联盟、集群、论坛、中心、研究所、俱乐部、科学院、共同体······

#### 八 在创造论眼中

由于创造是世界的本原、人类的本质,因而世界上的一切都是创造物,世界的一切活动都是符合创造律的创造活动。但是,创造的本原性、本质性并没有取代创造的形式多样性。本原性本质性决定着形式多样性,形式多样性体现着本原性本质性。诚然,创造是一切人类活动的本质,但是,这样说并不意味着人类的所有创造都是一个模式、一种形态。创造论眼中的人类活动,既是本质为创造的抽象活动,又是形式多样的具体活动。本章旨在将复杂多样、丰富多彩的人类创造选择若干,予以具体的简要的考察和剖析。

#### 1 政治

政治是权力的创造。

控制力和影响力是权力的基本内容。控制力是强制性的影响力,影响力是非强制的控制力。由控制力和影响力构成的权力是一种特殊形态的创造物,这种创造物的出现和存在意味着其他创造物(尤其是被称为"人"的创造物)必然要受其控制受其影响。所谓政治,便是这样一种创造过程,在这个创造过程里,创造主体(政治集团、政治家、热心参与政治者)最大限度地释放和发挥着自己的创造效能,即运用着一切智慧的和非智慧的力量,采取正义的非正义的、合法的非法的、光明正大的阴谋诡计的、暴力的和平的、残酷的仁慈的、高尚的卑鄙的等等,总之是能够采取的一切手段,千方百计攫取和占有新生成的创造物,即对他人、对民众、对政府、对军队、对异族、对外国、对人类、对世界的控制力和影响力。

作为权力创造的主体,政治集团、政治家或热心参与政治者的一切言行,都 必须也必然以维护、保持、巩固、扩张、强化自己对他人的控制力和影响力为目 的。政治学术语中所谓的"利益集团""压力集团",指的便是为了自身利益而有 目的、有计划地影响政府机构、立法人员或行政管理者活动的社会集团。为了维护、促进和发展本集团的特定利益,利益集团虽然不一定谋求对政府及有关机构的控制力,却一定要谋求、巩固和扩展对政府及有关机构的影响力。对政治家而言,能够保持和巩固自己已经掌握的权力并在此基础上不断扩张和强化自身权力的政治家是成熟的成功的政治家,不能够不断地扩张和强化自己掌握的权力,甚至不能够巩固和保持已有权力的政治家是不成熟的失败的政治家。权力是政治家生涯的全部内容,有了权力就有了一切,失去了权力就失去了一切。当然,这样说并不排除必要的"韬光养晦"式的退却和意外的挫折磨难——暂时性地失去一定的权力往往意味着获取更大的权力。

权力是一种"合力"。并非掌握权力者单方面参与了权力的创造,权力施加的对象,即受控制受影响的非掌握权力者也参与了权力的创造。在专制社会里,极权统治者通过武装起义、宫廷政变、合法继承等手段获取最高权力,而这种权力的巩固和发展则是以人民大众的普遍服从和认可为基础。为了让人民大众长久的普遍的认可和服从,极权统治者采用"王霸并用"的手段,牧师和刽子手一身二任,从精神、实物、肉体诸方面全方位地进行征服。一方面,大肆鼓吹"君权神授""王权至上",宣扬"三纲五常",让人们俯首贴耳、心甘情愿地接受其统治;同时,又不断地施点小恩小惠,实行所谓的"王道""仁政""德治",让人们不但心甘情愿地接受其统治,还要为自己能接受这样的统治而感激不已。另一方面,运用权力翼卵下的暴力工具,实行所谓的"霸道""苛政""刑治",强迫服从,镇压反抗,稍有言行不恭,皮毛不顺,便作肉体上的推残直至彻底消灭。在极权统治下,人民群众往往丧失了人之为人的基本权利。而大多数人的基本权利的丧失,又恰恰为少数极权统治者获得和强化权力开辟了道路。人的基本权利的丧失,往往导致由关心不成政治而不关心政治,无法参与政治而对政治参与不感兴趣的政治冷漠,而政治冷漠又往往促进和强化了极权统治的存在和延续。

权力创造具有"魔力"创造的特点。这种"魔力"容易使获得和掌握权力的 人洋洋自得,沾沾自喜地将自身的创造价值同权力的创造价值等一混同起来,以 为权力就是自身,自身就是权力,从而狂妄自大、蛮横无理、骄奢淫逸、滥用权 力。——"这不能片面地说只是拥有权力的人一方面的责任,"如日本学者池田大 作所言,"让出权力的民众的一方也许也有一半的责任。因为民众也会犯有把权力本身和拥有权力的人等同视之的错误,往往卑屈地依附于他们。"

滥用权力是腐败的同义词。权力喜欢腐败,腐败热爱权力。权力越集中,腐败越严重,这几乎成了古往今来政治生活中的一条铁律。权力是社会生活的产物,社会生活需要权力。适当的权力集中和科学的使用权力,能够形成巨大的创造促进,有利于生产力的发展和社会的进步。然而,权力过分集中和滥用权力则是巨大的创造抑制,只能损害生产力的发展,成为社会文明进步的阻力;克服腐败现象,防止滥用权力的惟一途径,是"以权束权",即以权力制约权力。一方面,需要政体上、制度上的约束、制衡、监督、更替机制,即将一把具有"法"的威慑力(可称作"形而上"的控制力)的智慧之剑明晃晃地悬在权力获得者的头顶,使其在使用权力时有所顾忌,不能姿意妄为。另一方面,需要全体社会成员积极的有效的政治参与(可称作"形而下"的影响力),即充分发挥文明社会人之成为人的最基本的权利如表决权、选举权、发言权、否决权等,以参与领导人的选择和各项政策的制定,使各项政策以社会多数成员的利益为圭臬,为绝大多数人所接受;同时也使权力的掌握者时时刻刻处在权力给予者即人民大众的监督之下。政治参与的程度是衡量一个国家文明程度的重要标志之一。人类能够创造权力,也就能够创造制约权力的权力。

#### 2 经济

经济是财富的创造。

财富是人类生存和发展所需要的实物状态的创造物的总称,包括人们通常所讲的消费资料、生产资料和自然资源。财富是人类和自然界共同创造的,换言之,人类和自然界是财富创造过程的主要参与者。没有自然界提供的土地、矿藏、森林、水源、阳光、空气,人类便失去了生存的依据,更谈不上创造财富了。然而,没有作为创造主体的人类,上述自然资源也就失去了意义。所以,财富只能是属于人类的财富,财富的创造即经济活动也只能是人类创造的组成部分。

这里,笔者着重强调了财富是实物状态的创造物,着眼点在于实物状态的创

造物能够直接满足人类生存发展的需要。这样说当然并未否定创造者的创造经验、创造技能以及观念形态的科学技术的财富性。创造者的经验和技能以及科学技术是潜在的非实物状态的财富,只有使经验技能、科学技术进入创造实物状态的创造物的创造过程,并将新的实物状态的创造物创造出来,用以满足不断进步中的人类的生存和发展的需要,这个时候,潜在的财富才算转化为现实的财富。如果创造者的经验技能和观念形态的科学技术,不参与实物状态的创造物的创造,即创造者将经验和技能埋在心里,藏在身上而不外化,科学技术也总是处在观念形态,而不走出科学技术家的脑壳及试验室,那么这样的财富,就还是潜在的非物化的财富,这样的创造也就只能暂且归入非经济的创造。讲"科学技术是生产力"或是"第一生产力"的实质就是潜在的财富能够转化为巨大的现实的财富。

财富创造因与人类的生存创造相吻合而具备了基础性。人类为了维持和延续生命,需要大量的实物状态的创造物,即我们通常讲的以吃穿用为主要内容的消费资料或生活资料。这些消费资料或生活资料满足了,即生存问题解决了,人们才有可能从事其它内容的创造。如果有人说经济即财富创造之外的一切创造诸如政治、战争、宗教、艺术、爱情等等,说到底都是经济即财富的创造,或必须以财富的创造为基础、为目的、为依托,笔者会认为这样的说法并没有错。以政治为例。政治是权力的创造,权力意味着对财富的控制和占有。没有不占有和控制财富的权力,也没有哪一种权力不占有和控制财富。占有和控制财富越多,意味着权力越大,反过来,权力越大,占有和控制的财富越多。有人惟恐失去权力,说到底是怕失去既得利益,即对财富的占有力和控制力。又如宗教,作为信仰的创造,宗教好像超越于财富创造即经济活动之上,其实,任何宗教都离不开财富创造,宗教好像超越于财富创造即经济活动之上,其实,任何宗教都离不开财富创造,都得以财富创造为基本。世上没有不食人间烟火的"出家人",信教者也只能在有饭吃有衣穿的前提下即起码的温饱问题解决之后才能虔诚其信仰,而祈求神灵赐予财富本来就是宗教创造的重要内容之一。

财富创造因与发展创造相吻合而具备了累积性。人们的生存需要满足后,还要继续发展,发展当然还需要财富,发展创造没有尽头,财富创造也就没有尽头。由于财富的增长幅度往往大于生存创造和发展创造所需要的程度——生存创造和发展创造所需要的程度可以说是按算术级数增长,而财富的累积往往按几何级数

增长,这几乎是一条规律。过多的财富使因生存和发展的需要不能及时消费掉而累积起来,形成财富积累。对创造个体或创造小群体——家庭而言,财富刚刚满足了生存需要,便算解决了温饱问题。财富不但满足了生存需要,还大体上满足了一般性的发展需要甚或略有盈余,便算达到了小康水平。如果财富创造超越了生存需要和一般性的发展需要,形成了财富剩余和财富积累,就算是生活优裕者或小富翁了。如果积累了大量的数以亿元计的财富,便可称作富豪或经济强人了。对一个国家而言,能否形成巨大的财富积累,是衡量一个国家国力强盛与否的重要标志。世界上的发达国家都是聚敛和积累着巨大的剩余财富的国家。巨大的财富积累不但使这些国家的人民生活水平大幅度提高,也使这些国家的领导人在国际舞台上扮演着举足轻重的角色。

多样性也是财富创造的一个特点,仅以财富的创造过程为例,就不但包括财富的生产过程和再生产过程,还包括财富的交换、分配、消费过程。生产和再生产是直接使实物状态的创造物即财富不断涌现的过程;交换是财富的互通有无,分配是财富的"化整为零"——由社会走向个人;消费是财富的转化——满足了创造者的生存、发展需要,同时又为财富的生产、再生产以及交换、分配、再一次消费提供了前提、主体和对象。最初的交换和分配是通过实物进行的。生产力的不断发展,交换范围的日益扩大,使实物间的直接交换发生了困难,于是出现了充当一般等价物的特殊商品——货币。商品经济的发展,使货币的职能和应用范围日益扩大,以至于成为财富的化身、象征、代名词。于是,追求和聚敛金钱便成为丰富多彩的财富创造的主要内容。在统治集团看来,"万乘之国,不可无万金之蓄饰;千乘之国,不可无千金之蓄饰;百乘之国,不可无百金之蓄饰。"(《管子•山权数》)在一般老百姓看来,则是"有钱能使鬼推磨""有钱一条龙,无钱一条虫"。金钱的魔力导致了"拜金主义"和"金钱拜物教",甚至形成了将金钱创造看得比生命还贵重的"异化"心理——许多罪恶行为、堕落现象都由此而滋生。

财富创造还具有群体性。孤立的个体不能从事标准的经济活动。财富的积累, 是创造合力的结果。世界上大大小小的发家致富,无不具备一、两个智慧超群、 毅力出众的创造主体,也无不具备若干个甚至许多个忠实能干的合作者。"一个篱 笆三个桩,一个好汉三个帮",一个巨人或智人的身边总围绕着一群智人或凡人。 发达国家里的大财团、欧洲经济共同体、石油输出国组织等,都发挥和体现着财富创造中的巨大的群体效能。进入 21 世纪的今天,世界已成为一个大家庭,人类已成为一个大群体,任何民族的、地区的、国家的经济都只有纳入全球经济的运行轨道,即加入"国际经济大循环",才有出路和前途。否则,说得严重点,就有可能被迫放弃"球籍";说得不严重点,就意味着有可能被挤到地球的某个角落里向隅而泣——改革开放的必要性、迫切性和价值性就在这里。

#### 3战争

战争是诉诸武力的权力和财富的创造。

诉诸武力的涵义是运用武器和暴力的手段解决争端。

战争是政治的继续和必然。政治是权力的创造,权力意味着对其他人众、其他民族、其他国家、其他政治集团的控制力和影响力——尤其是控制力。战争便是在其他非军事的手段不能够获得对其他人众、其他民族、其他国家、其他政治集团的控制权的情况下,采取武器的暴力的军事手段强行争夺这种控制权。诉诸武力必然带来伤亡和流血,因而有"战争是流血的政治,政治是不流血的战争"之说。不流血的政治渗透在流血的战争之中。激烈的枪林弹雨之外,必然伴随着政治上的宣传、经济上的封锁、外交上的分化等等非军事手段。

战争又是经济的要求和手段。经济是财富的创造,财富意味着实物状态的生产资料、生活资料和自然资源。战争便是在非军事手段不能获得由其他民族、其他国家、其他政治集团、其他创造群体控制和占有的生产资料、生活资料和自然资源的情况下,采取武器的暴力的军事手段强行争夺(或保卫)对这些生产资料、生活资料和自然资源的控制权和占有权。经济是战争的基础、条件和目的。战争需要经济支持,没有一定程度的财富积累,也就打不起一定规模的战争。战争以财富损失即消耗大量的人力物力财力为代价,同时又以获取更大更多的人力物力财力即财富为目的,由于战争是通过暴力手段掠夺(或保卫)和占有财富,因而我们可以说:经济是非暴力的战争,战争是暴力的经济。

战争属于群体创造。创造个体之间打不起一场战争,充其量是一场你死我活的厮杀或械斗。战争要在创造群体之间举行,而参与战争的创造群体一般都是较大的、人数多的、具有凝聚力的创造群体,如民族、国家、宗教派别、政治集团等。参战的创造群体的构成,是由一两个创造巨人指挥和统帅若干个创造智人,再由若干个创造智人指挥和统帅成千上万个创造凡人。战争中的创造巨人和创造智人通常被称作军事家、战略家、元帅、将军,等等。创造凡人则是在前线浴血奋战的中下级军官和广大士兵。血腥的战争为指挥作战的创造巨人及创造智人提供了发挥创造效能的大好机会和壮阔的舞台,一场战争总能涌现出一两个或若干个"英明统帅"、"民族英雄"或"战争狂人""杀人魔王"等等。这些名声显赫的创造者将自己的丰功伟绩建立在众多的凡人创造——流血牺牲之上。

由于战争的非人道性和破坏性——总是带来惨不忍睹的人员伤亡和无法挽回的经济损失,因而总体上人们一直对战争持诅咒、拒绝和否定的态度。旗帜鲜明地反对和指责战争,毫不留情地揭露战争的残忍性和暴虐性的论述,在古今东西方的思想家、哲学家、史学家和文学家的文论著作中时时可见。如:"谁也不会愚蠢到喜欢战争而厌恶和平的地步。"(《西方思想宝库》,中国广播电视出版社,1991)天下"没有把宝贵的、活生生的躯体、生灵变为一大堆只对野草生长有利的无名尸体更丑恶的景象了。"(《西方思想宝库》,中国广播电视出版社,1991)"战争是绝对不能打的。不论有什么样的理由,人类绝对不能重复这样愚蠢的行为。我在小说《人的革命》第一卷的开头写道:'再没有像战争那样残酷了,再没有像战争那样悲惨了,这是我从那时以后深深地刻印在心中的实际感受。"([日]池田大作:《我是怎样度过年轻时代的》,王叔晖译,台湾人人出版社,1987)

然而,不可否认的事实是,从古到今,地球上的战争几乎从来没有断绝过,总是这儿的硝烟还未散,那边的战火又燃起;而且,随着文明创造的积淀、科学技术的进步,战争的方式手段也日益进化,由古代的戈矛剑戟、面对面厮杀,发展到今天的坦克导弹无人机、人和人不见面。军事行为的事实上的没有断绝,已经从实践上表明了战争的必然性和必要性。能够对战争的必然性和必要性做出解释的只有战争本身——政治的经济的宗教的文化的,总之是战争之外的一切手段都不能万能地解决政治的经济的宗教的文化的种种根源于权力和财富的争端。当

战争创造之外的一切创造都不能取得争端双方希望取得的满意的创造成果的情况下,战争创造就成为不可避免的创造了。

许多思想家都不同程度地认识到了战争创造的不可避免性。如:"战争本身就 是一种文化进程,只有一个被拯救的文化才会自发地爆发出这样的愤怒和勇气, 以致于要去进行文化上的'割腕'。"{[德]尼采(Friedrich Nietzsche)著:《悲 剧的诞生》,贾翠莲译,商务印书馆,1997}。"若在正义的事业上的那些在战争中 的冒险行为可以被看作是对崇高的一种追求和对人类内在尊严的敬重,那么这样 的战争就可能被赋予一种美德的品质。这些美德,也就是战争中的英勇、大无畏、 牺牲以及公正的行为,被认为是值得尊敬的,正是因为它们表现出了对人性的敬 重以及对人类自由和独立的尊重。"{[德]康德(Immanuel Kant):《论持久和平》, 黄宏发、刘毓麟译,商务印书馆,1983》"和平的延续,甚至是和平本身,使人类 的智力和勇气日渐萎靡。战争才是展示民族最高勇气和最高理智的场合。"{[德] 黑格尔(G.W.F. Hegel)著:《世界历史哲学讲演录》,高世栻译,商务印书馆, 1993} 东方思想家也有类似的接近的说法,如:"圣战本身等于笃诚的朝觐。"{[阿 拉伯]伊本•哈尔东(Ibn Khaldun)著:《通史》, 杨启铭译,商务印书馆,1993} "杀人安人,杀之可也;攻其国爱其民,攻之可也;以战止战,虽战可也。"(司 马穰苴:《司马法·仁本》)"革命军的责任,是要把不平等的世界,打成平等的。" (刘咏尧编:《国父治兵语录》,世界兵学社,1957)

创造论强调人类的任何创造都必须符合文明积淀律,战争自然不可例外。凡是符合文明积淀律的进步的人道的战争,便是正义的战争;凡是违背文明积淀律的非进步非人道的战争,则是非正义的战争。违背文明积淀律的非正义的战争必然被符合文明积淀律的正义的战争所扼制所战胜——这正是创造规律的威力之所在。

#### 4 宗教

宗教是信仰的创造。

信仰的涵义是对创造主体之外的创造物——超验的神、理想、主义等等极度

的相信和尊服,从而心甘情愿地为之努力奋斗甚至于牺牲自己的生命而不顾。任何信仰都含有宗教的性质。创造了一种信仰,也就意味着创造了一种宗教。

早期的宗教主要是对众多的超自然神灵的相信,表现为大自然崇拜、动植物崇拜、祖先崇拜和图腾崇拜。超自然神灵是原始初民将支配自己生活和生存的自然力人格化的结果。原始初民相信,这些自然力同人一样有意志、有灵魂。也相信对这些有意志有灵魂的自然力的敬拜和求告,可以给自己带来许多好处。

古代宗教主要是对某种独立于万事万物之外的趋于一元的精神实体的相信。 独立的精神实体不再是某种自然力,也不再依附于某种自然物,而是超越各种自 然力、自然物之上并总摄、统管自然力、自然物及人即世间一切的最高神。这个 最高神有许多不同的尊称,在埃及是太阳神瑞,在希腊是主神宙斯,在印度是大 神梵天,还有雅赫维、上帝、真主、如来佛、玉皇大帝等等。古代人将自己的肉 身驯服地献给了地上的国王,同时又将自己的精神虔诚地献给了天上的"上帝"。

现代宗教主要是对某种非现实的精神理想的相信。超自然的神灵是虚幻的,独立于万事万物之外的精神实体也是虚幻的,非现实的精神理想同样还是虚幻的。没有人见过超自然的神灵,也没有人见过独立于万事万物之外的精神实体,人们见到的,只是自己的幻觉。而理想,无论多么美妙、多么高超,也都是脑子里想出来的。实践,才是检验真理的标准。现代科学已经对所谓的"天堂""净土""极乐世界"做了无可辩驳的否证,对遥遥无期的无法验证的美好"理想",我们最好也只是将其当作"不过在脑子里想想"而已,否则,就有可能陷入宗教性的迷狂和偏激。

宗教属于智慧的创造,尤其属于智慧的组成部分之一的想象的创造。和艰难 困苦的世俗生活相比,人的想象力是富裕的、发达的。自身虽然没有克服和战胜 所有的艰难困苦的能力,脑子里却可以想象有伟大的超人或万能的神灵具备这种 能力;而且,一旦这样想象,便觉得自身也多少获得了这样的能力;再通过进一 步的敬拜求告与归顺,便能够更多地获得或得福于超人或神灵的这样的能力。于 是,这样的群体想象经过反复、传播、积淀,最后便在意志的权力的作用下得到 相对固定。固定的想象便是相信,彻头彻尾的相信导致了尊服、顺从、皈依、迷 狂和沉醉。 同样,面对现世社会诸多的不完美、不如意,人们便在脑子里构想出一个完美的如意的未来社会,并固执地相信这样的未来社会一定会来临。岂不知,对发展的创造的人类而言,永远不会有完美的如意的社会。不满足是创造的天性,满足了就没有人类。在远古人的心目中——如果他们能"想象"到这一步的话,过上我们现代人现在这样的生活,已经进入"天堂"了,而"天堂"中的我们依然有许多的不满足不如意;我们现在想象遥远的几千年几万年后的人类社会,自以为就美满得很、如意得很,可对处在几千年几万年之后的人类而言,就必然还有我们现在想象不到的新的不满足不如意。从这个角度来看,人类永远不会有十分完满、绝对美好的理想社会。总在脑子里创造并坚信一个虚幻的、现在没有的、永远也得不到的东西,并为之而发狂,而陶醉,而自鸣得意,而孜孜矻矻,而奋斗不息——人类的聪明在这里,人类的愚蠢也在这里。

宗教具有巨大的凝聚力。"志同"而"道合",信仰的接近是最亲密的接近。 人们在一面信仰的大旗下认同、亲合、团结、凝聚,形成巨大的创造合力。这种 创造合力足以创造一个民族,如锡克教之与锡克族;足以创造一个国家,如伊斯 兰教之与伊朗;也足以深远地影响许多民族、国家和地区,如佛教之与东方诸国, 基督教之与西方世界,伊斯兰教之与阿拉伯世界。宗教根源于信仰,对同一个信 仰的不同认识和解释,形成不同的宗教派别,如佛教体系中的大乘小乘、显教密 教、六家七宗;甚至造成宗教分裂,如基督教体系的东正教、天主教、新教。信 仰的丧失意味着宗教的衰亡。人们既然会因信仰相同虔诚地聚到一起,也会因信 仰裂变和危机分崩离析。

宗教还具有迷狂性。对信仰创造而言,相信和迷信几乎是同义词。信仰是一种特殊的智慧能,这种智慧能的释放和发挥,往往能够导致一系列以激越、固执、神秘、怪异、痴迷、残酷、疯狂等为特色的不同寻常的宗教行为。如有的宗教杀死活人作祭献以愉悦神灵,有的教徒甘愿自焚以"升天";有的宗教要求僧侣在举行仪式时裸露全身,女青年跳舞时要裸露下体;有的宗教提倡苦行、壁观、棒喝,甚至主张千方百计地折磨自身,如卧刺床、拔须发、吃粪便、自行阉割、长时间的只手高举、单足独立,等等。现实生活中尤其是政治运动中,人们一会儿神经病似地狂呼滥叫,一会儿莫名其妙地痛哭流涕,甚至发疯般地打、砸、抢、烧、

杀等等,都可看作宗教迷狂或准宗教迷狂。宗教迷狂或准宗教迷狂是信仰创造的派生物,是创造常态中的创造变态。只要对非现实的创造物绝对相信的情形存在,这样的迷狂,这样的变态就不会匿迹。

#### 5 大术

艺术是美和审美的创造。

美和审美是既同一又有区别的创造过程。美是侧重于实物形态的创造物的创造,审美是侧重于精神状态的创造物的创造。对艺术作品而言,美偏重于美的作品的创造,审美偏重于对美的作品的欣赏的创造。美和审美也都可视作由创造主体和创造客体共同参与的创造过程,这个创造过程生成的创造物是新颖、独特、和谐、匀称、完善、多样统一的、漂亮的、好看好听好用的实物,和新颖、独特、和谐、匀称、完善、多样统一的崇高、愉悦、快适的感觉。美和审美互为条件,不可割离。美都是审美的美,审美也都是美的审美;美是审美的实物基础,审美是美的精神寄托。脱离了美的审美是没有根据、没有着落的审美,脱离了审美的美对人类而言是无价值无意义的美。

在创造论看来,无论是漂亮的好看好听好用的实物,还是崇高、愉悦、快适的感觉,其构成要素虽然复杂多样,但最本质最当紧即创造价值指数最高的是对新颖、独特的要求,也就是说,新异性是美和审美的最本质的属性。某个实物状态的创造物是新颖别致的,这个实物创造物就可以说是美的;某种精神创造物是新鲜感人的,这种精神创造物就可以说是审美的。说过去出现的某创造物,如古建筑、古书画、古代工艺品等等是美的,其实是说这些过去出现的创造物能使现代人不断地产生新的感知,能给现代人不断地提供新的用途。将美和审美定义为创造,当然没有错;将美定义为新的漂亮的好看好听好用的实物的创造;将审美定义为新的崇高、愉悦、快适的感知的创造,似乎更准确。

当然,笔者这里讲的实物,是打有精神烙印的、受审美主体影响的实物——自从人类在地球上出现以后,人类能够涉及的所有实物,都程度不同地接受着人类的影响。笔者这里讲的"感知",也非单纯地指和内外感觉器官直接联系的生理

快感,和在此基础上产生的知觉快感。它不但包括生理快感——感觉、知觉,还包括由表象、概念、思维、情感、智慧等构成的心理快感。在审美过程中,生理快感和心理快感相辅相成,不可分割,生理快感是心理快感的基础,心理快感是生理快感的升华。对以智慧创造为特征的人类而言,心理快感往往显得更重要。

艺术品便是漂亮的、好看好听好用的即美的实物的创造,和崇高、愉悦、快适的美的感知的创造的统一。尽管为了达到这样的"统一",各种艺术运用和发挥的材料、手段多种多样。

文学主要是艺术语言的创造,是以语言文字为手段塑造美的形象、美的作品,从而为文学欣赏者提供生动感人的审美对象。在文学作品的创造过程中,思想深刻、感情丰富、掌握着大量的审美素材的文学家是创造主,文学家从日常生活中提炼出来的文学语言、合适的创造环境、创造氛围、创造工具及发表、出版系统是创造从。经过或长或短的智慧的辛勤的写作过程及发表出版过程,用语言文字描述的具有动人的情节、感人的细节、鲜明的性格形象,复杂的感情、思想冲突的新颖独到的创造物——小说、散文、诗歌、报告文学等等便宣告诞生。在文学的欣赏过程中,具有一定的生活经验和审美能力的欣赏者是创造主,文学作品、欣赏环境、审美氛围等是创造从。欣赏者通过对文学作品的阅读、体味,领会,结合自己的生活经验、情思积累,展开更进一步的智慧的联想和升华,从而获得崇高、愉悦、快适的美的享受。

其他艺术和文学本质上相同,只是创造手段不同。戏剧主要是艺术表演的创造。是以演员扮演角色、当众表演故事为手段塑造美的形象美的作品,从而为观众提供可以直观的审美对象。参与戏剧创造的创造物除表演者外,还有编剧、导演、美工、音乐舞蹈设计、舞台调度、观众、剧场等等,因而,戏剧是一种典型的合力的创造。

音乐主要是艺术声音的创造。是以音响、旋律等音乐语言为手段塑造美的形象美的作品,从而为听众提供优美动听的、可以激起美感、引发联想的审美对象。 和其他艺术创造相比,音乐创造因主要诉诸于听众的感性感受而长于抒情,从而 具备了独特的感染力和深刻的表现力。

舞蹈主要是艺术形体的创造。是以经过提炼、组织和美化了的人体动作姿态

为主要表现手段,结合音乐、美术、道具等其它创造要素,塑造美的形象美的作品,从而为欣赏者提供可以直观的审美对象。最初的舞蹈同人类的生存创造、宗教创造联系在一起,是原始生命力的迸发和释放。舞蹈的特点是抒情性、节奏性、造型性和时空综合性。

美术主要是艺术造型的创造。是以形、光、色和点、线、面等造型手段创造相对静止的美的形象美的作品,从而为欣赏者提供可以静观的审美对象。美术作品因选用的材料和使用的工具不同而分为雕塑和绘画两大类。雕塑是以金属、石、牙骨等硬质材料或粘土、石蜡等软质材料为媒介,塑造可供视觉感受的三维立体的实物形象。绘画是以笔、刀等为工具,墨,颜料、油彩等为材料,通过线条、色彩、明暗、透视、构图等造型语言,在纸、纺织品、本板、墙壁等平面上,创造出二维(压缩了的三维)的可供视觉感受的艺术形象。美术创造具有造型性和直观性,能给欣赏者以空间感和质量感。

影视剧是综合艺术的创造。电影艺术运用摄影机拍摄影片,电视艺术运用摄像机拍摄录像带,二者都以不同的角度、不同的距离、不同的拍摄方法拍摄审美对象,又以不同的组接方式、不同的色彩运用构成镜头画面,并记录或配置音响,从而创造出鲜明生动新颖具体的为广大观众喜闻乐见的美的形象美的作品。影视剧是创造合力的结晶,它既是时间艺术(在时间的推移中表现内容)和空间艺术(画面在空间中展开、在空间中造型)的综合,又是多种创造参与(编剧、导演、演员、摄影、录像、美工、服装、道具等等)、多种艺术要素(文学、戏剧、音乐、舞蹈、美术、镜头蒙太奇等等)和多种表现手段(特写、特技、夸张、渲染、象征;对白、独白、画外音;推、拉、摇、移、旋转等)的综合,还是艺术创造和科学技术创造的综合——科技是影视之母,没有光学研究的卓越发现,和摄录、传播、接收技术及设备的发明和进步,也就没有电影电视,而现代科技的每一项新成果都几乎对影视的表现力产生影响。电影艺术具有大众性、具体性和真实感人性;电视艺术除具备电影艺术的上述特点外,还具备强于电影艺术的普及性、时效性和灵活性。

艺术创造还包括建筑、摄影、书法、剪纸等。

美和审美的创造构成艺术。艺术所揭示、表现和塑造的美尽管无限丰富,但

整体上考察不外乎思想美、情感美和形式美。

思想美意味着艺术品中渗透着艺术家对世界、对社会、对人生独特的、深沉的心理体验和理性升华,蕴涵着艺术家新颖、深刻的对真理的发现和揭示,闪烁着作为思想家的艺术家的卓越不凡的智慧光芒。人们在阅读、观看、欣赏艺术品的时候,感受着思想的力量,沐浴着智慧的光芒,响应着真理的呼唤,从而变得崇高、睿智、坚强、向上。古今中外的大艺术家都是思想家,成为思想家的艺术家才能创造出不同凡俗千古流芳的大作品。列夫•托尔斯泰、萨特、泰戈尔、鲁迅等,就既是大艺术家,又是大思想家。当然,艺术品的思想美和哲学家的理论学说不同,不是赤裸裸的直接了当的说教,而是寓思想于生动具体的形象中,将抽象的理论意象化、具象化、情境化。

情感美意味着创造艺术品的艺术家总是饱含着对世界、对人类、对生活的新鲜、独特、深厚的感性积累和情绪体验,艺术家创作的艺术品也总是揭示、表达和颂扬着人类对生命、对生活、对亲人、对民族、对国家、对自然界、对未来世界,热切、赤诚、执着的拳拳爱心和依依情怀。欣赏者在阅读、观赏艺术品的时候,也总是被艺术品中的人物的感情纠葛所吸引,为艺术品中所描绘、所创造、所褒扬的高尚、善良、执着、热烈、美好的感情而激动、而叹惋、而流泪、而鼓舞、而灵魂净化、而人格升华,也为艺术品所揭示、所鞭挞的卑劣、低下、龌龊的感情而愤怒、而恚恨、而对照、而忏悔,而自惭自新。世间惟有情难诉,世间也惟有情义重。艺术品都是情的艺术,情感美使艺术品永恒。

形式美意味着艺术家必须选择最流畅、最和谐、最恰当、最美好的外在的符号形式和内在的结构形式,来表现艺术品的思想美和情感美。无论外在的符号形式还是内在的结构形式,都必须遵循形式美的一些某本法则,如新颖、流畅、和谐、平衡、对比、对称、比例、节奏、主从、参差、多样统一等。艺术品首先得诉诸于欣赏者的视听觉,只有使欣赏者首先被艺术品漂亮的好看好听的形式美所吸引所感染,才能进一步领略艺术品所蕴涵所展现的思想美和情感美,因而形式美往往是思想美和情感美的前提、向导和外在表征。艺术美应当是思想美、情感美和形式美的有机的、自然的、佳妙的统一。任何美的思想、美的情感都得寻求美的内部结构形式和外部的表达形式,而美的形式也得寻求美的思想、美的情感

为内容。只有思想美或情感美而不具备形式美的艺术品,同只有形式美而不具备思想美和情感美的艺术品一样,都没有吸引力、表现力、感染力——生命力。

#### 6 爱情

爱情是男女之间相互依恋、相互思念和相互占有的创造。

从性别的角度看,人类社会只有两种人: 男人和女人。男人离不开女人,女人离不开男人; 说男人的一半是女人,也就等于说女人的一半是男人。生存创造的需要,使男女必然也必须相互合作、彼此依存,否则,就没有生命的维持和人种的延续,人类社会就面临灭绝的危险。因此,生存创造无疑是爱情创造的生物学基础。

基础不等于全部。发达的内外感觉器官和大脑神经系统使人类在生存创造及满足了生存创造之后的发展创造中产生了和思维和智慧互渗相关的感情联系。这种感情联系发生在相互合作以维持和延续生命的男女之间,便表现为我们所要讲的"依恋"。

依恋意味着将自己至少一半的生命价值寄托在对方身上,意味着能够从对方 获得生存创造和发展创造的原动力。依恋的实质是人的最基本的一部分创造效能 有目标地定向地释放和发挥,即所谓的"本质力量对象化"。通过相互依恋,男人 使女人成为女人,男人的女人;同时也使自己成为男人,女人的男人;女人使男 人成为男人,女人的男人;同时也使自己成为女人,男人的女人。

男女之间一旦形成依恋,便总是渴望在一起,"在天愿作比翼鸟,在地愿为连理枝",而不愿长久的甚至是短暂的分离,以至于要用难分难舍、如胶似漆来形容。 "得成比目何辞死,愿作鸳鸯不羡仙"。为了依恋,可以不作神仙,可以不当国王,可以发动战争,可以慷慨赴死,可以倾家荡产。

依恋导致思念。彼此依恋的男女双方虽然总是渴望在一起,却往往因种种创造条件的限制而不能在一起,于是便"碧海青天夜夜心""为伊消得人憔悴"了。思念是大脑皮层持久的定向性的神经联系,它意味着依恋对象的一颦一笑、一言一行、一举一动、一切的一切都在思念者的神经细胞里留下了难以消失的痕迹。

于是,便想他(这里的"他"和"她"通用,下同),想他,一千个一万个地想他!想他吃,想他喝,想他衣衫单,想他被褥薄,想他旅途远,想他磨难多!想他想得心如火,想他想得泪成河;想他想得肝肠断,想他想得白发多!人说世上千般苦,比不上相思苦;人间什么病都好治,惟有相思病难治。将相思和"苦"和"病"联系在一起,反映了爱情的艰苦性和深刻性。正如古人诗词所言:"十年生死两茫茫,不思量,自难忘";"春蚕到死丝方尽,蜡炬成灰泪始干";"冬雷震震,夏雨雪,天地合,乃敢与君绝!"

然而,在创造论看来,"苦"非苦,"病"非病。刻骨铭心的思念,本来就在爱情创造的意旨之中,没有深切的眷念和强烈的相思,算不上真正的爱情,爱情在思念中发育,爱情在思念中成熟。思念是水,滋润着爱情的花朵;思念是火,燃烧着爱情的天空。

不能不依恋她,又不能不离开她,离开她后又不能不思念她,这是爱情创造的三部曲式的标准化轨迹,也是古今中外一切以爱情为主题为内容的文学艺术作品的最基本的故事结构模式。这样的"三部曲",古往今来衍化出多少感天地、泣鬼神的情的喜剧、爱的悲歌!

爱情的思念不是为思念而思念,思念的目的是依恋和占有,依恋必然导致占有,依恋本身也就意味着占有。占有不是空洞的言辞,而是实实在在的灵与肉的行动。占有的内容包括心身两个方面,即心心相印和身身相融。对热恋中的男女双方而言,心心相印就意味着身身相融,就必然要求身身相融;而身身相融也往往使心心相印得以加深和强化。只有心心相印而没有身身相融的爱情是不彻底、不完美、不标准的爱情,而只有身身相融而没有心心相印的"爱情"是低层次、低格调、低品位的同样不完美不标准的"爱情"。完美的标准的爱情是"心身相印"或"身心相融"的爱情。

人们都渴望占有,岂不知占有总是在获得对方的同时失却了自己,即接受了、吸取了对方的创造效能,同时付出了、奉献了自己的创造效能。创造效能总要释放和发挥,从而相互占有总在进行。占有是在向世界显示:眼前这个大活人从灵魂到肉体,浑身上下一切的一切都属于我,起码此时此刻属于我,他已是我生命的一部分。同时,占有也在向世界宣告:我这个大活人,从灵魂到肉体,浑身上

下一切的一切都属于他,起码此时此刻属于他,我已是他生命的一部分。显然,爱情是一种创造合力,这种合力使两个生命同时快活、同时辉煌。

以依恋、思念、占有为内容的爱情创造,同其它创造一样,依然在创造律的规定和制约之下。加减化合律决定着爱情的创造方式,依恋、思念、占有的过程也就是爱情的加减化合的过程。文明积淀律决定着爱情创造的发展趋向,随着人类进化的脚步,爱情必然由低级而高级,由野蛮而文明,由压抑而开放,现代社会的一切新的创造成果,也都必然对爱情产生影响。新异替变律更是对爱情提出了本质性的要求。爱是喜新厌旧的。男女双方都必须努力做到常爱常新,使迷人的爱情总是新意盎然、新趣横生、新潮叠起;要不断地依恋出新花样,思念出新内容,占有出新感觉;否则,爱情之河就会干涸,爱情之树就会枯萎,爱情之火就会熄灭。

#### 7 死亡

死亡是毁灭和新生的创造。

宏观地看,世界上的一切事物都有一个毁灭和新生的问题。旧的不去,新的不来;老的不死,新的不生。结束一个创造过程,才能展开另一个创造过程。自然界每时每刻都存在着毁灭,也每时每刻都存在着新生。氧气被动物和人类吸收,变作二氧化碳呼出来,这便是氧气的毁灭和二氧化碳的新生;二氧化碳被绿色植物吸收,变作氧气被释放出来,这便是二氧化碳的毁灭和氧气的新生。世界上没有不死的植物,也没有不死的动物,一切有生命的无生命的创造物都处在毁灭和新生之中。毁灭是新生的前提,没有毁灭就没有新生;新生是毁灭的结果,任何毁灭都必然导致新生。

对人类而言。每时每刻都有死,每时每刻都有生,在毁灭和新生中,人类延续着生命、积淀着文明。无庸讳言,和太阳、月亮、星星总有一天要彻底毁灭一样,人类总有一天也要彻底毁灭。然而,种种毁灭之后的宇宙间必然还会有新的太阳、新的月亮、新的星星、新的人类诞生。

对个体生命而言,巨大的彻底的整体的毁灭一生只有一次,细小的具体的零

散的毁灭贯穿于整个生命的始终,随时随地都在发生。细胞在代谢,头发在脱落, 皮肤在老化,精神在更新……生中包含着死,死中孕育着生。今天的新生以昨天 的毁灭为代价;今天的毁灭,又意味着明天的新生。

个体生命整体的彻底的毁灭,就是人们通常讲的死亡。一个人的脑细胞不再 兴奋了,心脏不再跳动了,呼吸终止了,这个人的生命之灯就算熄灭了,生命之 舟就算到岸了或沉没了。人是智慧的创造物,生命毁灭了,智慧创造也就停止了。 智慧创造的停止,标志着人的创造结束,非人的创造开始。生命终止后,人或变 作一把骨灰,或变作一具骷髅,组成人体的亿万个细胞或化作一缕青烟溶入悠悠 蓝天,或分解成几许黄水渗入沉沉大地;也可能被禽兽虫蟊噬食,成为这些动物 生命创造的一部分。骨灰也好,骷髅也好,青烟黄水也好,被禽兽虫蟊噬食也好, 都是一种新生,毁灭之后的新生。只是新生的创造物不再有完整的生命,不再有 丰富的感情,不再有闪光的智慧,不再是宇宙之精华、万物之灵长罢了。因此, 死亡乃是由感情创造进入非感情创造,由智慧创造进入非智慧创造,由生命创造 进入非生命创造。

对个人而言,智慧的感情的生命只有一次,因而死亡便是人生的终端性和总结性标志。感情的历程到头了,智慧的飞船溅落了,生命创造的旋律迎来了它的休止符。然而,死亡的意义不仅仅在于是对生命创造的一次性总结,还在于它是生命的最后一次高价值的创造。正因为它是"最后一次",因而益发显得珍贵;也因为它是智慧的最后一次闪光,是感情的最后一次宣泄而特别凄美,特别悲壮,特别伟大。

生,多半相似;死,大不一样。面对死亡,有人痛楚地抽搐着全身,有人安详地微笑于脸上;有人恐惧得如闻惊雷,有人从容得如回故乡;有人恋恋不舍,只恨不得长生,有人毅然自决,快活得如饮琼浆;有人手指油灯,欲掐灭一只灯捻才咽气,有人口授遗言,将角膜、皮肤、躯体、财产奉献给世上;有人或软了骨头,或碎了心肠,或头颅缩到裤裆里,或冷尿流到脚面上;有人却扬头笑蓝天,低头慰沧桑,泰然如山岳,傲气贯九江。——啊,死亡,死亡,死亡之神,创造了多少笑煞人、哀煞人、惊煞人、羡煞人的悲欢图、众生相!

作为创造效能最后性的总结性的释放和发挥,人类不但能被动地无奈地参与

死亡创造,而且能主动地智慧地创造死亡。在创造论眼中,自杀和安乐死具有特殊的价值和意义。在人之为人的使命未完成之前,即以智慧为主导的创造效能还未得到充分的释放和发挥的情况下自杀,是懦夫;在人之为人的使命完成之后,即以智慧为主导的创造效能已得到充分释放和发挥的情况下自杀,便是英雄。人生难得几回搏,人生也难得几回"疯"。英雄式的自杀便是人生的最后一次"搏",最后一次"疯"。它以强烈的、坚定的自主选择性而显示着人之为人的即智慧创造的力量。生,从来不由我们决定,没有人征求过我们的意见,而死,难道不可以由我们自己决定吗?安乐死意味着在不可挽回、无可奈何的毁灭面前,智慧地、无痛苦地、主动地迎接毁灭、走向毁灭。人生历程中的苦难已经够多的了,为什么在生命终结的时候还要遭受病魔人患的残害而痛苦不堪呢?

不怕活着,何惧死亡?!

死亡之于人类,其实大不"公平",公平只在于"要死",即不管什么人都非死不可,任何人都得死。大不"公平",是在于死的价值不同。生来多创造,死后无遗憾。谁的创造成果越多,创造价值越大,谁的死亡创造力就越大。

祭文、奠章、墓志铭、告别词等等,是古往今来生者对死者一生创造的书面 总结。这里笔者不妨也作一篇"悼词",权当是写给百年后的自己的吧:

女士们先生们亲人们朋友们同志们:

我去了, 先你们一步去了。

创造,尤其是智慧的创造,使我青春无悔,生命无悔。在最值得珍惜的年华,我做了最值得做的事情。思索,耕耘,跋涉;跋涉,耕耘,思索……人类的文明和进步召唤着我,艰辛和痛苦成全了我,崇高和欢乐升华了我。此时此刻,我感到特别充实,全身的每个细胞都在愉快的溶液里浸泡着。如果说这是一种"幸福"的话,那么,我要说,是创造,追求卓越、倾心奉献的创造,塑造了我,成全了我,幸福了我。

女士们先生们亲人们朋友们同志们,别了!——瞧,幸福正笑盈盈地向你们走来,张开双臂、充满信心地迎接吧,幸福和快乐,属于追求卓越、倾心奉献的创造者!

1991年11月8日下午3时50分全书脱稿于西安慧雨庐;2023年1月19日再次修订于加拿大枫华阁;2023年3月9日第三次修订于加拿大枫华阁;2023年4月28日请ChatGPT英译完成于加拿大枫华阁。

#### 换个角度看世界——《创造论》跋

写这部书的想法萌动在三年前那段令人难忘的日子里。大概是初夏的一个傍晚,我和一位友人沿着西北大学的草坪边散步。谈到彼此的近期打算,我说我想写一部创造学方面的书。这部书和前人的有关创造的著作不同,前人多从心理学社会学的角度考究创造,我则想从哲学即世界观和方法论的高度来把握创造。比如,就可以将"创造"视为人类及生命的本质,世界万事万物的本原。这样以来,似乎可以超越哲学上的"唯物"与"唯心"之争——在即将跨入 21 世纪的今天,还你的鼻子我的眼睛地在一个似乎并不值得过多花费精力的问题上纠来缠去,显得很寡味、很没劲——为什么不可以换一个角度看世界呢?面对着如此宏阔、如此丰富、如此奇妙的大千世界,我们为什么总是强迫自己仅仅接受一两个人的绝对有种种局限的思想,而不可以走出局限、走出框范,走向新颖与鲜活呢?

从此便开始了积极的案头准备,并拉出了几章初稿。第二年,也就是去年,也是在初夏时节,偶尔在书店里看到了由上海文化出版社与香港海风出版社联合出版的"金字塔文库"丛书——列入丛书第一辑的有《死亡学精华》《谬误学精华》等,印得都精致,内容也不错——就萌生了将我的《创造学》加盟于此丛书的念头。随即便给丛书的主编余式厚先生写了一封信,谈了一番《创造学》的大体内容。余先生很快回了信,说欢迎加盟丛书,让我赶快寄两章样稿去。我便寄去了目录、前言和第一章。余先生看后复信说,决定将我的《创造学》列入丛书第二辑出版,让我最好在八月底以前完成全部书稿。

两个月内完成一部十七八万字的书稿,对有些"快手"来说或许可以,可我就感到吃紧。写这种论理性的、思辩色彩浓郁的东西,和编故事、写小说大不一样,内在的逻辑性要求你起码得想个差不离才可下笔。当时,我因声援过学生而受到批判、处分和贬谪,被剥夺编采权利(大约一年多时间不能在《西安晚报》上发表文章),到报社校对科上班。校对这个差吧,一点都马虎不得,紧留神慢留神,错别字就可能从你的眼鼻子底下溜过去。虽说每天上午一般只干两个多小时,可干下来,脑子就胀膨膨的,其他啥活都不想干也干不成了。

下午再有些杂事相扰,真正写东西的时间一般只有晚上。电影很少看,电视很少看,伴着别人家的欢声笑语和噼里啪啦的搓麻将声,我在桌上一趴几个小时。 大热天,一坐一身水;痔疮也坐犯了,老淌血。不能干得太晚,因为第二天还得赶大早上班。

就这么写了下去。每写好一章,就向住在杭州大学的余式厚先生寄一章。基本上是一个月一章的速度,余先生几次打电话催稿,可我就是快不了。8月底没完成,9月底未脱稿,其间因别的事又去了趟外地,直到11月8日下午1时,才将全部书稿干完。"总算写完了!"我长吁了一口气,并没有感到特别的兴奋。出去买了二斤回民坊上的清真糕点,吃了两块,又吃了碗酸汤饺子,算是对自己的一点慰劳。晚上,有朋友来聊天,我竟体力不支,疲惫得啥话都不想说一一写完一本书,真像害了一场病。

出版的情形不容乐观。余先生在电话里告诉我:一是我没有按计划完成书稿,拖过了时间;二是出版社的一位副主编对我书中的主要观点有异议,担心这本书问世后会给他和出版社带来麻烦(据说他曾经吃过这方面的亏)——这大概是主要原因吧。余先生的思想是比较"开"的,对我的书稿从观点到文笔都持赞赏态度,当然不希望夭折。于是便和那位副主编发生了争吵,吵得很厉害,吵的结果是彼此都做了让步,通知我:书可以按计划出,但必须将我的观点"修正"一番。

这当然是我不能同意的。我的观点是我书中的灵魂,撤换灵魂,以封闭陈旧取代鲜活新颖,我出这本书还有什么意义?这样,结局是读者可以想到的了,尽管余先生已安排人用电脑将书稿全部打了一遍。电话里,余先生再三对我说:有价值的东西是不会埋没的!好书总会有人出,有人看的!

这一点我也是坚信不疑,尽管还会遇到种种挫折。这不,在我写这篇《跋》的时候,整个清样已校过了两遍,即将制版付梓了。新世纪出版社已经出版了几十部大陆作家、学者的著作,在海内外影响深远。和这样的出版社合作,我的感觉中没有一丝一毫的不愉快。

书的取名是费过一番周折的:开始依《金字塔文库》的体例,叫《生命因此辉煌——创造学精华》,还曾经考虑用《卓越的呼唤——创造学论稿》以及《播种新太阳》等名字。后来,有朋友从将书推向市场的角度考虑,建议取《爆冷门的

学问》作书名,道理是据说胡适先生曾教导他的弟子三条出名成"气候"的"秘诀":上品是爆冷门,中品是骂名人,下品是捧名人。胡先生的话不错,但用其作书名,有朋友就表示反对,认为正儿八经的学术性著作,叫那样的名字有点不伦不类。于是决定,就叫《创造论》,堂堂正正的《创造论》!

当然,也不能不从"市场"角度考虑,在封面设计时加上"你想追求卓越吗?你想生命辉煌吗?你想出类拔萃吗?你想大爆冷门吗?"几行字。这几句诘问可以说是广告词,但也都在《创造论》的题旨之中。

我这个人,既喜欢"执",又不喜欢"过于执",不愿意将某个事物死死地揪住不放,想过的写过的折腾过的东西常常不愿再想再写再折腾。这样,这本书中的不少观点及论述,也就难免有许多不完善。但是,我相信,一个新颖鲜活的不完善,胜过一千个一万个落后陈旧的"完善"。任何东西,一旦彻头彻尾的"完善"了,也就接近彻头彻尾的完蛋了。我只想换个角度看世界,也为朋友们换个角度看世界,提供点镜片、镜头、参照物什么的,从而使我们大家都活得更符合人的创造本性些。

最后,我愿借此机会,向关心支持此书写作、出版的所有亲人、朋友致以诚挚的谢意!

庞 进 Pang jin 1992 年 12 月 29 日于西安日报社陋居

(全书 1993 年 5 月由香港新世纪出版社出版,其中部分章节分别发表于《美文》《艺术界》《陕西电大》《美学与美容》《西安晚报》等报刊。)

## 评论 1: 创造:人的生存本质——读庞进的《创造论》 畅广元

创造,是一个神圣的词。从语义学角度去研究它,其所指可以构成一个长长的意义链;从人类学的思路去思考它,把人类生存历程稍加具体化,就会理解它的内涵的丰富与博大。然而,我们绝不可能将"创造"仅仅看作一个词。不须把眼界放得很宽,只屑注目一下任何一位脚踏实地地沿着人的尊严所选定的生活道路默默奋进的劳动者,我们就会毫不怀疑地认为,创造是人的生存本质。从某种意义讲,研究"创造"不是为了说明自然界的功能,而是为了揭示人与人的实践本性。西哲有名言:人为自然立法。自然向人生成。细想起来,这些命题的确立就我们看,都与人是创造性的生存者紧密相关。认为人是运用符号创造文化的动物的恩斯特·卡西尔,不赞成对人性作实体性考察,力主从功能性上把握人性,首先关注的也是人的劳作状态,即是否为创造性的。创造是属人的。丧失了创造性,深刻点讲,就是人性面临危机。

我之所以喜欢庞进先生撰著的《创造论》,既不是我赞同他的全部观点,也不是书的封面上那颇具诱惑和刺激的广告式提问,而是他的严肃和坦诚地提出问题和解决问题的态度以及勇敢的开创精神。时下知识界中一批人文学者正在急迫地呼唤人文精神,启示人们去思考终极关怀,竭尽全力要重构我们民族的精神家园。这显然是从精神时弊出发的。"人文精神""终级关怀"到底包括些什么,可以仁者见仁,智者见智,但不把人当奴隶(不论是权力的还是金钱的),不把人当工具(不论是自我的还是他者的),而把人当作创造和支配自己命运的主人,去坚定不移地追求完美却应该是既定之意。庞进的《创造论》恰与这个时代激流共生并进,书的扉页上作者真诚地宣告:"在追求卓越与甘于平凡之间,我选择追求卓越;在屈服命运与征服生活之间,我选择征服生活。""追求卓越"与"征服生活"本身就是一种悲壮的创造过程,有志于此者,对"创造"的意蕴的体悟必然是独到的、

深切的,而这也正是《创造论》不是一般地从书本到书本的知识搬家,而是回荡着人生激情、满怀着远大理想、活跃着拼搏向上欲望的关于人的生存的综述。

然而《创造论》毕竟是作者"想写一部创造学方面的书",而且是与"前人多 从心理学、社会学的角度考究创造"不同的一部"从哲学即世界观和方法论的高 度来把握创造"的书。劈了一条新径,那是极不容易的,仅就想把"创造""视为 人类及生命的本质,世界万事万物的本原"来说,作者就得花大力气进行论证和 阐明。何况,他的"野心"还不小,想在这样一个非常重要的跨学科的理论问题 上,要"超越哲学上的'唯物'与'唯心'之争",要"换一个角度看世界",要 "走出局限,走出框范,走向新颖与鲜活"!现在看来,作者的勇气和胆识真起了 积极的促进作用,在数月之内,他汇笼资料、梳理思路、建构理论框架、修饰润 色文字,以近二十万字的篇幅,概论了自己关于创造的独到见解。读者读后是否 会同他的或全部、或部分、或个别的观点取得共识,暂且不说,有一条却是可以 肯定的,就是读者自己的创造意识的充实和提升、创造行为的自觉和完善定会从 这本书中得到启示。

按人在认识上表现的本性来说,是喜欢追问事物的本质的,崇拜普遍性,把 "一般"当作认知的直接目的。庞进当然深知这个道理,在《创造论》中,他专心致志地从多方面说明创造的本质和规律,并对"创造过程""创造效益"和"创造价值判断"作了尽可能展开性的论证与辨析。特别是本书后附录了他的硕士学位论文《论作家的智慧创造》,针对作家精神生产的创造,把《创造论》中阐述的基本理论和基本原则运用到实际分析作家的创造心理与创造行为上,具有较强的说服力。关于"创造律",作者并不是急于给它一个抽象的界定,而是立足于"创造无穷,释放和发挥创造效能的方式无穷,新的创造物无穷"的广阔学术视野,选择"新异替变""加减化合"和"文明积淀律",庞进在讲清"积淀"的"积累""遗传"和"滤汰"三层涵义之后,提出了他关于文明积淀律的几项若干原则:进步原则、优化原则和人道原则,并明确指出"作为制约和规范人类创造的特殊规律,文明积淀律要求人们在任何创造中都得遵守这几条基本原则,一旦有所违犯,就必将受到惩罚"。这就清楚表明,作者对人类的创造意识和创造行为的倡导,是以"文明"为前提的,而文明是以"人道"和"进步"为基础的"优化"历程,

在此可以见出作者思路的细密和他对创造价值的基本规范意向的高尚。

进入 21 世纪以来,世界上每个民族的实际代表和思想代表都在积极为自己民族的兴旺发达作物质的和精神的准备。可以设想,21 世纪从根本上说,少不了民族素质的竞争,少不了创造意识和创造行为的竞争。客观地认真地反思一下我们民族的现状,应该说,既有信心,又不容乐观。转型时期人的生存的意义世界里,"人为物役"的现象趋于普遍,金钱和权势争相扩大其支配"为人之道"的领域,真正进步的、人道的、优化的创造行为,不得不在支持与消解的氛围中坚持着。我们吁请社会关注这种精神现象。这当然并不意味着非得用一种价值序列来强化控制,而是要实实在在地重视文化教育,使人的本质力量逐步得到健康的发展。基于此,我愿向人们推荐庞进先生撰著的《创造论》。

(原载《美文》1994年第10期)

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# 评论 2: 创造的哲学与哲学的创造——读庞进的《创造论》

创造学虽不算是一门陌生的学说,但以往的论著大多限于心理学、社会学方面,而对创造本体的思考似乎是不大注意的。十分可喜的是,庞进先生所著《创造论》一书则有较大突破,他把创造作为一个哲学范畴来思考来运用,建立了一个超拔众说、新颖鲜活、颇具立体感的创造论哲学体系。我们钦佩庞先生的勇气和执着。

《创造论》给"创造"所下有富有创见的定义奠定了该书理论体系的基石。 庞进认为,创造"是由创造物参与并释放和发挥创造效能,经过创造过程完成从 而有新的创造物出现的活动"。这一定义的新颖鲜活之处,在于把创造拓展到包括 人类和非人类非生命的整个世界的范围,这一定义因其赋予创造以哲学本体论的 意义而使其创造论体系独树一帜:不仅人的本质是创造,而且世界的本来就是创 造。人以其独具的智慧参与创造,故人的本质是智慧的创造;人的智慧创造只是 世界的创造的一部分,非智慧者、非生命者因其同样"参与并释放和发挥创造效 能",所以它们也以其独特的方式参与了创造。宇宙间的一切都是创造物,同时又 都参与创造;世界不仅源于以创造为本质特征的创造物,而且世界正是通过创造 而起源的;宇宙万物永远处于创造中,故宇宙是永恒的,因创造而永恒。作者对 "创造"外延的拓展是其理论的突破口,从而使"创造"在内涵上更为新异和丰 满,更近创造的本质。一种本已僵化的理论一旦有了突破口,就有了滔滔然一泻 千里的气势。

"世界的本来是创造"这一命题很容易使人联想起中国古代哲学中关于天人合一的思想。《周易大传》讲人"与天地合其德,与日月合其明,与四时合其序",从创造论角度看,这亦可理解为天地创造了人赖以生存的自然界,日月创造了光明,人与自然的适应,和谐也是一种创造,人正是在这种创造中适应了环境,也

使环境愈来愈适应和满足人的需要,天与人处在对立统一的关系中。宋代关中学者张载提出"性者,万物之一源",又说"天地之塞吾其体,天地之帅吾其性。民吾同胞,物吾与也",把天(宇宙)人(人类)均视为一气之运化创造("天之化也运诸气"),洛学学者程灏亦谓"仁者以天地万物为一体",宇宙因创造而使天人合一成为永恒,可见庞氏的创造论对于哲学问题的升华具有重大意义。

重要的还在于作者从多角度、多层面研究创造学的广阔视野,建立了新的具有极强立体感的创造论体系。作者首先从不同角度探讨了"创造律",如"新异替变律""加减化合律""文明积淀律"等,基于将宇宙间一切活动视为创造活动的理解,作者把创造律内容明确为:创造物必然进入创造过程;必然要释放和发挥创造效能;必然有新的创造物出现。这正是哲学意义上所理解的规律,作者又从"创造态""创造过程""创造效能""创造价值判断"多层面细密深入地考察了创造的状态、创造的程序和轨道、创造的能量、创造力、创造的质量、度以及创造的价值指数等,其中许多概念是作者初次提出,许多观点新颖而惊人,如"创造态是世间万事万物最基本、最普通的存在方式"、"创造力是创造效能的释放和发挥"等命题,富有深刻的哲理性。其分析之细腻,语言之洗炼,资料之广博等都使该书透射出作者完成这一哲学创造之艰辛。作者写《创造论》的目的,是为了帮助人们"换个角度看世界",向人们昭示:人是作为创造物来到这个世界上的,"人的本性,人的使命,人的目的,人的一切,全在于创造"。无创造就无世界,无创造就无人类,无创造就无一切!总之,从创造论角度把握世界、认识世界,才能使自己活得"更符合人的创造本性"!

如果"你想追求卓越""你想生命辉煌""你想出类拔萃""你想大爆冷门",那么,劝君读一下《创造论》,也许你会从中获得强烈的创造激情的!

(原载《三秦晚报》1994年4月4日;《艺术界》1995年第5期)

(刘学智,著名哲学家,陕西师范大学哲学与政府管理学院教授、博士生导师。中华孔子学会副会长,国际儒联理事、中华孔子基金会学术委员,陕西省孔子学会名誉会长、陕西省哲学学会副会长、陕西关学与实学研究会会长等。著有《中国哲学的历程》《儒道哲学阐释》《儒道释与中华人文精神》《关学思想史》等。)

### 《庞进文集第一卷·创造论》(中文、英文版) 后记

《创造论》撰写于 1991 年。1993 年由香港新世纪出版社出版后,著名文学评论家畅广元教授、著名哲学家刘学智教授,于 1994 年为该书撰写、发表了切中肯綮的评论。在此,首先向两位令人尊敬的先生致以诚挚的谢意!

我 2016 年告别了报纸副刊编辑岗位。退休后,时间相对充裕,就想着把自己 几十年来写的东西整理整理,出一套文集,于是,撰写于三十年前的《创造论》 被列入文集的第一卷。

因家人选择到加拿大工作、生活,我在未退休前,曾有若干年每年都要来加拿大探亲、小住。这期间,一个偶然的机缘,认识了供职于多伦多华人媒体的龙牧华先生。龙先生了解到了我从事研究、写作的情况,就写了关于我的一篇采访记,以《庞进:龙凤文化研究第一人》为题,发表于 2009 年 5 月 7 日的《信报》上。

2010年11月,龙先生创办加拿大海慧出版社,邀请我做副总编辑。我特地作了一首《贺海慧出版社开张》的嵌名诗予以祝贺,诗曰:"海襟浩大纳百川,慧心化作远行船。启锚正当好风劲,航路通达天外天。"

2011 年 8 月,我与龙先生联合若干位热爱龙文化的同仁,在多伦多发起、成立了龙凤国际联合会。同年,我主编《飞龙福生——2011 贵州余庆龙文化与民族团结进步论坛论文集》(重庆出版社 2012 年出版),特邀龙先生撰写了《加拿大的龙文化》一文,并推荐龙先生飞越重洋,出席了该论坛。

我做海慧出版社副总编辑后,参与了该社若干本书的编校、审稿工作,并为该社出版的《多伦多 108 好汉》《枫国絮语》《枫国絮语 2》《心河流声》《加币之恋》写了序言,我的《龙情凤韵——庞进诗词选》,也由该社于 2015 年出版。

既然与海慧出版社、与龙牧华先生有如此友好的合作,那么,《庞进文集》就由海慧出版社来出吧。只是海慧出版社已更名加拿大西安大略出版社了。龙先生告诉我,更名为"西安大略",主要是因为出版社位于加拿大安大略省的西部。

巧的是, "西安大略"含有我的故乡"西安"二字; 而"大略"呢, 有两解, 一是"大概、大要", 二是"远大的谋略"。这"远大的谋略", 让人觉得也挺不错。

《创造论》从初面世到现在,尽管已过去了几十年,依然觉得有能够对得起读者的价值。适逢功能强大的 ChatGPT (聊天机器人程序)面世,于是,想到请 ChatGPT 翻译,出一个中文英文都有的《创造论》。ChatGPT 的确厉害,不到一个星期,就完成了全书的翻译。该书原来 17 万多字,现在变成了 47 万多字。这显然也是和我的《创造论》中的观点相吻合的新异替变、加减化合的产物。

随着互联网、数字科学的发达和智能手机的普及,电子阅读已成为时尚。鉴于此,这次《创造论》的再版,我打算采用电子书与纸质书相结合的方式。

感谢加拿大西安大略出版社,感谢龙牧华先生!

祝福所有与这本书有缘的朋友!

庞 进 2023 年 6 月 28 日于加拿大枫华阁 Selected Works of Pang Jin, Volume One

## Theory of Creation

Authored by Pang Jin

English translation:ChatGPT



Western Ontario Press Inc.

### Book Summary

This book starts with the fundamental questions of philosophy and expands the concept of creation to encompass the entire world, including both humans and non-humans. It argues that creation is a process in which the created entities participate, releasing and exerting their creative potential, ultimately leading to the emergence of new creations. It posits that the essence of the world is creation and that the essence of humanity is also rooted in creation. The Law of Creation is considered the most general and fundamental principle governing the natural world, human society, and human thought. The creative state is described as the most basic and universal mode of existence for all things in the world. The fundamental difference between human and non-human creation lies in the fact that human creation is characterized by intelligence, while non-human creation lacks this quality. The author, with a broad vision, in-depth analysis, and eloquent discourse, aims to establish a comprehensive and innovative philosophical system of creation. Through this system, the author seeks to provide readers with a fresh perspective on the world, offering valuable insights for maximizing the value of life and the beauty of the world.

Author Profile: Pang Jin is a writer and expert in Longfeng culture research. He was born in 1956 in Lintong, Shaanxi province, China. He serves as the Chairman of the Dragon and Phoenix International Federation, Honorary Chairman of the Chinese Dragon and Phoenix Culture Association, Director of the Chinese Dragon and Phoenix Culture Research Center, President of the Xi'an Chinese Dragon and Phoenix Culture Research Institute, and Senior Editor at the Xi'an Daily Press. Pang Jin is a member of the China Writers Association, a council member of the Shaanxi Provincial Writers Association, a special researcher at the Shaanxi Academy of Social Sciences, the editor-in-chief of the Chinese Dragon and Phoenix Culture website (www.loongfeng.org), and the Deputy Editor-in-Chief of the Xi'an Ontario Publishing House in Canada. He pursued his studies at Shaanxi Normal University and Northwest University, earning a Bachelor's degree in Philosophy and a Master's degree in Literature. Since 1979, Pang Jin has been engaged in literary creation and cultural research. He has published

more than 30 works, including "The Theory of Creation," "Chinese Dragon Culture," "Chinese Phoenix Culture," "Chinese Auspicious Symbols," "Ling Tree Swaying," and "Dragon Sentiments, Phoenix Rhythms." He has received numerous awards, including the First China Bingxin Prose Prize, the First Shaanxi Folk Literature and Art Mountain Flower Award, the Global Chinese Mother's Love Prose Competition Award, and the First Prize for Outstanding Achievements in Social Sciences in Xi'an, totaling over 80 awards. He is renowned as one of the "Top Ten Contemporary Figures in Longfeng Culture." His WeChat account is "pang\_jin."

### Theory of Creation

## Authored by Pang Jin

Between the pursuit of excellence and contentment with mediocrity, I choose to pursue excellence; between yielding to fate and conquering life, I choose to conquer life. —— This book is dedicated to all of my relatives and friends who have supported me.

East of Guanzhong lies Mount Huayue, while the Terracotta Warriors and Horses of Qin are more astonishing and breathtaking. I have come to know Mr. Pang, whose eyebrows are thick but not his breath, Vigorous, and whose literary talents are profound and timeless. The world is often cruel, but being able to enjoy it amidst the cruelty is an achievement. — Jia Pingwa

### 庞进文集第一卷

Selected Works of Pang Jin, Volume One

# 创造论

# Theory of Creation

庞 进/著

Authored by Pang Jin

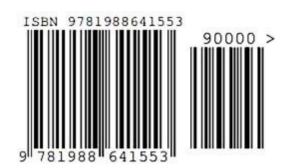
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## Foreword Q&A

Question: "Creation" is a very attractive and inspiring term that we are familiar with. However, we still know very little about "creatology". Could you briefly introduce the situation in this area?

Answer: The study of creativity as a science has not been around for very long. In 1900, German psychologist W. Stern published a paper titled "The Psychological Methods of Intelligence Testing," which introduced a new method for measuring intelligence called the intelligence quotient (IQ). As IQ was related to creativity, it can be considered one of the earliest studies related to creativity. In 1926, British psychologist Graham Wallas published the book"The Art of Thought, "which systematically studied the process of creative thinking and proposed the famous "four-stage theory of creativity, "which includes the stages of preparation, incubation, illumination or "aha" moment, and verification. In 1936, General Electric offered the first "Creative Engineering" course for its employees, placing a significant emphasis on exploring creative principles, teaching creative knowledge, and improving creative abilities. In the 1930s, American psychologist Joy Paul Guilford began to study the concept of creativity and methods for measuring it. He proposed four factors of creativity: divergent thinking, convergent thinking, continuous creative thinking, and original thinking. These factors became the basis for later studies on creativity. In 1941, Alex Faickney Osborn, a manager at the BBDO advertising company in the United States, invented "brainstorming"technique, which is a team-based creative thinking technique designed to promote innovation and problem-solving by encouraging and inspiring team members' creative ideas. Osborn published

the book "Applied Imagination" in 1953, which can be considered the first monograph on creativity. In the 1950s, British psychologist J.P. Guilford proposed the "spiral development model" to describe the process of creativity development. In this model, creativity is seen as a continuous and evolving process. In the 1960s, American educator E. Paul Torrance created the "Creative Thinking Skills" test, which became one of the important tools for later studies on creativity. In 1976, scholar Mel Rhodes published the book "Creating: A Comprehensive Guide to the Creative Process, "which is regarded as the greatest achievement in the field of creativity studies. In the 1970s, American psychologist Mihaly Csikszentmihalyi proposed the "Flow"theory, which suggests that flow is a psychological state full of creativity and challenges and is the foundation of creativity. In the 1980s, American psychologist Robert Sternberg proposed the "Three-Facet Model of Creativity, "which divided creativity into three aspects: novelty, utility, and aesthetics. This model became one of the main frameworks for later creativity research.

What is the current situation?

Answer: The current research on creating problems has spread to more than a dozen countries on all continents. Starting from the course "Creative Development" offered by Massachusetts Institute of Technology in 1948, more than fifty universities now offer similar creative courses. The subjects covered have become increasingly diverse, including not only relevant majors such as art and design, but also aerospace engineering, geology, architecture, management, journalism, education, and other disciplines. In addition, there are more than fifty specialized research institutes and some foundations dedicated to promoting creative research and education.

Here, the author would like to focus on the situation in Japan. The Japanese people are a highly creative nation who are unwilling to fall behind in anything. In 1955, Japan introduced the Creativity Engineering program from the United States and immediately began teaching it in universities. In 1979, Japan established the Society for Creativity Studies, followed by the Creativity Research Institute, as well as the "Sunday Inventor School"that aims to teach and exchange creative techniques, and the "Invention Idea" special program broadcasted by Tokyo Television since October 1981. In 1982, then Prime Minister Fukuda Takeo personally chaired a meeting and proposed raising the national creativity level as a path to the 21st century. April 18th every year is Japan's "Invention Day, "and Tokyo and other parts of the country hold grand events to recognize creators and inventors who have made outstanding contributions. In terms of the application of creative achievements, the Japanese are also at the forefront of the world. Japan's economic competitiveness has jumped to the forefront of the world, which undoubtedly has a lot to do with the Japanese emphasis on the study and application of creativity.

In Western developed countries such as the United Kingdom, Germany, and Sweden, there are also corresponding research institutions. By the 1990s, there were already around seventy to eighty monographs on psychology created worldwide, and over three hundred creative techniques had been developed.

Question: Is our country going to fall behind a bit?

Answer: Using the term "creation" as a vocabulary, our country is not late. The words "chuang" and zao have both appeared in pre-Qin classics such as the "Analects", "Book of Songs", and "Book of Rites". During the Southern and Northern Dynasties period from the 5th to 6th century AD, the historian Fan Ye combined the words "chuang" and "zao for use together.

Certainly, when it comes to studying creativity as an academic discipline, our country has been somewhat lagging behind. Like a belated

bride, it was only in the early 1980s that Creatology began to gain recognition. Advocated by a few scholars from Shanghai Jiao Tong University and Guangxi University, the "First National Academic Symposium on Creatology" was held in Nanning in June 1983. During the symposium, the "Preparatory Committee for the Chinese Creatology Research Society" was established, marking the beginning of creativity research in China. By the 1990s, there were few papers and monographs published on the subject, most of which were translations or compilations of works by foreign scholars. Examples include "Psychology of Creativity," "Social Psychology of Creativity," "Creativity and Creative Development," and "101 Creative Thinking Methods." There were also individual scholars who published specialized works, such as Lei Jiangwang's "Creative Education." These works focused on specific branches of Creatology, but comprehensive and systematic macro-level treatises were yet to be seen.

Question: What is the specific object of study in the field of creativity?

Answer: The question is actually about what creativity studies are and what kind of definition can be given to creativity studies. There are four definitions that I have come across, they are:

Creativity studies is a new discipline that emerged in the mid-20th century. Its purpose is to explore and reveal the laws of human invention and creativity, as well as to study how to cultivate people's creative activities and the formation of creative environments. Actively conducting research in creativity studies has significant implications for improving a country's efficiency in invention and innovation, promoting people's engagement in creative thinking activities, enhancing the economic benefits of technological improvements, and even the intellectual development of society as a whole. (Sun Xian, Liu Xun, et al. "Concise

Dictionary of New Technological Revolution Knowledge", Jilin Science and Technology Press, 1985)

Creatology should be a vast scientific system, and it is a scientific group that develops human initiative, creativity, and subjectivity. The basic theory of creatology will involve dozens of disciplines related to thinking, education, and management. Its applied sciences will involve "creative thinking", "creative psychology", "creative pedagogy", "creative engineering", "creative skills", etc. (Lei Jiangwang, "Creative Education", Xi'an Jiaotong University Press, 1989)

Creatology is an emerging interdisciplinary field that studies human creative abilities, the process of creation and invention, methods, and their underlying principles. It encompasses various disciplines such as philosophy, cognitive science, neuroscience, psychology, behavioral science, education, futurology, and the history of science and technology. It is a highly comprehensive discipline that focuses on the thinking and practical experiences of human creation and invention. The research scope of Creatology includes:Through empirical investigations and typological analyses of historical records of creation and invention, it reveals the mechanisms and conditions underlying human creativity and invention. It aims to explore the regularities of creative and inventive theories processes. By studying such as scientific methodology, technological methodology, and artistic methodology, Creatology aims to summarize and explore the general procedures and methods of the creative This the methodological foundation process. forms of creative activities. Through the study of creative psychology, epistemology, and the laws governing creative thinking, Creatology investigates the patterns, developmental principles of activities, and creative thinking. Additionally, through research in historical materialism and sociology,

it uncovers the relationship between creation and the social environment, as well as the social essence of creativity. These efforts contribute to the establishment of a comprehensive system within Creatology. (Xiao Haohui: "Dictionary of Decision Science," People's Publishing House, 1995)

Creatology is a science that studies the forms and structures of human thinking, psychological qualities, methods and techniques of creation, validation of creative results, and the influence of the environment on creativity. The main contents of creatology include: (1) studying the process of creative thinking; (2) studying the physiological mechanisms of creative thinking; (3) researching various factors that affect creative thinking; (4) cultivating and educating creative talents; (5) developing creativity; (6) exploring creative techniques; (7) evaluating creative results and the history of creatology's development. In recent years, creatology has focused on individual creative processes (including the relationship between psychological qualities, intellectual factors, and creative thinking) and the study of group creative processes and thinking. (Compiled by the Language Research Institute of the Chinese Academy of Social Sciences: "New Dictionary of Social Sciences", Commercial Press, 2001)

Compared to the other two definitions, the third one provides a clearer, more accurate, and more complete explanation of what creativity studies entail. It gives a preliminary understanding of the basic content and general scope of current creativity research.

There is a close connection between my theory of creativity and previous studies in creativity, but there are also significant differences.

What are the differences specifically?

Answer: The author's theory of creation is a worldview and methodology that constitutes the fundamental and universal laws governing the entire world, including the natural realm, human society, and human thought and development. The theory of creation posits that creation is the origin of the world and that creativity is inherent to human nature. It asserts that the law of creation is the most general and fundamental law governing the natural world, human society, and human thought. Furthermore, it contends that the creative state is the most fundamental and widespread mode of existence for all things in the world. The theory of creation seeks to elucidate why creation is the origin of the world and the essence of humanity, why the law of creation is the most general and fundamental law, why the creative state is the most basic and universal mode of existence, and the significance of such revelations and studies.

In that case, the distinction between the author's theory of creation and previous studies in creatology becomes apparent. Previous studies in creatology can be categorized into specific disciplines such as Creativity Engineering, Psychology of Creation, Science of Creative Thinking, Method Creative Education, of Creation, and others. Alternatively, disciplines can be integrated into a comprehensive framework. On the other hand, the author's theory of creation can be referred to as "Philosophy of Creation." While previous studies focus on the micro-level and provide concrete and specialized understanding of creativity, the author aims to comprehensively and abstractly grasp creativity from a philosophical standpoint. The author believes that only by approaching and studying creativity from the perspective of philosophy, which encompasses worldview and methodology, can the true nature of creativity be revealed, offering a novel and unprecedented perspective on understanding the world and oneself. This approach clarifies that humans come into this world as beings of creation, and everything about human nature, mission, purpose, and all aspects of human existence revolve around creation, particularly creative

wisdom. Without creation, there would be no world, no humanity, and no everything.

Question: It seems that you will be using this perspective to guide the entire book?

Answer: Yes. In this book, I will start by exploring the nature of the world and the essence of human existence, and then proceed to examine various aspects of creation, such as its definition, created objects, laws, states, processes, efficacy, categories, and value judgments. Naturally, this will involve the study of creative thinking, creative psychology, creativity engineering, creative education, and creative techniques. Furthermore, I will analyze politics, economics, religion, war, scientific discoveries, technological inventions, artistic creations, and love and death from the perspective of the philosophy of creation.

The theory of creation is the study of wisdom. The author's exploration is filled with challenges, yet it is endlessly fascinating. Our pursuit is intertwined with our creativity. Wise creation coexists with our lives. Creation brings vibrancy to the vast world. Creation enriches human society. Creation makes our lives radiant.

### One Creation and the World

#### 1 What is Creation?

● In ancient Chinese, "create" and "make"

In Classical Chinese, "创" and "造" were originally used separately.

"创" is explained in the "Shuowen Jiezi" as follows: "This character is made up of the component 刀 (knife) and the sound component 仓 (cang). It is used for all characters related to cutting or injuring with a knife." When one uses a knife to cut something, it makes a "cang cang" sound. When the knife creates a wound or injury, it is called "chuang". From this, "chuang" developed the meanings of initiating, creating something new, unprecedented, or being the first to do something.

Furthermore, "仓" refers to storing grain, and when combined with "刀", it means using a knife to harvest mature grain and then store it. In this way, "chuang" came to have the connotations of harvest, storage, and satisfying the needs for survival.

The historical texts and classics use the character "创" in the sense mentioned above. For example, in the "Analects of Confucius — Xian Wen", it says, "裨谌草创之" (the political decree was drafted by the official Bi Chan). In "Records of the Grand Historian — Sima Xiangru's Biography — Fengshan Sacrificial Text", it says, "Houji chuang yu Tang" (Houji initiated his work in the time of Emperor Yao in the Tang dynasty). In the "Book of Han — Xu Zhuan", it says, "liyi shi chuang" (the rites and ceremonies were established in this way).

The original meaning of "造" is achievement. For example, in the "Book

of Poetry - Da Ya - Si Qi", it says, "xiaozhi you zao" (the young man has achievements). Later, it was extended to mean create or make, as in the "Book of Rites - Yu Zao", where it says, "the official cannot make chariots and horses". In the "Discourses Weighed in the Balance - An Shu", it says, "The 'New Sayings' was created by Lu Jia. "Moreover, "造" also seems to have the connotation of spreading the news of one's own achievements, as in telling others about the achievements one has made.

The first person to combine "创" and "造" together in usage was the Southern Song historian Fan Ye. In his work "Book of the Later Han — Ying Feng Zhuan", he wrote, "Of the eighty—two matters... I have created twenty—seven of them." In the "Records of the Three Kingdoms — Wei — Annals of Emperor Wu", the annotation cites the "Book of Wei", saying, "Therefore, he created great achievements and employed both civil and military means." The meaning of "创造" in these two cases is quite clear: to invent or create unprecedented things.

#### • Definition of the predecessors

We have seen several definitions for "创造", such as:

"创造" means to initiate and create unprecedented things. (From "Cihai", compiled by the Language Research Institute of the Chinese Academy of Social Sciences, published by Shanghai Lexicographical Publishing House in 2016.)

"创造" means to come up with new methods, establish new theories, achieve new results or create new things. (From "Modern Chinese Dictionary", compiled by the Lexicographic Editing Office of the Language Research Institute of the Chinese Academy of Social Sciences, published by the Commercial Press in 2016.)

"创造" is a purposeful activity, the result of which is to discover (establish, invent) something new that was previously unknown, or to

actively adapt to the needs of the times by mastering existing cultural treasures. (From "A New Concise Dictionary of Philosophy", compiled by the Philosophy Department of Peking University, published by the Commercial Press in 2013.)

Creativity is an activity that requires intense physical and mental effort from human beings. It is the labor of social individuals. {[US] Mihaly Csikszentmihalyi: "Flow: The Psychology of Optimal Experience", translated by Zhang Kaiping and Zhou Fuxiang, Beijing Normal University Press, 1997.}

Creativity is the process of recombining known materials or ideas to generate new things or thoughts. Alternatively, creativity is the process of reorganizing known experiences to produce something with new value. (Robert J. Sternberg, "Creative Psychology", translated by Zeng Xianhua, Chen Yang, and Luo Liyong, Zhejiang Education Press, 2002)

The so-called "creation" means that it is not readily available, not mechanically imitated, but rather unprecedented and produced through human activity; at least it contains the element of "unprecedented" and "the first appearance." (Du Shuying, "Literary Principles: Creative Theory," People's Literature Publishing House, 2001)

Creativity means to break away from old ways and establish new ones. Creativity is innovation, which involves creatively solving problems. Narrowly defined, creativity refers to the activity of providing novel, original, and socially significant products, such as scientific discoveries, technological inventions, cultural and artistic masterpieces, and so on. Broadly defined, creativity refers to the activity of providing products that are unprecedented for the individual. That is to say, whether a person's solution to a problem is innovative or not does not depend on whether the problem and its solution have been proposed by others before.

In general, creativity or creative activity refers to the activity of providing new, original, and socially significant products.

The so-called creation is a complex psychological integration process in the process of creating unprecedented things. (From "Education Research", 1991, Issue 1)

If the above definition is not comprehensive enough, the author can also cite a group of definitions from Japanese scholars. In June 1982, the Japan Society for Creativity Studies solicited definitions of "creativity" from all its members. The results of eighty-three definitions were published in the society's journal in 1983. The variety is so diverse that "all sorts of" can hardly describe it. Briefly and roughly classified, some define creativity as a "human activity", such as:

The specificity of the process of creating something new in the solution of problems through the synthesis of concepts and representations is a remarkable human activity. (Tadashi Kameyama)

The activity of producing new values (means of satisfying human needs) that have not existed until now. (Mieni Tsugano)

Some definitions, while acknowledging that creativity is a "human activity," highlight the role of thought and spirit, such as:

Relying on exaltation to reach higher level concepts, applying these concepts to specific instances, and producing unique value through abstract and concrete spiritual activities. (Tadashi Murakami)

The idea that emerges from a leap beyond the usual thinking process, generally speaking, is a creative thing, and some are extensions of deep thinking. (Kimihiro Arai)

Some even define creation as an activity of "willpower", such as:

"The activity of becoming dominant on Earth as a result of the will of God, and at the same time, the activity that leads to the destruction of humanity. (Darusen Rang)"

"Creation is a legend of humanity, because it reflects a person's individuality, and therefore is a concrete manifestation of willpower. (Ogawa Tengami)"

Some definitions consider creation as a "capability":

"The desire and ability to create new things that are valuable to human life is a potentiality inherent in everyone, regardless of who they are. (Sato Mitsurou)"

"Creation is a function of intelligence that forms feedback when it is low and feedforward when it is high. (Sugita Motoyoshi)"

Some definitions consider creation as an "action":

"Creation is an action that generates new cultures based on the exchange of information between the left and right hemispheres of the human brain. (Hisashi Kyuta)"

"An action that removes all obstacles to achieving a goal and finds a quick way to achieve it. (Hosaka Einosuke)"

This type of action is even considered a form of "asceticism":

The act of creation has been humanity's destiny since the fall from paradise, and it is a form of asceticism for the sake of our survival. However, it also brings happiness, the degree of which varies from person to person. (Kenzaburō  $\bar{0}e$ ).

Regarding the concept of creation, it is seen as a "process":

The process of transforming something from nothingness to existence is what we call creation. However, the question of what nothingness truly is cannot be defined. (Keiji Iwata)

Creation is the process of climbing towards one's own self. (Junichi Kobayashi)

Creation is a form of "challenge."

Creation is a challenge to the realm of possibilities. (Mitsuo Abe)

Negating the current approach leads to further achievements. Therefore, one must devote all their energy to challenge the existing approach. (Modo Shima)

Creation is a form of "new combination."

A new combination of heterogeneous materials (this definition applies to all fields of spiritual activities such as science, art, philosophy, religion, etc.) (Shigeki Arisaki)

The spiritual or technical activity of arranging and merging two or more heterogeneous scientific information or intelligence together in order to achieve a certain purpose. (Shigehiko Kurosaki)

There are also some definitions that are not well-considered, such as:

Creation is the realization of the dream of the upcoming world (the future). (Tsunehiko Esaki)

To create ordinary yet new things, including destruction, for the happiness of all humanity, without the need for more artificial definitions. (Shō Nishi)

The author has tirelessly listed numerous previous definitions of "creation." On the one hand, this is to give readers an initial understanding of the current academic understanding of creation and to what extent it has reached. On the other hand, it provides a series of comparative references for the author's subsequent discussions.

The above definitions undoubtedly involve the essence of "creation"—
the emergence of new perspectives and new things. However, without
exception, they all limit "creation" to the scope of human activity. Whether
it is spiritual activity, the manifestation of will, or the abilities,
behaviors, processes, challenges, new combinations, etc., none of them
include non-human activities. As a result, there is a clear distinction

between what this book is discussing about "creation" and the definitions presented above.

#### • Creation and created object

I believe that creation is an activity where a creative product participates, unleashes and exerts its creative potential, goes through a creative process, and ultimately results in the emergence of new creative products.

The key to understanding this definition lies in clarifying what "creative product" means.

"Creative product" is a general term that encompasses all objects and phenomena that have already appeared or are currently appearing in the universe.

Before the emergence of humans, creative products were diverse in nature, such as the sun, moon, stars, mountains, rivers, trees, flowers, birds, animals, insects, and fish. After the emergence of humans, creative products not only include the diverse natural world but also include humans who can generate creative desire, engage in creative thinking, consciously unleash and exert their creative potential, and actively participate in creation. Human thoughts, concepts, emotions, feelings, attitudes, behaviors, lifestyles, social relationships, and so on are also included in the creative products. In short, all organic and inorganic, tangible and intangible, emotional and emotionless, material and spiritual, objective and subjective things are creative products.

Does that mean that there are no non-creative products in the world? From a macroscopic, holistic, and systematic perspective, everything in the world exists as a creative product. On the one hand, everything is the crystallization of creation, and on the other hand, everything has to enter

into some kind of creative process. If it does not participate in one kind of creation, it must participate in another kind of creation, without exception. Therefore, it can be said that there are no non-creative products in the world. However, from a microscopic, concrete, and relative perspective, if a certain object does not enter a certain creative process, or does not unleash and exert its creative potential, compared to the creative product that enters this creative process and unleashes and exerts its creative potential, the object can be seen as a non-creative product in this creative process.

For example, regarding the Gulf War, the ink bottle on my desk, the parasol tree outside my study window, and the crying baby in a room downstairs can be considered "non-creative products" of the Gulf War. Of course, the world is a whole, and the universe is one. We cannot say that the parasol tree outside the window, the ink bottle on the desk, the crying baby downstairs, and the Gulf War are absolutely unrelated and have no participation in the Gulf War. We can only say that this relationship and participation are so small that they can be ignored.

After having a general understanding of "creations," we can take a closer look at the author's definition and find it to be accurate and comprehensive. In terms of its connotation, it reflects the essential attributes of creation and summarizes all its content: creation is an "activity" that involves the participation, release, and utilization of creative energy by creations, completes the creative process, and produces new creations. In terms of its extension, its object scope is clear. All activities that meet the requirements of the definition, that is, "activities that involve the participation, release, and utilization of creative energy by creations, complete the creative process, and produce new creations," are considered as creations. In other words, the extension

of the concept of "creation" refers to all activities that meet the definition's requirements.

It is clear that activities that meet the requirements of my definition are not limited to human activities. Non-human activities, such as those of animals, plants, and inanimate objects, also meet the requirements of the definition. In other words, the concept of creation I am discussing includes all activities of both humans and all other objects outside of humans. This is the difference between my definition and the definitions previously mentioned. According to previous definitions, phenomena such as the rotation of the earth, solar eclipses, landslides, weather changes, birds building nests, swallows carrying mud, ants moving homes, and seals playing in the water are not considered creations. However, according to my definition, all of these are creations. For example, a tree growing from a seed in the ground and growing to towering heights is a creation. The objects participating in the creation process include the tree seed, soil, sunlight, air, and rainwater, among others. In the process of participating in creation, these objects all release and exert their creative potential. After several decades or even hundreds of years (a creation period), a new creation appears on the earth - a towering tree.

### 2 The theory of creation ex nihilo

#### • Origin and How it Originates

The "origin" that I am referring to here, refers to the ultimate source of all things in the world. "Ultimate source" has two aspects of meaning, or should be understood from two perspectives, namely "what is the source" and "how it is sourced".

There is great divergence among the thoughts of the previous

philosophers regarding the question of "where the origin lies". Their views can be broadly divided into four categories.

The first category: Originating from God.

The term "God" here refers to Yahweh, Allah, or other divine beings with attributes of omniscience, omnipotence, supreme power, and dominion over all things.

In Christian theology, it is believed that "In the beginning, God created the heavens and the earth" (Genesis, the Old Testament) and "The earth is the Lord's, and everything in it, the world, and all who live in it" (Psalms, the Old Testament).

The first fundamental belief in Islam is that "there is no god but Allah". It is this one and only God who "created everything on the earth". (The Quran, Al-Baqarah)

Hinduism and Brahmanism believe that the world and all things in it were created by their primordial ancestor "Brahma". According to the Manusmriti, Brahma originated from the "golden embryo" (Hiranyagarbha), and divided the eggshell into two halves, creating the heaven and earth. Then he created ten "Prajapatis" (lords of creatures) who completed the rest of the creative work.

The second category is: Origin from matter.

The material here can be divided into concrete matter and abstract matter.

The second view, which holds that everything originates from matter, can be divided into two categories: concrete matter and abstract matter. In ancient China, the "Water and Earth" chapter of the "Guanzi" stated: "What is water? It is the origin of all things, the ancestral home of all living beings, and the source of beauty, ugliness, wisdom, foolishness, and talent." The Greek philosopher Thales also believed that "water is the

beginning of all things. "Heraclitus, who lived a century later than Thales, believed that the world's origin is "fire." He said, "The world was not created by any god or man, it is and always will be an eternal and everlasting living fire."

There are also views that the origin of the world comes from several concrete substances working together. For example, the "Five Elements" theory in ancient China holds that the universe and all things are formed by the interaction of "metal, water, wood, fire, and earth". In ancient Greece, Empedocles proposed the "Four Roots" theory, which holds that the origin of the world consists of four basic elements: earth, water, fire, and air, and all things are mixed from these four elements in different proportions. In ancient India, the founder of Buddhism took the "Four Great Elements" (earth, fire, water, and wind) as the origin of all "rūpa" (equivalent to material phenomena), and believed that all things and the human body are composed of these "Four Great Elements".

The view that the origin comes from abstract substance, such as the "Yuan Qi theory" in ancient China. "Tai Lu" in "He Guan Zi" stated: "Heaven and Earth are formed by Yuan Qi, and all things ride on Heaven and Earth." "Yan Du" in "Lun Heng" stated: "All things are born of Yuan Qi."

Another example is the "atomic theory" proposed by the ancient Greek philosopher Democritus, which holds that the origin of the world is atoms and void, and everything is composed of these two substances.

The third category is: Originating from the spiritual realm.

Subjective spirit and objective spirit are the two types of spirit referred to here.

The subjective idealist view, such as the "School of Mind" in ancient China, as proposed by Liu Jiuyuan in the Southern Song Dynasty and Wang Shouren in the Ming Dynasty. They believed that "the universe is the mind,

and the mind is the universe", and "there is nothing outside the mind."

In the West, there is the subjective idealism proposed by the British philosopher George Berkeley, who said: "All the objects in the universe have no independent existence outside of human consciousness; their existence lies solely in being perceived and recognized by human consciousness." {[Ireland] George Berkeley, A Treatise Concerning the Principles of Human Knowledge, translated by Yang Shaochang, Commercial Press, 1981.}

In China, the objective idealism is represented by Zhu Xi's theory of "Li", which he considered as the basis of all living things. He said, "Before the creation of the universe, there was only Li. The existence of the universe is based on this Li. Without this Li, there would be no universe, no living beings, and nothing at all." (From "The Collected Sayings of Zhu Xi", Volume One)

In ancient Greece, Plato believed that "Ideas" were the primordial principle of the world. The "world of Ideas" was superior to the material world and existed prior to it.

In Germany, Hegel attributed the origin of the world to the "absolute idea" (or "universal spirit"). The absolute idea is not only transcendent of time, space, nature, and humanity, but also in constant motion, development, and change. The absolute idea is "externalized" into the natural world, and becomes all things in the process of this motion and change.

Derived from fuzziness.

The term "fuzzy" here refers to something that is unclear, undefined, and lacks a definite meaning. It can be interpreted in various ways and does not have a specific or precise definition.

For example, the ancient Greek philosopher Anaximander proposed the

concept of the "unlimited" as the "origin and element" of all existing things. This "unlimited" is something without a fixed nature.

In ancient China, the philosopher Laozi proposed the concept of "Dao". He wrote, "Something existed in chaos before the creation of heaven and earth. It is silent and formless, standing alone and enduring unchanged. It moves in cycles and is never exhausted. It can be considered the mother of the world. I do not know its name, but I call it Dao." Similarly, Zhuangzi said, "The Dao has feelings and is trustworthy. It is formless and inaction, it can be transmitted but not received, it can be attained but not seen. It has existed since ancient times and before the creation of heaven and earth. It is a god and an emperor, giving birth to heaven and earth. "However, what exactly is the "Dao"? It is vague and elusive, and nobody can explain it clearly.

There are various opinions about the origin of something, and there are also different ways of explaining how it originated. Overall, there are several main perspectives:

The first: Theory of divine creation

The Book of Genesis in the Christian Bible is a typical representation of the theory of divine creation. It is said that when God created the heavens and the earth, "the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters." Then, "God said, 'Let there be light,' and there was light. God called the light Day, and the darkness he called Night. And there was evening and there was morning, the first day." Then, using the same method, God spent five more days creating the air, land, seas, plants, trees, the sun, the moon, the stars, birds, fish, and animals. After creating everything in the world, God rested on the seventh day.

Was there anything before God's creation? The description in the Book

of Genesis is ambiguous, as it says "the earth was without form, and void," but also mentions the "deep" and "waters." It was not until the writings of Augustine and theologians in the Middle Ages that the Church clarified that God created everything from complete "nothingness." This means that before the creation of the universe, there was no material existence, not even time and space, only God and His "Word" and "Spirit." God spoke His "Word" and created everything in the world.

In Indian mythology, the creator god "Prajapati" "created the earth and separated the heavens by his might" (Rigveda). "Prajapati said, 'Now I will beget progeny; I will produce many.' And so, he brought forth this world through his own heat, and thus created the three realms of heaven, air, and earth" (Taittiriya Brahmana). "Prajapati uttered the sound 'Bhur', and the earth was produced; he uttered the sound 'Bhuvar', and suddenly space was produced; he uttered the sound 'Svar', and the sky was produced" (Atharva Veda).

In ancient Chinese mythology and folklore, Pangu played the role of creating heaven and earth. It is said that at first, "heaven and earth were in a state of chaos like an egg, and Pangu was born within it" (The Three-Five Histories). He "stretched his body, and the sky gradually rose, while the earth fell down. There was still a connection between heaven and earth. He held a chisel in his left hand and an axe in his right hand, and he either used the axe to split or used the chisel to open. This was his divine power. After a long time, heaven and earth were separated. The two gases rose and fell, and the clear one rose to become the sky, and the turbid one sank to become the earth. Thus, the chaotic void was opened" (The Popular Records of the Creation and Derivation).

Regardless of whether it is the God of the West or the Shengzhu and Pangu of the East, the theory of divine creation undoubtedly has a strong mythological flavor, or in other words, they are beautiful myths themselves. As the worldview of ancient ancestors, the basic characteristic of mythology is to personify and visualize natural forces through imagination. Since it is imagination and this imagination is adapted to a very low level of productive forces, it was created in the infancy of humanity, and its illusory nature is self-evident.

Another flaw of the theory of divine creation is its oversimplification. How did the world originate? This is a very complex and serious question, but in the theory of divine creation, everything is simplified to be as easy as building blocks for toddlers. In fact, it is even simpler than building blocks because building blocks take some time to assemble, while in the theory of divine creation, all it takes is for God to speak.

In the Book of Genesis, the phrase "And it was so" appears five times, indicating the completion of each act of creation. How did it happen? God simply spoke it into existence. God said, "Let there be lights in the expanse of the heavens to separate the day from the night. And let them be for signs and for seasons, and for days and years, and let them be lights in the expanse of the heavens to give light upon the earth," and it was so. God said, "Let the earth bring forth living creatures according to their kinds—livestock and creeping things and beasts of the earth according to their kinds," and it was so...

According to ancient Arabs, "The Creator creates the universe and all things in it by his will and his language. If there is no language or if it is not spoken, the universe and all things will not exist." (One Thousand and One Nights, translated by Chen Qingzhi, People's Literature Publishing House, 1979). In another story, it is even more specific and vividly described: "The universe, the Tuba tree, Adam and Eden were all directly created by Allah's almighty hand; as for everything else, Allah only said

'Be!' to them, and they came into being." (One Thousand and One Nights, translated by Chen Qingzhi, People's Literature Publishing House, 1979).

Is reality really that simple? The answer is undoubtedly no. Take the phenomenon of life, for example. The process of its origin, namely the evolution from inorganic matter to primitive life, has gone through a complex and lengthy process of changes over billions of years, which cannot be accomplished simply by the word of a certain "god". This has been proven by modern biological science and is an indisputable fact.

The second: Derivative theory.

The phrase "道生一,一生二,二生三,三生万物" (Chapter 42 of Laozi's Tao Te Ching) can be seen as a typical expression of derivative theory. In the Indian text "Brahma Sutras", which discusses the birth of the "creator", there is also a sense of "derivation": "In the beginning, the world was water. Water thought to itself, 'How can I multiply?' After thinking, it produced heat and gave birth to a golden egg." ... This egg "swam in the water. Within a year, a person was born from the egg, and he became the creator. "These quotes suggest the idea of a creation process that starts from one and derives into many. In both the Taoist and Indian texts, there is a sense of a primordial unity that gives birth to diversity and multiplicity through a process of derivation or manifestation. This concept can be applied to the field of finance and investment, where derivative theory deals with the creation of new financial products based on underlying assets or contracts.

Derivative theory was proposed by ancient people after observing the phenomenon of continuous birth and growth in the natural world. It has intuitive and simple characteristics, and also contains a certain degree of rationality. However, its weakness lies in using some examples to explain the whole, and treating general phenomena as universal laws.

The third: externalization theory.

The theory of externalization can be divided into two types: subjective spiritual externalization theory and objective spiritual externalization theory.

Subjective spiritual externalization theory can be found in Chinese ancient philosophy of the mind, such as in the theory of Xin Xue. For example, the Song dynasty philosopher Shao Yong stated in his book "Fisherman's Song" that "nothing is greater than the heaven and earth, which originate from the Taiji, and the Taiji is equivalent to my heart. The infinite changes and phenomena of the Taiji are the same as those of my heart." Similarly, the Ming dynasty thinker Chen Xianzhang believed that "the wise man's heart contains all knowledge, and despite the diversity of things, they all exist within me." Based on this, he further proposed that "the universe exists within me, for I stand in the center of heaven and earth, and all transformations emanate from me" (from "Chen Xianzhang's Collected Works", Volume 3, "Correspondence with Lin Junbo").

Zen Buddhism is a typical Chinese form of Buddhism, which believes that "all phenomena are contained within the self-nature of one's own mind", and that one should "attain the true nature within one's own mind." This "attainment of the true nature within one's own mind" undoubtedly falls under the subjective externalization of the mind. A famous koan from the Zen tradition goes like this: "The wind is moving the flag." One monk said, "The flag is moving." The other said, "The wind is moving." They argued back and forth, but Hui-neng said, "It is not the wind that moves, nor is it the flag that moves; it is the mind of the wise that moves" (from the "Platform Sutra of the Sixth Patriarch" in the Dunhuang Manuscripts).

In the philosophy of the British philosopher George Berkeley, subjective externalization is expressed as "to be is to be perceived by the mind." He believed that objects are just collections or combinations of ideas or sensations. For example, an apple is a collection of sensations such as color, smell, taste, and shape. If these qualities of sensations are removed, then the apple ceases to exist. Therefore, he argued that "all objects contained in the universe have no independent existence outside of the human mind; their existence depends on being perceived and known by the human mind." (George Berkeley, "A Treatise Concerning the Principles of Human Knowledge," translated by Yang Shaochang, Commercial Press, 1981)

The subjective externalization theory emphasizes the active role of human mental factors. If we only consider the subjective world's impact on the objective world, there is some merit to this theory. However, the problem lies in the fact that this externalization theory exaggerates the role of human mental factors infinitely, inevitably leading to absurdity. It cannot explain the origin and source of the world before the emergence of humans.

In China, the objective externalization theory is represented by Zhu Xi's concept of "li" (principle). "Between heaven and earth, there is li and qi. Li is the principle that exists in the world of forms, it is the foundation of all living things. Qi is the tool that manifests the li in the world of forms, it is the essence of all living things." (From "Reply to Huang Daofu") According to Zhu Xi, the sun, moon, stars, and earth in the natural world are all manifestations of li, which are produced by the "grinding" of qi. "In the beginning, the earth was just the qi of yin and yang. This qi circulated and was ground, and when it became too fast, it formed many residues that could not escape and eventually solidified into the earth in the center. The clear qi becomes the heavens, the sun, moon, and stars, which constantly revolve around the outside, while the earth remains stationary in the center and does not move." He also said, "The

process of creation is like grinding, which constantly turns without stopping. The birth of all things is a result of the scattering that occurs during the grinding process, resulting in varying degrees of coarseness and fineness." (From "Zhu Zi Yu Lei")

The objective idealism is manifested in Hegel's philosophy as the externalization of the absolute idea. This "externalization" is particularly evident in the second stage of the dialectical development of the absolute idea, namely the stage of natural philosophy. In this stage, the absolute idea externalizes itself as nature. Within this process, there are three sub-stages: the mechanical stage, where everything in nature is in a chaotic state of scattered, dispersed, and mechanical disarray; the physical stage, where individual things appear in nature, such as the formation of planets and volcanic eruptions, and various physical phenomena such as sound, light, heat, electricity, and magnetism emerge; and inevitably, the physical stage develops into the organic stage, where after the evolution of geological organisms, plant organisms, and animal organisms, finally, there emerges a thinking organism, namely humans.

The foundation of Hegelian philosophy is illusory, but in his discussion of the development and evolution of the absolute idea, he had the "germ" of evolutionary theory and the "rational core" of dialectics, which are worth affirming.

The fourth: motion theory.

The first proponent of the motion theory was probably the ancient Greek philosopher Democritus. He believed that the ultimate reality of the world is atoms and the void. Atoms are the smallest, invisible, indivisible particles of matter, which are solid, impenetrable, and indestructible. The void is the space where atoms move, which is characterized by looseness. Democritus believed that an infinite number of atoms move rapidly and

randomly in the void of the universe, with high velocity and easy collisions, forming "atomic vortices." Therefore, the combination of atoms forms all things, and the dispersion of atoms leads to the disappearance of things. He even believed that the soul is also composed of atoms, that is, of flame-like, spherical, and easily movable atoms. Democritus's contribution is to regard motion as an inherent property of atoms, propose the idea of atoms moving by themselves, and use the motion of atoms to explain the occurrence, development, change, and destruction of things.

In the above, the author spent a lot of space summarizing various views on the issue of origin, not only to provide a reference series and give readers a general understanding of the various views on the origin of the world we live in, but also because, in a macro and broad sense, these views should also be included in the "creation theory". They could be respectively referred to as "divine creation theory", "derivative creation theory", "spiritual externalization creation theory" and "motion creation theory". These theories in quotation marks are far from the creation theory that the author wants to talk about, such as "divine creation theory" and "spiritual externalization creation theory", some of them have some merits, such as "derivative creation theory", and some are relatively close, such as "motion creation theory". However, whether they are close or far away, have some merits or not, they are not a system.

The author's system considers creation as the origin of the world.

Certainly, the various perspectives mentioned above have provided the author with an insight: regardless of the "creation" in "divine creation," the "life" in "derivation," the "transformation" in "externalization," or the "motion" in "movement," they all share a commonality, which is "motion." In other words, "motion" is something common among different viewpoints. With "motion," there is this world; without "motion," there would be no

world. The world is born because of "motion," and "motion" creates the world.

"Motion" and "creation" are synonymous.

#### • The origin of the world is creation

The author defines the origin of the world as creation, mainly based on four aspects: the world originates from creations that have creation as their essential characteristic; the world originates through creation; everything in the universe is a creation; and all things are always in the process of creation. We will elaborate on these points below.

Firstly, the world originates from the creative objects that have creativity as their essential characteristic.

As we know, "world" and "universe" are synonyms. According to the annotation of "Original Principles" in the ancient Chinese book "Huainanzi", "up, down, left and right are called 'universe', while ancient and modern times are called 'cosmos', as an analogy to heaven and earth." Philosophically, the universe generally refers to the totality of space and all the celestial bodies and diffuse matter existing in it, which is vast and boundless.

The most influential theory about the origin of the universe is the "Big Bang cosmology" proposed by American (of Russian descent) astronomer George Gamow and others in the 1940s. This theory holds that the universe, as we know it today in the natural sciences sense, has undergone a process of expansion from a dense and hot state to a sparse and cold state. The expansion started with a violent and rapid burst of energy, much like a massive explosion.

For the sake of convenience in our discussion, it is necessary to briefly introduce the relevant content of the Big Bang cosmology.

About 10 to 20 billion years ago in the early universe, the temperature

was over 10 billion degrees Celsius, and the only particles were electrons, photons, neutrinos, and a small amount of protons and neutrons in a highly dense state. As the entire system expanded, the temperature rapidly dropped. When the temperature dropped to around 1 billion degrees Celsius, protons and neutrons began to combine to form heavier elements such as deuterium and helium. When the temperature dropped to 1 million degrees Celsius, the process of forming chemical elements in the early universe ended, and the main substances in the universe were protons, electrons, photons, and some relatively light atomic nuclei. When the temperature dropped to a few thousand degrees Celsius, electrons combined with hydrogen and helium nuclei to form atoms. These atoms gradually condensed into gas clouds, which continued to combine and eventually formed the many galaxies and stars that populate the universe today.

As the author mentioned, creation refers to the activity where a creation participates, releases and exerts its creative power, goes through a creative process, and creates new creations. Therefore, if we apply the theory of the Big Bang cosmology to the author's concept, we can see that the origin of the universe is actually a massive creative process that consists of many relatively smaller creative processes. If we view the formation of chemical elements as the first creative process, then the most primitive creations are the basic particles, such as electrons, photons, neutrinos, neutrons, and protons, which were in a high-density state. It was these basic particles that entered the initial creative process, released and exerted their respective creative powers, and thus generated new creations — the basic nuclei of heavy hydrogen (deuterium) and helium nuclei, and other chemical elements.

The author has previously stated that creation refers to the activity in which the created object participates, releasing and exerting its

creative power through a creative process to produce a new creation. Therefore, if we incorporate the Big Bang cosmology into the author's theory, we will discover that the process of the origin of the universe is actually a massive creation process composed of many relatively small creative processes. If we consider the formation of chemical elements as the initial creative process, then the most primitive created object would be the basic particles such as electrons, photons, neutrinos, neutrons, and protons that existed in a high-density state. It was these basic particles that entered the initial creative process, releasing and exerting their respective creative powers, and producing new created objects - the nuclei of chemical elements such as deuterium and helium. As the author has stated, any created object is actually dual in nature: it is both a participant and a result of creation. As participants in creation, basic particles such as electrons, photons, neutrinos, neutrons, and protons contributed to the formation of new creations (chemical elements such as deuterium, helium, lithium, etc.) by entering the initial creative process of the Big Bang. As a result of creation, basic particles such as electrons, photons, neutrinos, neutrons, and protons are also the products of other creations that have participated in the creation process. This is equivalent to saying that before these basic particles, there were even earlier and more primitive creations. What were these creations? Cosmologists have put forward the view that there were point particles such as leptons and quarks before the basic particles based on observation and speculation. If this view is correct, it can be assumed that the universe originated from point particles such as leptons and quarks. If we trace back even further, were there any created objects before the point particles such as leptons and quarks? Yes, there were, but human ability is limited, and we currently do not have knowledge of them.

In fact, the universe that modern cosmology faces is one that is over 10 billion light years in distance and time. Although it is already so far away in terms of time and distance that it is beyond our imagination as human beings living on Earth, it is still a "finite" universe that is observable by astronomical observations, and not a universe in the philosophical sense of the term. The philosophical universe is "infinite," without beginning or end in time and without limits in space. However, the philosophical infinite universe cannot exist independently of the finite universe explored by astronomy. As a summary and abstraction, the former must be based on and only on the facts observed by modern cosmologists and the theories they propose as a blueprint.

In fact, the universe that modern cosmology faces is an observable universe with a distance scale of over 10 billion light-years and a time scale of over 10 billion years. Although it is already so far away from us in terms of time and distance that it is difficult for us humans on Earth to imagine, this universe is still a "finite" universe that can be observed by astronomical observations. It is not a philosophical universe in the sense of philosophy. The philosophical universe is "infinite", with no beginning or end in time, and no boundaries or edges in space. However, the philosophical infinite universe cannot be separated from the finite universe of astronomy. As a summary and abstraction, the former must be based on the exploration and research of the latter, and must only be based the facts observed and the theories proposed modern on by cosmologists. Therefore, it is necessary to explain that when discussing the problem of the world's origin, the author used the Big Bang cosmology as an argument, or in other words, incorporated the theories of modern cosmology on the origin of the universe into the author's theoretical system. The advantage of doing so is to increase the persuasiveness of the author's

argument, and thus prove that the author's theory of creation can explain and generalize (or cover) any natural science theory. The disadvantage is that this can easily make philosophical issues scientific. For example, the author said that the world originated from a creation, and brought in the Big Bang cosmology, which may make the creation here concrete to certain fundamental particles or point particles. Here, it needs to be emphasized repeatedly that if we limit our focus to the framework provided by modern cosmology, we can regard the initial creation as certain fundamental particles or point particles; if we go beyond the framework provided by modern cosmology, then the creation that led to the generation of the universe may be something else. Although we cannot observe or measure them now, they are undoubtedly creations. There are creations before creations, and creations before creations. The universe is infinite, creation is infinite, and creations are infinite. One thing can be certain: the world originated from a creation.

The second point is that the world originated through creation.

Since the world is said to originate from a created entity, why not consider the created entity as the origin of the world, and instead consider creation as the origin of the world? What is the relationship between the created entity and creation?

The concept of "origin" has two aspects: where it comes from and how it originates. These two aspects are closely related and indispensable. Without knowing where something comes from, we cannot talk about how it originates; and without understanding how it originates, there is no such thing as where it comes from. When previous philosophers discuss the problem of origins, they often emphasize where things come from, while I would like to emphasize more on how things originate, although both aspects are equally important. Understanding the origin leads to an understanding of the

essence, and understanding how things originate leads to an understanding of where they come from. Emphasizing where things come from provides a static understanding of the problem of origins, while emphasizing how things originate provides a dynamic understanding. A dynamic understanding seems to be closer to and more in line with the original nature of the universe.

Obviously, saying that the world originates from the Creator solves the problem of where it comes from, while saying that the world originates through creation solves the problem of how it originates. Creation is the activity of a created being entering the creative process, releasing and exerting its creative power, and generating new creations. Only when a created being enters into creation can it be called a creation, and creation can only be the creation of a created being. There are no creations that do not enter into creation and no creations that are not created beings in the world. Creation is undoubtedly the most essential characteristic of a created being, so it is more accurate to say that the world originates from creation rather than from created beings.

Taking the materials provided by cosmology's Big Bang as an example, if the basic particles such as electrons, photons, protons, and neutrons (the original creations) in the earliest stage of the universe did not enter the explosion process (the universe's overall expansion, sudden temperature drop, and release of a large amount of thermal energy), they could not combine with each other to form light elements such as deuterium, helium, and lithium (new creations). Similarly, if light elements such as deuterium, helium, and lithium (creations) do not combine into atomic nuclei (new creations) as the temperature continues to drop, and if atomic nuclei (creations) do not condense into gas clouds that continue to combine, various galaxies and stars in the universe (updated creations) would not

form.

Here, the explosion, combination, condensation, and combination mentioned are all creation processes. The creation process is the carrier and orbit of creation, and creation is carried out, unfolded, and completed through the creation process. One relatively small creation process connects and combines to form a relatively large creation process, and one small creation accumulates and evolves into a huge creation.

In this way, the generation process of the universe is that the initial creation enters the creation process, releases and exerts the creative energy to generate new creations, and the new creations enter the creation process to continue releasing and exerting creative energy to generate updated creations. The updated creations then enter the creation process again to release and exert creative energy to generate even newer creations. To summarize, it is creation  $\rightarrow$  recreation  $\rightarrow$  recreation again... accumulating into a large creation.

This summary highlights the significant role of creation in the process of universe generation. This role is fundamental, which means that without creation, there would be no universe, no world, and our world originated and formed through creation.

The third point is that everything in the universe is a creation.

The world we face includes everything in the universe, from celestial bodies and galaxies, to the sun, moon, basic particles, and unicellular organisms. It encompasses the macrocosm and the microcosm, from things that fly in the sky, run on the ground, and swim in the water, to things that don't fly, run, or swim. All of them exist as creations in the universe.

The author asserts that everything in the universe is a creation because, firstly, everything is the result of creation, and secondly, everything is a participant in the act of creation.

Taking the sun as an example, the sun is the central celestial body of the solar system and the closest star to us. Stars are celestial bodies that are formed by the aggregation of interstellar creations such as dust, particles, certain elements, and their molecules. In the later stages of the Big Bang, the universe formed many interstellar clouds (creations) with hydrogen, helium, and other elements as the main components. These interstellar clouds constantly contracted (creation process) under the influence of their own gravity (creative power). When they contracted to a certain extent, they formed new creations, including the sun, which are composed of hot gases and can emit their own light. As a new creation, the sun must continue to enter the creative process, such as rotating, revolving, emitting light, releasing solar wind, and producing solar flares and sunspots. Everything formed by the sun's participation in creation can be regarded as new creations.

Taking a pebble in a small river as an example, it may come from a big mountain, which is definitely the result of a mountain-building movement or creation. The rocks on the mountain loosen due to wind, rain, and earthquakes, and are swept into the river by floods. They become smooth and round pebbles through the grinding action of water. After this series of creation processes, a smooth and round pebble, a new creation, is formed. Of course, this pebble will continue to be created. If it remains in the water, it will continue to be smoothed by water and become a part of the scenery, embellishing the environment with aquatic plants and fish. If it is picked up, it may become a part of a concrete structure, such as a building foundation, bridge pile, or road surface, contributing to human civilization. If a child picks it up and puts it in a slingshot to shoot birds, it becomes a weapon and enters a new creation process. If the bird is shot down (even if it is not shot down, the act of shooting itself is

also a creation), the mission of this pebble in this creation process is completed, and it enters another creation process.

The myriad things in the world can all be seen in this way.

The fourth point is that everything in the world is always in the process of creation.

As the author mentioned before, everything in the world is a creation, and creations are both the results and participants of creation. As the result of creation, it signifies the end of a creation process. As the participant of creation, it signifies the beginning of another creation process. This is an endless, ceaseless, and infinite chain of creation, where each creation process is just a link in this chain. Creation is limitless, creations are limitless, and the chain of creation is limitless.

Let us take the sun as an example. Scientists have analyzed the spectrum of the sun and found that the most abundant element in the sun is hydrogen, accounting for about 71%; followed by helium, which accounts for about 27%; and there are also other elements such as carbon, nitrogen, oxygen, iron, silicon, magnesium, sulfur, which account for about 2%. The sun is a hot gas ball with a central temperature of up to 15 million degrees. Under such creative conditions, the "nuclear fusion" process (a creative process) of hydrogen nuclei fusing into helium nuclei is continuously carried out in the central region of the sun, producing and releasing the creation - huge amounts of energy. These energies are mainly emitted into the universe in the form of radiation (a creative process). At this time, the sun is in the main sequence star stage (previously called a protostar or "star embryo"), which lasts for billions of years. When all the hydrogen in the core of the main sequence star has been fused into helium through the nuclear fusion process, this stage ends. At this point, the nuclear fusion process, as a creative process, shifts from the central region to the outer core,

releasing heat that causes the sun to expand dramatically, the surface temperature to decrease, and the radiated light to be mainly red. At this stage, the sun evolves into a new creation — a red giant.

Entering the red giant phase signifies that a star has entered middle age. At this stage, the temperature in the core of the Sun is as high as 10,000 Kelvin, or 100 million degrees, and helium starts undergoing fusion to form carbon. After all the helium in the core has been fused into carbon, there are further nuclear reactions, such as carbon to oxygen and magnesium, oxygen to neon and sulfur, and so on. Each reaction is a creative process, generating new creations, i.e., heavier elements. Eventually, all the nuclear fuel will be exhausted, and everything will fuse into stable, heavy elements like iron. This series of nuclear reactions marks the Sun's transition into the late-stage star phase. During this phase, the luminosity and volume of the Sun will vary periodically, and it will expel a large amount of matter outwardly, creating new creations in the sky, such as planetary nebulae.

After all the nuclear fuel in the Sun's core has been burnt, the nuclear reactions stop, but the process of creation does not end. The high temperature causes continuous explosions in the outer layers of the Sun, ejecting a large amount of material, leaving only a dense core, which is called a white dwarf. The white dwarf continues to create and gradually evolves into a red dwarf, which in turn evolves into a black dwarf. The black dwarf can be said to be the symbol of the end of the Sun's life as a star. However, the process of creation does not end here. The black dwarf still enters a series of creation processes, continuing indefinitely.

The sun is forever in a state of creation, as are all things in the universe. The specific forms, structures, and characteristics of all things are diverse and complex, yet they all inevitably undergo the process of

creation, releasing and exerting their creative energy, and generating new creations. This is a universal, unchanging, and eternal aspect of all things. In other words, creation is the fundamental characteristic of all things. This fundamental characteristic and commonality determine that all things must be creations. Specific creations can take on a multitude of forms, while abstract creation, which refers to creation as the ultimate origin of the world in philosophical terms, can only be singular. The fact that creation is the fundamental characteristic and commonality of all things is not contradictory to the individuality and other characteristics possessed by each thing. Individuality and other characteristics belong to and are an expansion and manifestation of the fundamental characteristic and commonality.

For example, in a forest, the trees are diverse in species, size, and shape, but they all undergo photosynthesis, which is the process of using solar energy to convert water and carbon dioxide into carbohydrates, while releasing large amounts of oxygen. Photosynthesis is a process of creation. Saying that photosynthesis is the common characteristic of trees is the same as saying that creation is the common characteristic of trees. Although there are differences in the shapes, colors, and thicknesses of leaves, the amount of oxygen they release may also vary.

Just as trees in a forest come in a variety of species, shapes, and sizes, but all undergo photosynthesis — the process of using solar energy to convert inorganic substances like water and carbon dioxide into carbohydrates and oxygen — so too are all things in the world constantly in a process of creation. This fundamental characteristic and commonality of creation means that all things are, at their core, created entities. Concrete examples of creation are endless, but abstract creation — the philosophical concept of creation as the world's origin — can only be one.

Although the individuality and other traits of things do not contradict their fundamental characteristic and commonality of creation, individual traits are subordinate to and serve as the specific manifestations of this fundamental characteristic and commonality. In the same way, different entities - such as the wutong tree outside the window and the desk lamp on the writer's desk - may belong to different categories of created entities. The wutong tree grows and blooms, and the desk lamp lights up when it's plugged in. Both growing and blooming, and lighting up, are examples of creation, even though growing and blooming cannot be equated with lighting up. They represent different concrete examples of the creative process, but when we abstract their commonality as created entities involved in the process of creation, we find that they share a fundamental unity. Moreover, from the writer's perspective, both the wutong tree and the desk lamp are part of the writer's creative atmosphere and serve as creative conditions - the wutong tree brings greenery and the desk lamp brings light. In the writer's creative output, we can also see their selfless contribution. If we take a broader view, we can see that the wutong tree, the desk lamp, the writer, and everything visible and invisible, all belong to the category of created entities on Earth, and are part of the creative process of the entire universe as the Earth rotates around the sun (which is also a creative process).

Doesn't this kind of creation last forever?

# Two Creation and Humanity

## 1 The Fog of Mythology

Human beings are the highest form of life and are the product of the development of life phenomena to an advanced stage. Discussing the origin and essence of human beings inevitably involves the origin and essence of life. In other words, understanding the essence of life also means understanding the essence of human beings.

There are rich and diverse myths and legends about the origin of life and human beings in various cultures around the world.

The Christian Bible records the detailed process of God's creation of life: "And God said, Let the earth bring forth grass, the herb yielding seed, and the fruit tree yielding fruit after his kind, whose seed is in itself, upon the earth: and it was so." God also "created great whales, and every living creature that moveth, which the waters brought forth abundantly, after their kind, and every winged fowl after his kind: and God saw that it was good." (Genesis, Old Testament) Finally, God created livestock, insects, wild animals, and humans.

It is said that God created humans in his own image. He formed the first man from the dust of the ground and named him "Adam" (from the Hebrew word "adham," meaning "of the earth" or "the one who is formed"). Then God breathed the breath of life into Adam's nostrils, and he became a living being. God then took a rib from Adam's side and created a woman, whom he named "Eve" (from the Hebrew word "hawwan," meaning "mother" or "life-giving"). Adam and Eve married and had children, and thus humanity

came into being.

Interestingly, a theologian named James Ussher calculated the "exact time" of God's creation of the Earth based on some biblical texts to be 9:00 am on October 12, 4004 BC. This means that humans and other living beings were suddenly created and appeared on Earth just a few days over six thousand years ago.

In the Islamic scriptures, Allah is the Creator of the universe. He created the Earth in two days and established everything that is needed for life in four days. Afterwards, Allah created the angels who worship and submit to him. Finally, Allah created Adam from black clay and breathed life into him, making him a living being. In the Quran, Allah says, "I created man from sounding clay, from mud molded into shape; and before him, We created the jinn from smokeless flames of fire" (Quran 15:26-27). Allah then explains the process of human creation further, saying, "Verily We created man from a product of wet earth; then placed him as a drop (of seed) in a safe lodging; then We fashioned the drop a clot, then We fashioned the clot a little lump, then We fashioned the little lump bones, then clothed the bones with flesh, and then produced it another creation. So blessed be Allah, the Best of creators!" (Quran 23:12-14).

Other religions and related myths and legends also have similar beliefs. For example, in Judaism, it is believed that the creator, the "One True God" Yahweh, created the world from the "void and chaos" of the "earth" and "water," and then created humans from the "dust." In ancient Egyptian mythology, it was the "divine god" Khnum who shaped the first humans out of clay. In Greek mythology, it is said that the forethinker Prometheus molded humans out of mud and water and gave them life, while the goddess of wisdom, Athena, gave these living beings their souls and breath.

China's pantheon of gods is complex and diverse, with many different

myths about the creation of the world. The earliest myth was the Yin-Yang dual gods theory: "There were two gods who mixed together and controlled the heavens and the earth... The turbid energy became insects, and the pure energy became human beings" (from the "Spiritual Nature" chapter of the Huainanzi). Later, there was the Pan Gu "dying and transforming" theory: after Pan Gu died, "the various insects in his body, scattered by the wind, transformed into the common people" (from the Yishi, quoted in the Yi Shi Yanian). There is also the theory that many gods worked together to create humans, such as the Yellow Emperor creating yin and yang, Shangpiansheng creating ears and eyes, and Sanglinsheng creating arms and hands (from the "Saying Forest" chapter of the Huainanzi). Of course, the most widely spread myth is that of Nüwa creating humans by "kneading yellow soil" (as the Tai Ping Yulan, vol. 7-8, quotes from the Fengsu Tongyi): "It is said that when the heavens and earth were first formed, there were no people. Nüwa kneaded yellow soil to create human beings, but it was a difficult task and she couldn't keep up, so she took a rope and swung it in the mud, creating people." To ensure that the created humans could reproduce, Nüwa even became the first matchmaker for men and women, so that they could have children.

Whether it's Yahweh, Allah, Hahnuum in ancient Egypt, Prometheus in ancient Greece, or Nüwa in China, these "creators" can all be considered "anthropomorphic" gods, possessing some level of "humanity" and "human form" (it is said that Allah has "no image", but there is still a sense of "humanity"). However, in some minority ethnic groups around the world, certain animals or plants are often worshipped as the divine beings that created all living things.

The indigenous people of the Pacific Northwest Coast of North America believe that the creator of the world is Silver Fox. According to legend, at the beginning of the world, the earth was covered in water. While the Long-tailed Wolf, whom Silver Fox had created, was away, Silver Fox used an arrow to open the sky layer and fell onto the sea, creating a small island. When the Long-tailed Wolf returned and saw what had happened, it also wanted to go down, so Silver Fox shot an arrow into the sky, causing the wolf to fall to the ground. The island was too small and inconvenient to live on, so Silver Fox stamped its feet, causing the island to grow. In this way, it first walked to the east, then to the north, west, and south, and walked for five nights in a row, and the island became the current land. Then, Silver Fox created trees, springs, animals, and humans on the earth.

The Native Americans on the Pacific Northwest Coast of North America believed that the creator of the world was the silver fox. According to their myth, at the beginning of the world, the earth was covered in water. The silver fox, who lived in the sky, took the opportunity while the long-tailed wolf, whom it had created, was away, and used an arrow to break open the sky. The silver fox then fell to the sea, creating a small island. When the long-tailed wolf returned and saw what had happened, it also wanted to go down to the island, so the silver fox shot an arrow to the sky and the wolf fell down. The island was too small to live on, so the silver fox stamped its feet hard, causing the island to expand. The silver fox then continued to stamp its feet, stepping first to the east, then north, west, and south, for five nights in a row, until the island became the land it is today. Finally, the silver fox created trees, springs, animals, and humans on the earth. In California, the Native Americans regarded the wild wolf as their ancestor in their mythology. The wild wolf initially ran on four legs, but eventually began to develop human body parts such as a finger, a nail, an eye, and so on. Over time, it gradually evolved into a complete human being, shedding its tail, learning to sit upright and stand on two legs.

The Ojibwe believe their ancestors were transformed from dogs; the Ama'hà people have a legend that their forebears were the incarnations of water buffalo; the Hosagai believe their progenitor was a male figure who evolved from a male whelk and mated with a beaver to produce offspring; the Aboriginal people of the Victoria region in Australia believe the first humans evolved from the branches and nodules of rubber trees; the Aboriginal people of New South Wales believe their ancestors were hatched from wild goose eggs; the people of Ellis Island believe their forefathers were originally hedgehogs who transformed into humans; and the people of Ceram Island believe that their ancestors were formed from a solidified bubble that hatched into a man and a woman who married and became the first humans.

There are also legends of people being reborn from a combination of animals and plants. For example, the Pueblo people of North America claim that their nation was born from the marriage of their ancestors and alligators; the Haida people believe that their tribe was born from the marriage of a sea clam and a great raven chieftain, which gave birth to a female sea clam that the chieftain then married, thus creating their tribe. Additionally, the Shoksech people believe that their tribe was born from the marriage of their ancestors and a female bear; the West African Ewe people believe that their tribe was born from the marriage of their ancestors and a blue fish; and the Chipmunk tribe believes that their tribe was born from the marriage of their ancestors and a beautiful woman who had transformed into a chipmunk, and so on.

Both religious texts and popular mythologies are products of human understanding at a primitive stage of development. They are "created by imagination and the use of imagination to conquer and dominate natural forces, to visualize natural forces" (Selected Works of Marx and Engels, Volume 2, People's Publishing House, 1951), and are not a true reflection

of science. However, from these "reflections", we can detect certain traces and characteristics of creative thinking and development, such as the myth of creating humans from clay, which may be a product of humans learning to make pottery from clay. The myth of humans and animals sharing a common ancestor or the belief that humans can be reborn from animals and plants can be viewed as a "primitive image" of the genetic concept of "common ancestry" in human consciousness — a "primitive image" is also a creation, a historical and spiritual creation.

It is obvious that religious texts and myths cannot be simply regarded as false. The positive aspect of these texts and stories lies in the fact that their creators recognized or guessed that all living beings in the world, including human beings, were created and appeared as creations. Theologians and ancient people were limited by the creative conditions of nature, society, and humanity, and could not determine who was creating and how they were creating, thus mistakenly attributing all creative power to the "Creator" - the deity. They did not understand that it was they who created the deity - the concept of the Creator - and not the imaginary Creator who created them.

## 2 Life lies in creation

The scientific explanation of the origin of life depends on the development of the biological sciences, which gradually emerged in the 16th century. Earlier, some people proposed the theory of spontaneous generation based on the observation that maggots appeared on decaying flesh and fish and frogs could be found in mud and dirty water, believing that life could spontaneously arise from non-living matter. In 1668, Italian scientist Francesco Redi conducted an experiment to test whether rotting meat could

generate flies on its own. The results showed that rotting meat cannot produce flies on its own. The maggots (and later, the flies) were found to arise from eggs laid by flies on the decaying meat, thereby disproving the theory of spontaneous generation.

Scientific explanations of the origin of life depend on the development of biology, which gradually emerged in the 16th century. Earlier, some people proposed the theory of spontaneous generation based on observations such as the appearance of maggots on decaying meat and the emergence of fish and frogs in mud and polluted water, believing that living organisms could arise directly from non-living matter. In 1668, Italian scientist Francesco Redi conducted an experiment to test whether rotten meat could generate flies on its own. The results showed that rotten meat could not produce flies on its own. Maggots (and later flies) were found to arise from eggs laid by flies on the decaying meat, thus refuting the theory of spontaneous generation. In 1675, Dutch biologist Antonie van Leeuwenhoek used a grinding lens (which can be considered the earliest microscope) to discover the first group of microorganisms later called "protozoa." In 1683, he also discovered smaller living organisms - bacteria. In 1753, Swedish naturalist Carl Linnaeus published "Species Plantarum," which established the preliminary classification system of plants and animals. In 1838 to 1839, German biologists Matthias Schleiden and Theodor Schwann established the cell theory, which stated that the cell is the basic structural and functional unit of all living organisms. This revealed the unity of the biological world and proved that there is no insurmountable barrier between the animal and plant kingdoms, providing strong evidence for the theory of biological evolution.

Another piece of evidence for the theory of evolution was provided by the French naturalist Lamarck, who in the early 19th century discovered the order in which animals appeared in the history of the earth, and the phenomenon that their development from embryonic to mature stages corresponds to the order of appearance.

In 1859, a giant was created. Charles Darwin, a British biologist, published his epoch-making book "On the Origin of Species by Means of Natural Selection" (commonly known as "The Origin of Species"), which shook the whole world. In this groundbreaking work, he rejected the "creationist" theory and proposed the theory of biological evolution based on natural selection and survival of the fittest.

According to Darwin, at the beginning, the various species of organisms were not independent of each other and there was no distinction between them. Later, due to reproductive pressure and natural selection, all living things gradually changed and old, unsuitable species were replaced by new, more suitable ones. Several different species may have originally come from the same ancestor, and all life on Earth may have evolved from a primitive, original form of life. This means that "people no longer need to look for the origin of the millions of known living creatures, but only need to understand the origin of any one living organism (no matter how simple). This primitive, simple life form that arose through natural generation has given rise to various complex forms of life through evolution, culminating in the emergence of human beings." {[US] Asimov I. "Extraterrestrial Civilizations", translated by Wang Jingping, Yilin Press, 2011.}

So, what is this "primitive, simple life form"? Modern science believes that the most basic elements of life are proteins and nucleic acids. The origin of life first involved the formation of organic small molecules from inorganic substances, followed by the formation of organic macromolecules such as proteins and nucleic acids. These organic macromolecules then combined to form multi-molecular systems, eventually developing into

primitive life.

In his book "Anti-Dühring," Engels gave a famous definition of life as "the mode of existence of protein bodies, and this mode of existence essentially consists in continuous self-renewal of the chemical constituents of these bodies." (Selected Works of Marx and Engels Volume 3, People's Publishing House, 1951) This definition was based on the achievements of biology at that time. In the past few decades, biological science has made great progress, and it has been discovered that the most important substance in biology may be nucleic acids. Nucleic acids are information bio-macromolecules that determine the properties of proteins (functional bio-macromolecules). Therefore, Engels' definition of life should be developed as follows: Life is the mode of existence of a complex system of nucleic acids and proteins, and this mode of existence essentially consists in the continuous self-renewal of the chemical composition of nucleic acids and proteins.

It is evident that from a perspective of creationism, this constant self-renewal is undoubtedly within the scope of creation. Life phenomena such as metabolism, self-replication, growth and development, genetic variation and induction, adaptability, etc., are both processes of creation and results of creation. As mentioned earlier, creation is the activity of continuously releasing and exerting creative efficiency of created objects, thus generating new creations. The continuous generation of new creations is the most basic purpose of creation. In the field of life, metabolism is the most basic creative process and the foundation of all other life phenomena. Metabolism is the continuous generation of new creations, and the continuous generation of new creations, and the continuous generation, and creation is metabolism.

Therefore, the author has reason to believe that the essence of life

is creation, and life is creation itself. The process of the formation of life is a creative process, and the development of life is also a creative process. Life is the continuous metabolism of creative entities, such as inorganic and organic molecules, nucleic acids, and proteins. In other words, life is constantly entering into the process of creation, constantly generating new creations (various life phenomena) as a result.

The process of creating life is extremely lengthy. According to modern science, the Earth, which humans rely on for survival, as well as the entire solar system, was formed after the Big Bang that occurred 4.6 billion years ago. Life on Earth, on the other hand, originated about 3 billion years ago, which means that the process of life coming into being took about 1 billion years. The process of creating life from nothing is undoubtedly composed of a series of relatively smaller creative processes. Based on the information provided by modern science, these relatively smaller creative processes can be divided as follows:

The first step involves the basic elements such as carbon, hydrogen, oxygen, nitrogen, and others that were scattered on the surface of the primordial Earth. Under high-temperature conditions (as the primordial Earth was a hot molten sphere), these basic elements collided and combined with each other to form new inorganic compounds such as ammonia, water, carbon dioxide, and others.

The second step involves the interaction between the previously formed compounds, such as ammonia, water, carbon dioxide, and carbides that were erupted from the Earth's core onto its surface. This interaction leads to the formation of new compounds such as methane, ethyne, and other hydrocarbons. The hydrocarbons further combine with water and ammonia molecules to produce more complex organic compounds such as hydrogen cyanide.

The third step involves the formation of the primitive atmosphere, composed of methane, ammonia, nitrogen, hydrogen, water, carbon dioxide, hydrogen cyanide, and other compounds. Under the influence of various factors such as cosmic rays, ultraviolet radiation, lightning strikes, volcanic eruptions, and meteorite impacts (the opportunities for creation), these compounds continuously combined to generate a series of organic compounds that can directly give rise to life. compounds include amino acids, nucleotides, fattv monosaccharides, and many others.

In the fourth step, these organic compounds were collected in the primordial oceans through the action of rainwater and rivers. After a long period of accumulation, under the appropriate creation conditions, amino acids were able to condense and form protein molecules, while nucleotides were able to polymerize and form nucleic acid molecules.

In the fifth step, the biological macromolecules such as proteins and nucleic acids, which accumulated more and more in the seawater, further concentrated and aggregated due to various factors such as evaporation under sunlight. This led to the formation of a multi-molecular system mainly composed of proteins and nucleic acids and presented in a granular form.

In the sixth step, these small particles, known as aggregates or microspheres, floated in the primordial oceans and absorbed other elements. Under suitable creation conditions, they underwent continuous assimilation and differentiation, resulting in the emergence of some high-quality multi-molecular systems that could unify assimilation and differentiation, develop primitive metabolic functions, and self-replicate (reproduce). This successful multi-molecular system is the great creation - primitive life.

At this point in the discussion, some readers may raise the question:

you said that the essence of life and the origin of the universe is creation, but what is the power source behind this creation? For example, in the first step of the process of creating life, the basic elements (carbon, hydrogen, oxygen, nitrogen, etc.) scattered on the surface of the earth collided and combined to generate organic compounds such as ammonia, water, and carbon dioxide. What force drives these basic elements to collide and combine with each other? Going back to the origin of the world, what is the power source that caused the basic particles to combine into basic elements during the Big Bang?

This is actually a theoretical problem. Even the great physicist Newton, who created the theory of classical mechanics, was also confused when answering this question. Although he summarized the achievements of his predecessors and himself, and induced the three laws of classical mechanics — the law of inertia, the law of acceleration, and the law of action and reaction, and discovered the famous law of universal gravitation, he still faced difficulties in exploring this theoretical problem. Nonetheless, he made a tremendous creative contribution to the scientific progress of humanity.

Newton believed that all planets were set in motion by an external "first impulse," but what is this external "first impulse"? Aristotle believed it was a mysterious "rationality," while Newton believed it was "God." Thomas Aquinas put it more clearly: "In the cause of power, if there is no first cause of power (if the cause of power is traced back infinitely), there will be no intermediate causes or ultimate results. This is clearly not in line with reality." "The thing that fundamentally constitutes the foundation of all things can be considered the highest reason for the reason." "Therefore, the Creator is none other than God, who is the first cause." {[Italy] Thomas Aquinas (Thomas Aquinas): "The Complete Theology",

translated by Liu Bingsen, Huang Wenbing, Xie Changchi, and Zhang Pengxiang, published by the Commercial Press, 2013.}

I cannot agree with such a view. Firstly, there is no such thing as a "first mover" or "first cause". Creation is infinite, creations are infinite, and the chain of creation is infinite. Philosophically speaking, the "universe" has no beginning or end, so there can be no "first mover" or "first cause". The proposal of a "first mover" or "first cause" is a product of human knowledge that is limited.

Furthermore, the absence of a "first mover" or "first cause" does not mean the absence of a foundation or source of power. This foundation or source of power is the creative efficiency. The creative efficiency is an intrinsic energy inherent in the created things and mainly determined by the internal structure of the created things. The internal structure of the created things varies greatly, and this determines the varying degrees of creative efficiency. Obviously, any created thing has its internal structure and therefore possesses creative efficiency. There is no created thing that does not have creative efficiency in the world.

The release and exertion of creative potential constitute creative power. In other words, creative power is the release and exertion of creative potential. It is the release and exertion of the inherent creative potential within the internal structure of a created object that forms the basis and source of creative power.

The creative power gathers and combines to form the creative power field, such as the gravitational field, electromagnetic field, strong and weak nuclear forces that control the interaction between particles and atoms. The creative power field has even greater creative efficiency, and the creation of new objects occurs as they interact and fuse in the creative power field.

Now, I can answer the reader's question in this way: At the initial stage of the origin of the world (of course, the "world" we face), the driving force that caused the basic particles to combine into chemical elements in the Big Bang was creativity, that is, the release and exertion of the creativity inherent in these basic particles themselves. In the first step of the origin of life, it was still creativity, that is, the release and exertion of the creativity inherent in basic elements such as carbon, hydrogen, oxygen, and nitrogen, which promoted the collision of these basic elements and the generation of new creations such as ammonia, water, and carbon dioxide. These collisions and combinations were all carried out and completed in a certain creative field.

## 3 The essence of human nature

Upon seeing this topic and connecting it to the previous sections, readers will certainly think of the following statement: "The essence of human nature is creation." Indeed, the essence of human nature is creation. This type of creation undoubtedly belongs to the realm of life's creation and even the creation of the universe. However, it must be pointed out that human creation is the highest, most refined, and most complex part of life's creation and even the creation of the universe. Therefore, in a certain sense, human creation differs from the creation of life and the universe outside of humanity. Human creation is the creation of intelligence, characterized by thinking, consciousness, and emotion. Thus, it is more accurate to say that the essence of human nature is the creation of intelligence, the active creation of thinking, consciousness, and emotion.

In order to illustrate the issue, we need to roughly understand the process of creation from primitive life to the emergence of humans, which is from simple to complex, from low-level to high-level, and from aquatic to terrestrial. As shown below:

From primitive life forms (non-cellular organisms)  $\rightarrow$  primitive unicellular organisms  $\rightarrow$  protozoa  $\rightarrow$  coelenterates  $\rightarrow$  bilaterians  $\rightarrow$  deuterostomes  $\rightarrow$  echinoderms  $\rightarrow$  primitive chordates (without head)  $\rightarrow$  primitive vertebrates (with head)  $\rightarrow$  jawed fishes  $\rightarrow$  amphibians  $\rightarrow$  reptiles  $\rightarrow$  mammals  $\rightarrow$  primates  $\rightarrow$  monkeys  $\rightarrow$  apes  $\rightarrow$  humans.

This creative process was extremely long and complex, lasting approximately 2 billion years. During this time, primitive life forms emerged, followed by primitive single-celled organisms one billion years ago, primitive animals 500 million years ago, primitive chordates 400 million years ago, primitive fish 300 million years ago, amphibians 200 million years ago, reptiles 100 million years ago, and mammals 180 million years ago. 25 million years ago, mammals replaced reptiles as the dominant species in the natural world.

The appearance of primates can be traced back to 75 million years ago, and around 40 million years later, around 35 million years ago, primates diverged into two branches: one branch comprised of small monkeys and lemurs with less developed brains, and the other branch comprised of great apes with relatively well-developed brains.

About 8 million years ago, a highly evolved species of ape with a well-developed brain emerged. After over 7 million years of evolution, this ape gradually transformed into the human species, which first appeared around 600,000 years ago.

The transition from apes to humans is undoubtedly a tremendous and significant process of creation. According to the human fossil discoveries in archaeology, this enormous process of creation is composed of four relatively smaller stages: the early hominid stage, the late hominid stage,

the ancient human stage, and the modern human stage.

The early hominid stage dates back to about 3 million to 1.5 million years ago, represented by "Homo habilis" found in Tanzania and "1470" found in Kenya. The basic characteristics were the ability to walk upright, the ability to make simple stone tools, a brain capacity of over 700 milliliters, and limb bones similar to those of modern humans.

The late hominid stage, dating from about 1.5 million years ago to over 200,000 years ago, is represented by the Java man and the Peking man. The basic characteristics of this stage are: the ability to walk fully upright on two feet, the ability to make more advanced stone tools, the ability to use, preserve, and control natural fire, and a brain capacity close to that of modern humans, reaching over 1,200 cubic centimeters.

The stage of ancient humans, also known as the early Homo sapiens stage, lasted from about 200,000 years ago to about 100,000 years ago. Representatives of this stage include the Neanderthals in Germany, and the Maba Man and Dingcun Man in Guangdong and Shanxi provinces of China, respectively. Their basic characteristics were: they could walk with a steady gait, create sophisticated stone tools and composite tools, and make crude clothing out of animal skins. They were not only able to use natural fire, but also able to create fire artificially. Their brain capacity had reached modern levels, with an average of 1440 milliliters for both men and women, but the shape and structure of their brains still retained many primitive features.

The modern human stage, also known as the late modern human stage, lasted from approximately 40,000 years ago to approximately 10,000 years ago, represented by Cro-Magnon man in France, the Liujiang Man in Guangxi Province of China, and the Shanidar man in Zhoukoudian, Beijing. Their basic features were not only the ability to make various refined stone tools,

but also to make fish spears, arrowheads, and bone and horn writing and decorative tools. They invented tools to make tools, could create fire by rubbing, and control the use of fire, build crude houses, and develop primitive arts primarily based on carving, painting, and sculpture. The brain capacity was difficult to distinguish from modern humans, and their skeletons were generally taller than modern humans.

Overall, in the process of evolution from apes to humans, there are several key creative achievements that are particularly noteworthy. These are: upright walking, tool making, the use of fire, and the increase in brain capacity.

Upright walking raised the previously drooping head, accelerated the evolution and perfection of brain structure, increased brain capacity, and developed the sensory organs in the head, providing a physiological basis for a new creation: the thinking and miraculous creations of intelligence. At the same time, upright walking also freed the two front limbs, transformed them into hands, and under the control of the brain, they were able to actively alter nature by creating tools, using fire, and other activities.

If we only examine upright walking and the increase in brain capacity, it is not enough to explain the process of human creation, because animals like penguins and kangaroos can also walk upright, and the brain capacity of elephants and whales is much larger than that of humans. However, when we consider the creation of tool-making and the use of fire, all other animals pale in comparison. Besides humans, no other animal in the world has been found to be capable of creating tools and using fire. As a "patent" of humans, tool-making and the use of fire are creations closely linked to human thinking, and are unique creations of human intelligence. That is to say, in the process of human creation, in addition to the natural

world and human physical senses closely related to humans, there is also the human brain, and the intelligence produced by the brain through thinking activities. Intelligence is an advanced and active creation, which means that in any creation process, humans can engage in recognition, planning, analysis, judgment, discrimination, and selection. In other words, humans can imprint their own marks and their subjective initiative on any creation.

Obviously, this kind of creation can only be produced by the "primate of all things" — the human being, and any other living creature outside of humanity, no matter what extraordinary abilities they possess, will not produce wisdom, human wisdom. Ask yourself, which animal other than humans can think of making and using tools to enhance their creative capabilities? And which animal can think of lighting a fire and using it to cook food, enhancing their physical and energy creation? None can be found, wisdom belongs exclusively to humans.

There is a paragraph that expresses this idea very well: "If we only look at the physical conditions, humans are just an ordinary species. In terms of strength, humans are no match for elephants, tigers, or even animals of the same size. Although humans can walk upright, their movements are far less agile than cats. Humans can't run as fast as dogs, let alone horses. Human vision is not as sharp as eagles, their sense of smell is not as good as dogs, and their hearing is not as good as antelopes. Many of their senses are dull. Although humans can stand, they can get 'sore back and waist' if they stand for too long, which shows that their bones and muscles are not very suitable for their upright posture. Humans may be the only species in the biological world that is not harmonious. Other creatures do not have this situation. Fish swim in water, birds fly in the air, all in such harmony and perfection. Even tiny insects have such great reproductive power and strong adaptability to the environment. However,

it is still humans who dominate the world. Humans are able to achieve this entirely due to their intelligence. In other words, humans have an unparalleled brain compared to other animals. This single difference has enabled humans to dominate the world." (Editorial Department of Nature Magazine: "Gateway to Contemporary Science", Xuelin Publishing House, 1982) To add to this, it can be said that the creation of intelligence distinguishes humans from the animal kingdom, allows humans to dominate the world, and makes humans what they are.

Marx also has a classic discourse on this issue: "Animals only utilize the external nature, and through their mere presence, they change the natural environment. However, humans make changes to nature to serve their own purposes and dominate the natural world. This is the ultimate essential difference between humans and other animals, and labor is what causes this difference." (Selected Works of Marx and Engels, Volume 3, People's Press, 1951)

According to the theory of creation, labor is the externalization of intelligence, and the creation of intelligence includes labor. Animals, due to their lack of intelligence, can only "simply use the external natural world," while humans, because of their intelligence, can change the natural world and "dominate the natural world." Therefore, we can completely replace "labor" with "the creation of intelligence" as a summary of the essential difference between humans and animals. "The creation of intelligence" is more accurate, more thorough, and also more innovative than "labor."

#### 4 The difference between human and nonhuman creation

In the previous section, the author has already clarified the

difference between human and non-human creations, namely that human creations involve intelligence, while non-human creations do not, and the difference lies in whether intelligence is involved in the creation. In this section, we will further examine this difference from the perspective of non-human creation, and at the same time, reveal the various characteristics of non-human creation.

## ● Non-biological creation

Non-living things refer to all creations in nature that do not possess life, such as the sun, moon, stars, mountains, rivers, rocks, deserts, sound, light, electricity, heat, magnetism, as well as various minerals, inorganic and organic substances, and so on. Like any living thing, these non-living things are constantly in the process of creation, meaning that they are constantly involved in a creative process, releasing and exerting a certain creative effectiveness, and generating some new creations. For example, the sun produces light radiation, mountains affect atmospheric circulation, and storms are formed in the desert. So what are the characteristics of non-living creation?

Firstly, compared with biological creation, non-living creation is the creation of non-living phenomena. The internal structure of non-living things does not contain a multi-molecular system formed by the coupling of proteins and nucleic acids, so they cannot be inherited or replicated. The moon can rotate around the sun, reflect the sun's light, and constantly change shape, but the moon cannot become pregnant and give birth to another moon. The Yellow River can accommodate many tributaries, flow for thousands of miles, change course several times, cause floods, and support boating, fishing, and shrimp farming. However, the Yellow River will never reproduce another Yellow River in its own image.

Secondly, compared with human creation, non-living creation has no senses, no perceptions, no appearances, and no thoughts — it does not even have the most basic sensitivity, let alone the generation and involvement of intelligence.

For example, Mars, as one of the nine planets in the solar system, has some creation phenomena that are similar to those on Earth, such as day and night alternation and seasonal changes. In the 20th century, some people discovered hundreds of neat black lines on the surface of Mars through telescopes and believed that they were artificial "canals" dug by intelligent creatures to irrigate barren land with melted ice and snow. Since the 1960s, people have launched multiple spacecraft to explore Mars repeatedly, and the results show that the so-called "canals" are just dust particles blown up by the monsoon winds on the crisscrossing mountain ranges. There is no trace of life in the Mars soil brought back by the lander. This indicates that all creation phenomena on Mars are non-living creations of lifeless intelligence, which are naturally formed rather than human-made or co-created by humans and nature.

Volcanic eruptions, flowing magma, rainbows in the sky, falling meteorites... Non-living creations have added countless magnificent wonders to our world. However, volcanoes have no sensation, they cannot hear or see people's comments, praises, curses, or complaints; magma has no perception, it does not understand "choice", let alone "understanding", and other characteristics that come with perception; rainbows have no representation, they do not remember the position of the previous rainbow, and they cannot predict the length of the next one; meteorites have no thoughts, they cannot actively choose to fall in a certain part of the earth, they cannot cry or laugh, and they cannot use language, a product of intelligence, to express themselves.

The idea of "all things have spirits" emerged in ancient or prehistoric times before the formation of religions, and we can still see its influence in a large number of surviving myths and legends today. This concept believes that everything in the world, such as mountains, rivers, plants, animals, has a "soul", "breath", and "life" just like humans. Obviously, this is a product of primitive people's simple and vague thinking, which belongs to the low-level group symbolic "creation" and is far from the truth, even though it has led to nature worship and natural religions.

#### • Microbial creation

Biological creation can generally be divided into three categories: microbial creation, plant creation, and animal creation.

Let's first look at the creation of microorganisms.

Microbial creation includes bacteria, actinomycetes, fungi, yeast, spirochetes, rickettsia, chlamydia, viruses, viroids, protozoa, and unicellular algae. The characteristic of microbial creation is that compared with non-biological creation, it is a living creation; compared with plant creation, it has weak sensitivity; compared with animal creation, it is a creation without perception; and compared with human creation, it is a creation without intelligence.

For example, bacteria, as single-cell or multicellular tiny prokaryotic organisms, have certain characteristics of the early origins of life in their creative process. The cell line reproduces asexually, that is, without the combination of reproductive cells to produce offspring — this mode of reproduction took about two billion years of history to evolve into sexual reproduction. The parent of the bacteria divides itself directly into two offspring in the process of reproductive creation. Although it is a single-parent inheritance and has a simple structure, it

belongs to a living creation that can self-replicate, which is beyond the reach of non-biological creations.

Microbial creations exhibit a minimal level of stimulus responsiveness. Although they lack mature sensory organs and central nervous systems, the stimulus responsiveness of microorganisms represents the embryonic stage of sensation. Sensation is developed and strengthened on the basis of stimulus responsiveness. Furthermore, the difference in quality between microbial creations with minimal stimulus responsiveness and human creations with intelligence is enormous.

#### Plant creation

Primitive organisms have evolved over more than three billion years to form over 400,000 species of plants that now inhabit every corner of the Earth. These can be classified into algae, fungi, lichens, mosses, ferns, and seed plants. The process of plant creation is undoubtedly an evolutionary process of going from simple to complex, from primitive to advanced, including from prokaryotic to eukaryotic, from heterotrophic to autotrophic, from anaerobic to aerobic, from unicellular to multicellular, and from asexual to sexual reproduction, from aquatic to terrestrial habitats. Compared to non-biological creation, plant creation is a living creation that can self-replicate. Compared to microbial creation, plant creation has a stronger sensitivity. Compared to animal creation, plant creation is a non-sentient creation. And compared to human creation, it is still a creation without intelligence.

Most plants contain chloroplasts and rely on them for photosynthesis, which is the process of absorbing and utilizing solar energy to convert low-energy carbon dioxide, water, and inorganic salts into high-energy organic compounds that plants need, while releasing oxygen, thus

"self-nourishing". Microorganisms do not contain chloroplasts in their structure, so the ability to carry out photosynthesis for "self-nourishment" is undoubtedly a major characteristic of plant creation, and an important difference between plant creation and microbial creation, animal creation, and human creation.

Compared to microorganisms, plants have enhanced sensitivity and "sensory movements" exhibiting various responsiveness, photoperiodism, thermoperiodism, and thigmomorphogenesis. For example, many leguminous plants open and close their leaves in response to day and night cycles; the sensitive plant folds its leaves and droops its stem when stimulated by touch, vibration, or electric shock, resembling a shy appearance; tulips can be induced to bloom by changes in temperature. Additionally, some plants can produce sound and some can secrete oil. In Guangxi Xincheng, China, a species of oak tree changes the color of its leaves in a regular pattern according to climate changes, providing a way to observe the weather. On the islands of Java in Indonesia and Madagascar in Africa, there is a "man-eating" tree whose stem and branches can entangle and suffocate humans or animals upon touch, becoming the tree's fertilizer.

Having a strong stimulus responsiveness does not mean having sensation. Structurally speaking, plants do not have sensory organs and nerve tissues. Therefore, plant creation is a creation with sensitivity, even strong sensitivity, but not a creation with sensation, let alone a creation with intelligence.

#### Animal creation

Animals are the largest category of organisms in the animal kingdom. Currently, there are an estimated 1.5 million species of animals on Earth, and if subspecies are included, the number of named animals is probably

over 2 million. Compared to non-living creations, animal creations are creations with life. Compared to microorganisms and plants, animal creations are creations with sensations, and even with simple thinking. Compared to human creations, animals are still creations without intelligence.

Animals do not have chloroplasts in their structure, and therefore cannot live autotrophically like plants, but instead have to rely on other organisms for nutrients, including microorganisms, plants, and other animals, in order to maintain and reproduce their life. Through long-term evolution, the functional structures of animals for adapting to heterotrophic life have gradually become more complex and advanced, from simple to sophisticated, and from low-level to high-level.

Protozoa, the lowest and simplest class of animals, consist of only a single cell or a group of cells formed by aggregation. They can already respond to external stimuli, such as swimming towards a drop of sugar and away from a drop of acid. The earliest nerve cells appeared in primitive multicellular animals, such as the Cnidaria. These nerve cells are highly sensitive to even the smallest stimuli and can rapidly transmit signals through synapses, the tiny gaps between nerve cells. In animals such as jellyfish, these nerve cells are distributed throughout the body. Flatworms, which are more evolved, have the first sensory organs, which are groups of specialized nerve cells that are highly sensitive to specific stimuli. These nerve cell groups gradually converge towards the head, which is the first appearance of the central nervous system in the form of a spherical "nerve cord", which is the rudimentary form of the brain. As evolution continued, the number and sensitivity of sensory organs increased, and the central nervous system became more complex. In vertebrates, there are three types of brain structures: the forebrain, midbrain, and hindbrain. The

forebrain is the largest and most important part, and its outermost layer is the cerebral cortex. In higher mammals, the surface area of the cerebral cortex exceeds that of the brain, forming folds and ridges known as "gyri and sulci". The cerebral cortex is responsible for analyzing and synthesizing various stimuli received from sensory organs. In primates, the brain is even larger, the midbrain is almost absent, and the cortex has more developed and intricate folds, forming an extremely complex neural network system that is closely linked to sensory, visceral, and motor organs, providing the material and functional basis for thinking.

It can be said that the evolution of animals is a creation of increasingly sophisticated sensory organs and richer sensory experiences, which is a creative process that moves from the primary sensations of lower animals to the advanced sensations and representational thinking of higher animals. This process of creation is quite long, and is linked by several stages of creation. In general, sensation corresponds to the segmental animal stage, perception corresponds to the arthropod stage, representation corresponds to the vertebrate stage below primates, and thinking corresponds to primates.

There are two issues that need to be clarified here: first, animal creation belongs to the category of sensory or sensation-based creation, and humans are also animals, so their creation undoubtedly belongs to the category of sensory creation. However, human sensory creation is not equivalent to animal sensory creation. The fundamental difference between the two lies in the fact that human sensory creation is intimately linked, blended, and inseparable from human intellectual creation, while animal sensory creation is essentially a simple sensory creation. Engels once said, "The eagle can see much farther than humans, but the human eye is far better at identifying things than the eagle. The dog has a much sharper sense of

smell than humans, but it cannot identify one percent of the specific markers that are perceived as various things by humans. As for touch (ape has just a rudimentary hint), it has only developed with the formation of human hands themselves due to labor. "("Selected Works of Marx and Engels," Volume 3, People's Publishing House, 1951). Identification and discrimination are expressions of intelligence, and labor, as we have said, is the act of materializing intellectual creation. Therefore, the sensory ability of human intellectual creation participation is unmatched by any animal.

Second, animal creation progresses gradually from sensory creation to intellectual creation, and some animals (primarily primates) even have the ability to think. However, animal thinking creation and human thinking creation are qualitatively different. The difference lies in the fact that animal thinking is a simple, low-level, and non-intellectual thinking, while human thinking is a complex, high-level, and intellectual thinking. If the ability to generate intelligence is used as a criterion for judging thinking, then only human thinking can be considered true thinking. Marx once said, "The ability of bees to build hives makes many architects on earth feel ashamed. However, the most clumsy architect is superior to the most clever bee from the beginning, because he has already built it in his mind before building it with beeswax." ("Complete Works of Marx and Engels," Volume 23, People's Publishing House, 1972). The intellectual creation of human wisdom is manifested in the fact that it is conceived, designed, and planned before creation, while the non-intellectual creation of animals is manifested in the limited release of genetic instincts in the process of creation. Another important feature of human intellectual creation is ability to design, manufacture, and use tools, while non-intellectual creation of most animals can only make simple use of existing natural resources, although a few primates seem to be able to use simple natural objects such as sticks as tools, but they cannot consciously and purposefully make tools.

Language and writing are the culmination of human intellectual creation. Although chimpanzees, our closest relatives, can learn individual signals through special training (referring only to physical signals, not sound or written signals), and can even combine these signals to express meaning in sentences such as "give me the key," there are two important differences between their communication and human language. First, chimpanzees can never learn and use symbolic language without special training. Second, even with special training, chimpanzees cannot use limited language elements to create an infinite number of sentences, let alone display these infinite sentences in written form. The human ability to create and use symbolic language is beyond the reach of chimpanzees. Anyone who knows a language can speak and understand words they have never heard or spoken before without special training. The number of speeches that can be constructed in the human language system is infinite, and humans can transform these infinite speeches into written symbols to communicate thoughts and spread civilization. This is another fundamental difference between human and animal thinking and creation.

# Three The laws of creation

### 1 An overview of the laws of creation

The law of creation refers to the laws governing the process of creation. Since all activities in the world can be viewed as creative activities, the law of creation is the most general, universal, and fundamental law of nature, human society, and human thought. As an inherent, essential, stable, repetitive, and mutually restrictive connection within the phenomenon of creation, the law of creation determines the inevitable trend of all creation, that is, the development and evolution of all things. In other words, the development and evolution of all things in the world must follow the law of creation. There is no creation that is not restricted by the law of creation, nor is there any law of creation that does not prescribe and restrict creation.

So, what is the law of creation?

The law of creation is the rule that any creation must inevitably enter the process of creation, inevitably release and exert its creative potential, and inevitably lead to the emergence of new creations.

Specifically, firstly, any creation must inevitably enter the process of creation.

The author has stated that everything in the world is a creation. Since it is a creation, it must inevitably enter the process of creation. If it does not enter this creative process, it will enter another creative process, or even simultaneously enter several or many creative processes, without exception.

For example, a white cloud in the sky, as a visible aggregate composed

of ice crystals suspended in the air above 5000 meters, is undoubtedly a creation that has condensed from high-altitude water vapor in the air (gaseous creation that directly condenses into a solid creation without passing through a liquid phase). Its existence in the sky and as an aggregate of ice crystals is also a process of creation. At the same time, it participates in the creation of the atmosphere, the water cycle, and the appreciation of people, among others.

Another example is a person, as a conscious and dynamic creation, who is always and everywhere in the process of creation. When he sits down, he enters the process of creating sitting; when he stands up, he enters the process of creating standing; when he eats, he enters the process of creating eating; when he works, he enters the process of creating work, and so on.

Secondly, the creation that enters the process of creation must inevitably release and exert its creative energy. As the author has explained before, creative energy is an essential energy determined by the internal structure of the creation, and can be seen as the creation's "instinct". This "instinct" must be released and exerted in the process of creation. If not released and exerted in this process, it will be released and exerted in another process or in multiple processes simultaneously. In any case, once entering the process of creation, it must inevitably be released and exerted, although the amount and way of releasing and exerting energy may vary.

The composition of white clouds is water vapor and ice crystals, and these water vapor and ice crystals will inevitably release and exert their creative power that can condense and aggregate for as long as the white cloud exists in the sky. If this white cloud gradually dissipates — dissipation is also creation — then the creative power that can be

dissipated and decomposed will be released and exerted by these water vapor and ice crystals.

Similarly, for humans, if they are sleeping, they are releasing and exerting the creative energy that allows them to sleep; if they are walking, they are releasing and exerting the creative energy that allows them to walk; if they are entering the creative process of falling in love, they must release and exert the creative energy that generates strong emotions such as longing and attachment.

Furthermore, once entering the creative process and unleashing the creative energy, new creations must inevitably arise. The absence of creative products from the creative process is no different from not entering the creative process or not releasing and utilizing creative energy. The creations prior to entering the creative process were already diverse, and the new creations that emerge from the release and utilization of creative energy during the process are even more diverse. The possibilities of creation are infinite, and the ways of releasing and utilizing creative energy are endless, leading to an infinite variety of new creations. This is the fundamental reason why the world is forever abundant and ever-changing.

The ethereal white clouds floating in the sky are thin and translucent, soft and shadowless, and their shapes are constantly changing and creating. At times they resemble hooks, at times feathers, and at times horse tails. These ever-changing shapes are the new creations. When they enter a person's field of vision, they can be captured by a painter's brush or a photographer's lens, resulting in a new creation: a painting or a photograph. Even the act of capturing and depicting itself is both a creative process and a new creation—phenomena are also creations. If someone appreciates the beauty of these clouds, the resulting aesthetic experience is a new

creation. If another person expresses this experience in writing or song, such as "white clouds floating in the blue sky, horses running beneath them," then the words, lyrics, and performance are all new creations.

A person is no exception. When you talk to someone, the content, atmosphere, style, emotion, and effect are all new creations; when you write with a pen, the handwriting on the paper, the article you write, the emotions you express, the characters you shape, and so on, are all new creations; when you exercise, the ball you hit, the water you split, the sweat on your forehead, the mud on your feet, and even the excited pulse, the excited emotion, the happy feeling, and the observation and comments from people around you are all new creations.

The Law of Creation is composed of three specific rules: the Law of Novelty and Replacement, the Law of Addition and Subtraction, and the Law of Cultural Accumulation.

## 2 The law of novelty and alternation

The law of novelty, replacement, and alternation, also known as the law of newness and variation, is the most fundamental and essential purpose of the creative law. It means that any creation must and will inevitably pursue and produce newness, replacement, and alternation. In other words, the end of any creative process must be marked by the appearance of new and novel creations. Without pursuing newness and variation, it cannot be considered true creation. Moreover, a creative process without the appearance of new and novel creations as its terminal sign cannot be considered a true creative process.

"New" refers to something that has just appeared and did not exist in the past; "different" means that it is distinct and not the same as before. Essentially, something that is "new" is also "different," and something that is "different" is also "new" compared to what was before. In more specific terms, "new" and "different" have slight differences. "New" means that something has never existed before, completely fresh and unprecedented. "Different" means that it has some connection or basis with what has existed before but has diverged or split off. For example, "differentiation" refers to the process or result of similar or identical things becoming dissimilar or different, or the process where a thing's inherent quality or power is transformed into something opposite to itself and even dominates itself.

(ti) means to replace, substitute; 变 (bian) means to change, transform. "New" implies replacement, "different" implies transformation. When a new creation appears, it means that some previous creation has become old, outdated, and will be replaced or substituted by the new creation, although this substitution may not necessarily be rapid, complete, overall, or total. For example, buying a new piece of clothing implies that the old clothes will be replaced; the development of new products implies that old products will be replaced; young people growing up implies that the older generation will be replaced, and so on. When a different creation appears, it also means that some creation has become commonplace, not innovative, and will undergo change, and may even be transformed by the different creation, although this change may not necessarily be rapid, complete, overall, or total. For example, the emergence of plastic has changed the iron and aluminum products and wooden products of the past; the emergence of synthetic fibers has changed the fabric of clothing, and so on. We say that all activities in nature are creations, which means that all activities in nature are governed and controlled by the law of newness, difference, replacement, and transformation, and aim to create new and different creations. The sun is creating every moment and is always new; the moon

is creating every moment and is always new; the stars are creating every moment and are always new. Yesterday's sun is the replacement and transformation of the sun the day before yesterday, today's moon is the replacement and transformation of yesterday's moon, and tomorrow's stars are the replacement and transformation of today's stars. The ocean produces tides under the influence of the moon's gravity, and each tide is new and different; storms-large air vortices-form on the sea, and each storm is new and different; fish, shrimp, turtles, and crabs swim in the sea, and each fish, shrimp, turtle, and crab is new and different. Each tide, each storm marks the past, and fish, shrimp, turtles, and crabs are born, grow, replacement, die in continuous creation, innovation, and and transformation.

Metabolism is the fundamental process and characteristic of biological creation. Metabolism, or the law of new, different, replacement, and change, manifested in living organisms as metabolism. Whether it is decomposition synthesis, whether it is energy-requiring energy-releasing, assimilation or dissimilation, the result of metabolism is always the emergence of new and different creations, marked by life phenomena such as self-replication, growth, reproduction, variation, and so on. The termination of metabolism also signifies the termination of life phenomena.

Humans are the most advanced and intelligent living beings. There is no doubt that human creation is subject to the laws of newness and novelty. While creations outside of humanity unconsciously, passively, and naturally obey the laws of newness and novelty, human creations consciously, deliberately, and actively follow and utilize these laws. Humans constantly devote their boundless intelligence to the creative process, striving to create unprecedented, innovative creations that contain enormous creative

value.

Scientific discoveries and technological inventions are creative endeavors full of human intelligence, and are the result of humans consciously seeking novelty and innovation. If we consider the act of uncovering and revealing natural phenomena and laws through exploration and research as "discovery," then "invention" refers to a kind of creation that applies the already discovered natural phenomena and laws in the process of ideation and production of technology, products, and so on, with the aim of bringing about new creations — new technologies, new processes, new machines, new equipment, new manufacturing methods, and so on.

For example, in 1820, Danish physicist Oersted discovered the magnetic effect of electric current, revealing for the first time the close intrinsic connection between electricity and magnetism. In 1821, British physicist Faraday invented the world's first electric motor based on electromagnetic principles, taking a groundbreaking step for humanity into the electrical age. In 1922, British bacteriologist Fleming accidentally discovered a mold that could secrete a substance capable of killing or preventing the growth of Staphylococcus aureus, which became known as penicillin. Fifteen years later, British pathologist Florey and German biologist Chain successfully developed the chemical formula for penicillin and applied it clinically. Since then, penicillin with its enormous power has saved the lives of millions of people, making a huge contribution to human civilization.

Clearly, both discovery and invention conform to and embody the law of novelty and innovation, reflecting its essence. Due to the involvement of human intelligence, the novel elements of creativity in the process of creation are increased and strengthened, leading to higher value and significance in the resulting creations. If Oersted kept a beautiful Persian cat in his house, could the cat discover the magnetic effect of

electric current like his master? Would Faraday's handsome horse be able to invent an electric motor by constructing a simple device that makes a circuit carrying an electric current rotate around a magnet? The answer is undoubtedly negative. Similarly, without the outstanding intelligence of Fleming, Florey, and Chain, penicillin would not have come into being on its own, nor would it have been transformed into a chemical formula, leaving the laboratory to effectively kill those damn bacteria that breed in the human body. Discovery and invention are the patents of humanity, the products of human intelligence and creativity, and the unsurpassable achievements that no non-human and non-intelligent creation can match or achieve.

It is true that non-living things, as well as microorganisms, plants, and animals, also follow the law of novelty and innovation in their creations. However, they can never understand and comprehend this law like humans do, nor can they actively and intelligently utilize it to create. The fundamental quality that makes humans human is the awareness that all their activities are creations aimed at pursuing novelty and innovation. Therefore, humans actively and proactively invest their intelligence in the process of creation, striving to release and maximize their creative potential to the fullest extent possible, and to produce more and greater creations with greater creative value.

Therefore, words such as "innovative," "changeable," and "fickle" need to be redefined and reinterpreted, at least without negative connotations. Undoubtedly, the theory of creation praises and admires innovation, breaking with the old, making way for the new, changing the old ways, and keeping up with the times, while not praising or liking sticking to tradition, following the same old patterns, clinging to outdated practices, and being complacent with the status quo. The reason is simple and clear:

the former conforms to the law of novelty and innovation, while the latter goes against it, and is therefore reactionary.

In daily life, people cannot always wear the same clothes, eat the same food, or talk about the same topic. They like to wear clothes with new styles, and even the best food will become boring if you eat it too much. In Lu Xun's story of "Xianglin Sao," when she first told the tragic story of her husband being eaten by wolves, people listened patiently and even shed tears of sympathy. However, when she repeated the same story over and over again, people became tired of it, even the kind-hearted old ladies who were chanting prayers no longer shed tears. Later, almost everyone in the town could recite her words, and when they heard her speak, they would feel bored and get a headache. Why is this? Because it violates the law of novelty and innovation.

The creation of writers follows the law of novelty and uniqueness. Whether it's novels, essays, or poetry, characters, stories, plots, themes, structures, language, and more, they always strive to portray unprecedented novelty.

In the realm of ideas, the law of novelty and innovation also constrains and regulates the creation of people's intellectual products. Throughout history, great thinkers have been renowned for putting forward original, novel, extraordinary, and groundbreaking viewpoints or theoretical systems that surpass their predecessors. Without the famous views on "ren" (benevolence), there would be no Confucius in the East; without the pioneering insights into disciplines such as philosophy, logic, and rhetoric, there would be no Aristotle in the West. The Buddha, seated beneath the Bodhi Tree, realized concepts such as "all phenomena are impermanent," "all actions are selfless," and "dependent origination is empty," which led to the profound impact of the establishment of Buddhism.

The theory of surplus value and the theory of scientific socialism made Marx a monument in the history of human thought, while the theory of psychoanalysis made Freud a pioneer and founder of modern psychology.

New and unique ideas, profound theories, always contain the sweat and wisdom of thinkers exploring the world and life. These intellectual essences provide people with various keys and perspectives to understand the world, society, and themselves, enabling them to have rich and powerful intellectual means and wisdom weapons in creating the world and themselves. They are like lighthouses, illuminating the course of human progress. Without these lighthouses, people's eyes will be in the dark, and human civilization will be unimaginable.

Indeed, no viewpoint or theory can exhaust truth or be flawless; any viewpoint or theory can be further developed, created, and renewed. The water of life always flows, and the tree of creation always remains green. Compared with them, ready-made viewpoints and theories are always gray. Any perspective represents a past, and the present and the future are always novel and unique.

The creation of wisdom makes humanity a whole and also makes individuals into members of a group and society. As a product of collective creation, the modes of production, social forms, economic foundations, and superstructure must also follow the law of creation. People constantly seek new means of production and ways of living, and the mode of production will never remain at the same level, as old and backward modes will inevitably be replaced by new and advanced ones. Therefore, no social form can remain eternal, as slogans such as "long live," "eternal," "immortal," "forever green," and so on are only empty words.

Some scholars have summarized several "principles of creation", such as the transplant principle, amplification principle, reduction principle, substitution principle, modification principle, and so on. These principles are also within the summary of the law of creation and can be seen as the concrete and technical aspects of the law of creation.

The creative principles that fall within the framework of the law of novelty, transformation, and replacement include:

The principle of substitution, which means to replace something with another thing. For example, water power was replaced by thermal power, and thermal power was replaced by nuclear power, and so on.

The principle of change - changing the shape, color, taste, as well as technology, strategy, etc. of the original things. For example, the shape of a radio has changed from cumbersome to compact, the color of bicycles has become more diverse, and traditional cuisine has been modernized with "flavor enhancers" to improve the taste, and so on.

The principle of strangeness — that is, to examine familiar and commonplace things with a new and unfamiliar perspective. For example, when analyzing the literary masterpiece "Dream of the Red Chamber," one can use structuralism, deconstructionism, psychoanalytic criticism, or archetypal criticism instead of traditional literary criticism to derive new and unfamiliar conclusions.

Familiarity principle — in contrast to the strange principle, it means using familiar theories and methods to analyze and understand unfamiliar things. For example, when mathematicians encounter unfamiliar problems, they often use familiar formulas to solve them. Actors, when faced with a new set of lyrics, often use familiar melodies and rhythms to sing them.

In concrete creation, no matter which creative principle is applied or embodied, the fundamental goal is the same, which is to actively follow the creative law - seeking novelty and uniqueness. Only by constantly and actively pursuing novelty and uniqueness can human creation shine with

infinite magical charm.

### 3 The law of addition and subtraction in chemical combination

"The law of addition, subtraction, and combination" is a methodological principle in the process of creation, which implies that all creation must and will inevitably proceed through the methods of addition, subtraction, and combination. In other words, this principle suggests that any creation can be viewed as a series of processes involving addition, subtraction, and combination. This law is present throughout the entire process of creation and must be followed at all stages of the process.

### • The law of addition

The word "加" has two meanings. The first is to participate, join, or add in. The second meaning is to increase or add.

In the context of the creative process, "加" refers to the act of participating in the creation itself. For non-living things, plants, animals, and microorganisms, their "加" is unconscious and non-intelligent. In the case of humans, "加" can sometimes be unconscious and non-intelligent, but more often it is a conscious and intelligent act.

For example, when climbers set out to climb Mount Everest, the highest peak on earth, they take the first step in the creative process of climbing. The vast glaciers, broad snowfields, steep rocks, thin air, and other elements on the summit of Everest become a part of the creative process of climbing together with the climbers. The participation of glaciers, snowfields, rocks, and oxygen in the process of climbing is unconscious and non-intelligent. They do not possess spirituality simply because humans are present. The climbers' participation, on the other hand, is conscious

and intelligent. Their choices of the climbing route, the climbing equipment, the use of protective devices, and their struggle against harsh weather conditions all require consciousness and intelligence. Therefore, their participation in the process of climbing is an example of conscious and intelligent "加".

The first meaning of "加", which refers to participation and joining in, is applicable to all forms of creation, both living and non-living.

The second meaning of "加", which refers to adding or increasing, is more applicable to biological creations, especially human creations. In other words, adding or increasing is generally a conscious and artificial act. Non-living things, plants, animals, and microorganisms do not actively and consciously add or introduce anything in their creative process. Even if a fox is clever, it does not know to sprinkle salt or seasoning on its food, or if a dolphin is adorable, it cannot dress itself up by applying lipstick or blush. The principles of creation that scholars have summarized are also aimed at human creations.

One of these principles is the transplant principle, which involves the transfer of a theory, method, or components of an object to another area without modification or with minor modifications. This obviously involves an "addition" or "appendage", meaning that a creation is moved from one creative process to another. For the creation itself, it means that it exits one creative process and joins another. For example, when the theory of bacterial pathogenesis is applied in medicine, it gives rise to antiseptic disinfection methods; when a vaccine containing cowpox virus is inoculated into the human body, artificial immunity is produced; diesel generators can be transplanted to tractor engines, and airplane propellers can be modified for use as propulsion devices on ships, and so on.

Another example is the amplification principle, which involves

expanding the applications of existing theories, methods, and technologies, or increasing the size, height, thickness, width, weight, strength, or quantity of existing creations to create new ones. Using a telescope to observe the cosmic world is a form of amplification, as is examining the microcosmic world with a magnifying glass. Increasing the number of computer calculations, reinforcing buildings, widening roads, extending pipelines, taking anti-aging drugs to extend lifespan, and so on, are all forms of amplification or addition.

There is a "Yamazoku Ramen Shop" in Japan. The owner of this noodle shop often consciously prepares a large bowl of "Yamazoku Ramen" (enough to feed four to five people). Whoever can finish the entire bowl of noodles and soup within a set time will win applause and receive a beautiful commendation letter. Their name will also be added to the "Wall of Fame" in the shop. The noodle shop also has an extra-large beer mug that can hold ten bottles of beer. If someone can finish the entire mug of beer in one go, they will receive another large mug of beer for free the next day. By using this conscious method of "adding", the noodle shop has a thriving business every day, with customers flocking in.

The creative technique that embodies the principle of addition includes the method of analogy and association, which involves drawing inspiration from comparing different or similar creations and proposing a new insight or simulating the strengths, styles, techniques, and craftsmanship of one creation and transplanting them to another creation. For instance, British physicist Dirac proposed the existence of a positron by analogy with positive and negative electric charges, while French scientist de Broglie used the analogy between light and matter to suggest that matter not only has particle-like properties but also wave-like properties. Ancient Egyptians used a continuously rotating chain to transport water buckets

for irrigation, which was later applied by British inventor Evans in the transportation of grain in mills. The Wright brothers in the United States observed the flight of eagles and developed wings with flexible trailing edges to solve the problem of maintaining stability when turning a plane in the air. In modern biomimetics, organs of humans and animals have been simulated, leading to the successful development of electronic eyes, electronic ears, electronic power hearts, vibration gyroscopes, intelligent robots, and more.

The methods of listing drawbacks and listing hopes also reflect the principle of addition.

The method of listing disadvantages is also a manifestation of the principle of addition. It involves holding a meeting where participants are encouraged to list as many disadvantages of a particular creation as possible, and then to improve and enhance it. The improvement and enhancement part is a form of "addition" relative to the original creation. For example, by listing various disadvantages of the old-style umbrella, such as being too big and long, inconvenient to store and carry, having water-permeable umbrella cloth that easily wets pants, and having a limited range of colors and styles that are difficult to recognize, improvements can be made. This leads to the creation of foldable umbrellas that are easy to store and carry, umbrellas with waterproof-treated umbrella cloth that is not permeable, and umbrellas with a wide range of colors, styles, and designs that are easy to recognize.

The Hope Spot Enumeration Method is also to hold a certain meeting and allow attendees to propose new ideas and hopes for the function, characteristics, structure, material, shape, etc. of a certain creation, and then formulate specific plans to gradually turn these new ideas and hopes into reality. Compared to the original creation, these materialized

ideas and hopes are undoubtedly a form of "addition". For example, in the past, for the refrigerator, people proposed many ideas and hopes, hoping that it could have more doors, open on both sides, automatically defrost or be frost-free, and dispense cold drinks outside the box, and so on. Through the efforts of manufacturers, most of these ideas and hopes have now become a reality. There are now refrigerators on the market that have multiple functions, such as multi-door, double-sided opening, automatic defrosting or being frost-free, and dispensing cold drinks outside the box.

### • The law of subtraction

The concept of "reduce" also has two meanings. The first is to subtract or withdraw, and the second is to decrease or shrink.

The term "減" has two meanings. One is to exit or withdraw from a creative process, and the other is to reduce or decrease. For a creation involved in the creative process, withdrawing from it and entering another creative process is considered a "減". For example, when a basketball player withdraws from a game, it is a form of "減" for both the player and the game. However, a "減" in one creative process implies an "加" in another, such as when the player switches to playing volleyball or seeks medical treatment in a hospital or meets with his girlfriend, they enter a new creative process.

The "subtract" principle also has two meanings. One is to withdraw or exit, and the other is to reduce or shrink. For example, when a basketball player withdraws from a game, it is a "subtract" for both the player and the game. Of course, a "subtract" in one creative process means an "addition" in another creative process, such as if the player goes to play volleyball, he joins the creative process of playing volleyball; if he goes to the hospital for treatment, he enters the creative process of medical

treatment; if he goes to meet his girlfriend, he enters the creative process of dating, and so on. The meaning of "subtract" and exit applies to all creations: the setting of the sun is a "subtract," and the moon falling into the sea is also a "subtract"; the death of a tree is a "subtract," and the flight of a bird is also a "subtract," and so on. The other meaning of "subtract," which often bears the stamp of human wisdom, or in other words, can only be consciously and wisely reduced or shrunk by human creativity. Mouse kingdoms don't practice family planning, and elephant clans don't engage in weight loss programs, and only humans can achieve global environmental cleanup. The creative principles that embody the "subtract" principle include the shrinking principle, the cutting principle, and the recombination principle.

The principle of reduction corresponds to the principle of enlargement, which involves creating new creations through methods such as condensation, purification, splitting, simplification, miniaturization, etc., such as extracting alcohol from liquor, refining gasoline from crude oil, splitting a political party into two or several factions, dividing and conquering in guerrilla warfare, reducing product costs, straightening out curved roads to shorten distances, simplifying traditional Chinese characters, miniaturizing radios, tape recorders, telephones, computers, mobile phones, and so on.

The principle of segmentation involves cutting or removing certain aspects of an existing creation (theory, method, technique, tool, etc.) and leaving behind useful elements. A large cake can be sliced into several smaller pieces; a large tree can be felled and its branches cut off, leaving the trunk for use as timber; a square can be cut into a rectangle, trapezoid, or triangle; a cylinder can be segmented into a cone or a frustum.

The principle of recombination involves rearranging the various parts

and elements that make up an existing creation to form a new creation. The principle of recombination is both "subtractive" — reducing the participating creations to zero — and "additive" — adding the participating creations to an appropriate degree. The number of participating creations in two creation processes does not change, but their positions are transformed, i.e., they are rearranged into different permutations and combinations. For example, a child can build different shapes of "houses" with a fixed number of building blocks; pilots can perform different formation flights, such as trapezoid, rhombus, and triangle, with a fixed number of airplanes; and the same elements, such as carbon atoms (C), can form different substances due to different permutations and combinations, such as graphite or diamond, which are soft and hard, respectively.

The principle of recombination involves recombining the various parts and elements that make up an existing creation to form a new creation. This principle involves both "subtracting" and "adding" - subtracting the various components involved in a creation process to reduce them to zero and then adding them back in a suitable way. The number of components involved in both creation processes remains the same, but they are rearranged differently, resulting in different combinations. For example, a child playing with building blocks can use a fixed number of blocks to create various shapes of "houses." Pilots can perform formation flying in different formations, such as a trapezoid, a diamond, or a triangle, with the same number of planes. Similarly, carbon atoms can be used to form both graphite, which is soft and can be easily cut, and diamond, which is extremely hard. However, if not all the components involved in the original creation process are added to the new creation process, or if the new creation process does not involve the participation of the original components, it is not "recombination," but rather "reconstruction." For

example, if an old building is demolished and a new building is constructed in its place, the building materials, such as bricks, tiles, wood, and stone, from the old building may be partially useful, such as for laying the foundation, or completely useless, requiring them to be cleared away as rubbish.

The "destructive method" in the process of concrete creation reflects this "reduction" principle. Many writers have had experiences of tearing up or burning their own works. The reason for destroying the original creative results is to rebuild them without hesitation and create works that are newer and better than the original ones.

### • The law of chemical combination

Combination is the interaction between two or more original creations in a creative process, resulting in a new creation. Here, "combination" includes both chemical "combination," in which two or more substances react chemically to form a new substance, such as the combination of hydrogen and oxygen to form water, as well as physical "mixing," in which two or more substances are mixed together without undergoing a chemical reaction, and the original properties of each substance remain unchanged, such as adding oil to water. It even includes chemical "decomposition," in which a compound is broken down into two or more simpler compounds or elements due to a chemical reaction, such as the decomposition of potassium chlorate into potassium chloride and oxygen gas.

The reason why the physical "mixture" and chemical "decomposition" in physics are also included in the "combination" of the theory of creation is that they both generate new creatives. The process of generating a new creative is the process of "combination," or in other words, "generation." The key difference between "combination" and "non-combination" lies in

whether a new creative is generated. When oil is poured into water, although the oil floats on the water, the water at this time is the water with oil floating on it, and the oil is also the oil floating on the water. They both belong to new creatives and are a kind of "combination." Any compound cannot be decomposed by itself and must involve other creatives, such as a certain temperature, humidity, catalyst, reaction vessel, etc. For example, potassium chlorate can only be decomposed into potassium chloride and oxygen at a temperature of 356°C or higher. Potassium chloride and oxygen are the results of the "combination" of potassium chlorate and other creatives such as thermal energy and reaction vessel.

In summary, the term "combination" used here is much broader than its meaning in chemistry. Any creative process can be understood as a "combination" process. The term "combination" used here includes chemical reactions, but it does not exclusively refer to chemical reactions. It also encompasses meanings such as change, transformation, generation, formation, and proposal.

The principle of hybridization is a prominent manifestation of the creative principle of combination. Hybridization involves incorporating two or more existing creations (theories, methods, techniques, elements, organisms, objects, etc.) into a creative process, allowing them to merge, synthesize, mix, combine, and intermingle, with the aim of generating new creations such as new theories, new methods, new technologies, new products, new varieties, etc. When an apple is crossbred with a pear, the result is a hybrid fruit called an apple pear, and when a donkey is crossbred with a horse, the offspring is a mule. Fields like social psychology, which is a hybrid of sociology and psychology, and geomechanics, which is a hybrid of geology and mechanics, are examples of the almost entirely hybrid nature of modern science and technology. The Japanese steel industry's

technological system is a product of hybridization, which involved the following creations: Austria's oxygen blown top blown converter steelmaking, France's heavy oil blown blast furnace, West Germany's steelmaking deoxidation, the United States' high temperature and high pressure blast furnace and strip rolling, and Switzerland's continuous casting, among others.

Typical creative techniques that embody the principle of combination include the combination method, the synthesis method, and the information fusion method.

The creation techniques that typically reflect the principle of combination include the combination method, the synthesis method, and the information fusion method. The combination method involves combining creative phenomena and creative technologies to create new creations, or combining two or more creative phenomena or creative technologies to produce new creations. For example, by combining the phenomenon of ultrasonic waves and diagnostic technology, a new technology of ultrasonic diagnosis is created. Friction welding is formed by combining the physical phenomenon of friction with welding technology, and the development of the Sony diode is due to the combination of the magnetoresistance effect and the Hall effect (both physical phenomena).

The principle of synthesis is an amplification of the principle of combination. Unlike the principle of combination, which involves two or several things, the principle of synthesis involves multiple, and even many, things. The third technological revolution, for example, is a product synthesized from multiple new scientific and technological developments, such as atomic energy, space technology, microelectronics, and electronic computing technology. The super-speed boat is a composite of a high-speed boat and a hovercraft. Due to its synthesis of developmental technologies,

such as the hydrodynamic shape resembling an aircraft, lightweight materials, high-output and high-efficiency water jet propulsion systems, and high-speed control systems, it is regarded as one of the last major technological advancements of the 20th century.

The creative techniques that typify the law of combination include the combination method, the synthesis method, and the information fusion method. The combination method combines creative phenomena and technical creations to produce new creative objects. Alternatively, it combines two or more creative phenomena or techniques to create new objects. For example, combining the ultrasonic phenomenon with diagnostic technology resulted in the new technology of ultrasonic diagnosis. Combining the physical phenomenon of friction with welding technology led to the development of friction welding. Combining the magnetoresistive effect and the Hall effect, both physical phenomena, resulted in the successful development of the Sony diode. The synthesis method is an amplification of the combination method. Rather than combining two or more creative objects, the synthesis method involves the synthesis of multiple, sometimes many, scientific and technological innovations. The Third Industrial Revolution, for example, was a product of the synthesis of multiple new technologies, such as atomic energy, space technology, microelectronics technology, and electronic computer technology. The high-speed ship is a composite type of high-speed boat and hovercraft, which has been included as one of the last major technological innovations of the 20th century, due to its incorporation of a number of developmental technologies such as a boat shape that resembles a plane, lightweight materials, high-output and high-efficiency waterjet propulsion system, and high-speed control system. The information fusion method breaks down two types of creative objects into a sequence of elements, which are then represented as an "information coordinate

reaction field" in the form of X and Y axes. The various elements on each axis are then combined one by one to obtain new creative objects. For example, the function, structure, and shape of a bottle can be arranged into a sequence, and people's daily activities, such as drinking water, playing chess, exercising, and aesthetic appreciation, can be arranged into another sequence, which together form an information coordinate reaction field. Then, each element on the two sequences is combined one by one. The function of the bottle is combined with drinking water to produce a bottle that can be used as a cup. Combining the function of the bottle with playing chess, the bottom of the bottle can be molded with the characters for soldiers, horses, and cannons, so that when the bottle is empty, it can be flipped over and used as chess pieces. Combining the function of the bottle with exercise, the bottle can be strung together as a meteor chain, or hung on the wall as a bullet target. Combining the function of the bottle with aesthetic appreciation, various drawings and writings can be made on the bottle body, or various bottles can be glued together to form various works of art. The lengths of the two sequence axes are infinite, and the uses of the bottle are limitless.

In a macro perspective, all the various creative techniques that people have summarized conform to and reflect the law of combination. For example, the brainstorming technique is a "combination" of collective intelligence to create an environment that can inspire each other, stimulate association, and develop intelligence, in order to come up with new proposals and solutions. This is certainly a "combination", a collective intelligence involved in the creation of "combination." Another example is the KJ method, proposed by Jiro Kawakita, a professor at Tokyo Institute of Technology. This method classifies and organizes scattered ideas related to a particular topic, and develops them into a new idea through induction and

combination. This method is undoubtedly a "combination" of various scattered ideas involved in the creation of "combination."

Other creative techniques can also be viewed in the same way.

The principles of addition, subtraction, and combination are all integrated in the process of creation. For a particular creation, addition may mean subtraction for another, and vice versa. It's like cooking a dish, adding too much salt means other seasonings like sweet and sour sauce are reduced, and vice versa. Furthermore, the process, endpoint, and purpose of addition and subtraction must ultimately result in combination, that is, the creation of a new product. Whether adding more salt and less sugar or less salt and more sugar, the goal is for various creative elements to blend together in the cooking pot, resulting in a delicious and well-rounded dish - a new creation with great taste, aroma, appearance, and texture.

The creation of writers follows the law of addition and subtraction. Cao Xueqin spent ten years on "Dream of the Red Chamber" and revised it five times. Lu Xun once said, "After finishing writing, I would read it at least twice and strive to remove any unnecessary words or phrases without any hesitation." As an editor for a newspaper supplement for over thirty years, I have been engaged in the practice of "adding and subtracting" to "make wedding clothes for others" for three decades. Many submissions often suffer from issues like excessive verbosity, inflated content, and excessive length. Therefore, I would "remove verbosity, trim excessive content, and cut down length," while also correcting any typos and polishing the entire piece. My own writing also adheres to the law of addition and subtraction. Each work goes through repeated contemplation, revision, and refinement before being published. Even after publication, I continue to make further revisions. Since the 1970s, when I began practicing writing, I have published thousands of works and written over thirty books. These

works and books are the result of addition and subtraction, and, of course, they are also products of novelty and transformation.

#### 4 The law of accumulation of civilization

Civilization is a product of intelligent creation, while animals, plants, microorganisms, and inanimate objects outside of humanity are products of non-intelligent creation. Therefore, the Law of Civilizational Accumulation discussed in this section is a relatively special law that only applies to human creations, which constitute the main body of civilization. Non-human creations are not constrained or governed by this law. In other words, non-human creations only follow the laws of novelty replacement and addition-subtraction combination, while human creations must also follow the Law of Civilizational Accumulation. This is another significant difference between human and non-human creations.

As the sum of material and spiritual wealth created by humans, the accumulation of civilization represents the enormous wisdom that humanity has contributed to creating the world and themselves over hundreds of thousands of years. It also serves as a symbol and display of the level and degree of civilization achieved by human society in terms of enlightenment, progress, and development. For example, spoken language, stone tools, artificial fire and cooked food, the invention and use of bows and arrows, witchcraft and primitive art are all symbols of the Paleolithic era; the introduction of Copernican heliocentrism, the establishment of Newton's classical mechanics, the invention of textile machines and steam engines are all symbols of the transition from agricultural society to industrial society; the creation of quantum mechanics, genetics, and relativity theory, as well as the application of atomic energy, electronic

computers, and space technology are all symbols of human entry into a highly industrialized and modern society, and so on.

The term "accumulation" used by the author here is borrowed from the terminology of analytical psychology, but its meaning is much broader than what is meant in analytical psychology. In analytical psychology, especially in the mythological prototype school led by Jung, accumulation mainly refers to the accumulation and inheritance of collective unconsciousness, that is, primitive images and ideas that are universally shared. However, what the author means by "accumulation" includes not only the collective unconsciousness, personal unconsciousness summarized and proposed by Jung and others, and the subconsciousness proposed by Freud, but also consciousness - personal consciousness, collective consciousness, social consciousness, and the materialization of these consciousness - the crystallization of human wisdom created in the form of civilization, such as language, music, architecture, sculpture, painting, machinery, tools, theories, methods, production modes, social forms, and so on.

The term "accumulation" at least has the following three meanings:

Firstly, accumulation. Human wisdom and creativity is a gradual process of gathering and civilization, starting from small to large, from few to many, from low to high. The pyramid was built by stacking one giant stone after another, while the Great Wall was built by laying one green brick after another. In the early days, humans could not enjoy televisions, telephones, computers, and printers, nor could they build spacecrafts to explore space. However, without the earliest discovery, control, and use of fire, as well as the later invention of gunpowder, there would be no spacecraft today flying in space; without the earliest oral language and later pictographic, cuneiform, and alphabetic scripts, there would be no modern communication devices and office supplies. From learning to use fire

to making rockets, satellites, and spacecraft; from primitive gestural language to digital communication via computers and printers, countless creators over generations have accumulated intelligence and wisdom. The course of civilization is a process of wise creation from bits and pieces to streams and oceans.

Secondly, genetic inheritance. Here, genetic inheritance not only refers to the hereditary transmission of human physiological structure and functions, but also includes the psychological, intellectual, and spiritual inheritance, even including the products of wise creation, such as methods, techniques, technologies, and means, passed down from one generation to another. For example, the hereditary transmission of the physiological structure and mechanism of the brain, which is the center and cradle of wisdom creation, is a genetic inheritance; the continuous transmission and dissemination of the wise sayings and verses of ancient sages and poets is also a genetic inheritance; and the intergenerational transmission of various livelihood skills such as the method of making fire, the technique of papermaking, the technology of metallurgy, and various means of making a living, are all genetic inheritance. These genetic inheritances transmit the spark of human wisdom and serve as the bridge and lever for the continuation and development of civilization.

Thirdly, filtration and elimination. Civilization accumulation is not inclusive without any selection. In the process of accumulation and inheritance, there must be filtration, selection, and elimination — judging, discriminating, selecting, and eliminating — leaving behind what is appropriate, progressive, and high—quality, and discarding what is inappropriate, backward, and inferior. In the production of pottery, what is left behind is mostly the highest quality, the most delicate, and the most beautiful created under the conditions at that time; the inferior,

rough, and ugly ones are thrown away or smashed even when they are still in the rough stage. In language and writing, those rare, cumbersome, difficult-to-read, and difficult-to-write words are always being eliminated and replaced by novel, concise, easy-to-recognize, and easy-to-read and write words.

The basic meanings of "accumulation" as mentioned above provide the foundation for the basic principles of the Law of Civilizational Accumulation. These basic principles are: the principle of progress, the principle of optimization, and the principle of humanity. As a special law that restricts and regulates human creation, the Law of Civilizational Accumulation requires people to abide by these basic principles in any creation. Once violated, they will inevitably be punished.

The principle of progress requires people to invest their intelligence in creation, resulting in creations that are not only new and unique but also represent progress. Generally speaking, new and unique creations are considered progress, but not necessarily always so. For instance, every sentence spoken or every action taken by people may be considered new and unique in the context of creation, but not all are necessarily progressive. Progress means getting closer to or surpassing the highest level achieved by civilization accumulation so far. In other words, the highest level achieved by civilization accumulation is the benchmark for measuring progress. For example, when publishing a book, the current highest level is characterized by new and original content, as well as unique and sophisticated layout electronic color separation, design, laser typesetting, and color offset printing, among other features. If the book meets or approaches this standard, it can be considered progressive. Otherwise, it may be regarded as backward or partially backward. Progressive books are naturally favored by a broad readership, while it

is difficult for backward books to win over readers.

The political situation of a society can also be measured by the principle of progress. In modern civilized societies of the 21st century, the required political system should be scientific, democratic, and transparent, rather than arbitrary, authoritarian, or mysterious. A political system that is scientific, democratic, and transparent is considered progressive, while a political system that is arbitrary, authoritarian, or mysterious is considered backward. Backward politics will inevitably be replaced by progressive politics, as determined by the law of civilization accumulation, which is irreversible by any individual will.

The principle of optimization requires people to invest their creativity in creations and select the most advanced and excellent ones while eliminating the backward and inferior ones. The most advanced typesetting technology today is computer input and laser typesetting, which is several times or even dozens of times more efficient than the traditional lead type printing. If a printing factory does not choose to adopt the laser typesetting system and continues to use the "letterpress printing" method of lead type setting, the factory will not be profitable and cannot sustain The principle of optimization is also followed in student enrollment exams and health examinations, as well as in the evaluation of cadres' promotion. In agricultural and industrial production and scientific experiments, the optimization method is often used, which involves finding the optimal formula, suitable process conditions, and so on by using mathematical methods to find the maximum or minimum value of a function with the least number of experiments. In daily life, there is always an "optimization" problem in everything people do, such as eating, dressing, traveling, watching TV, listening to music, and so on.

The principle of humanity is a very important principle. It requires people to abide by the basic criteria for being human when creating, and to be constrained by these criteria. Human beings are the essence of the universe, the spirit of all things, and the subject of creation. Therefore, the principle of humanity is about respecting, caring for, and protecting human beings. This requires people to respect, care for, and protect the creative efficiency and value of human beings, as well as their basic rights to survival, life, speech, and publishing. Killing is a kind of creation, and heinous criminals who commit crimes deserving the death penalty should be executed according to the law. However, killing innocent people, or even slaughtering innocent and peaceful civilians, violates the principle of humanity. It is not about respecting, caring for, and protecting people, but about harming, depriving, and brutalizing them. The law of civilization accumulation does not tolerate such inhumane creations, and once they occur, they will be severely punished.

Bloody wars of aggression, wicked slave trade, racial discrimination and segregation, production and trafficking of drugs, etc., are all creations that violate the principle of humanity. Such creations naturally need to be condemned, stopped, and judged by all mankind. This is also a necessary requirement of the law of civilization accumulation, which cannot be influenced by any individual will.

Adolf Hitler, the infamous world-class demon, was undeniably a highly creative individual if we were to examine his ability to create. He launched the Second World War, which led to the loss of 35 million lives, and he rose to become the head of a world power in just a few short years as a Nazi party member without any financial means. Furthermore, he established fascist dictatorship rule at a lightning-fast pace. The impact of his creations was profound, and he is still widely discussed by many people

of his generation and beyond (some even trying to emulate him). When writing "The 100 Most Influential People in History," American author Hart could not help but include Hitler in a high position, despite feeling sickened by it.

However, Hitler's creations were against the rule of civilized conduct and the principles of humanity. During his reign, he implemented an unparalleled policy of racial extermination, where innocent men, women, and children were poisoned to death in massive concentration camps. The number of Jews brutally killed within a few years reached six million, and not only Jews, but also countless Russians, Gypsies, and many others that he deemed as inferior races lost their lives in his bloody massacres. Falling into the hands of such a fascist tyrant, people could not even obtain the basic right to survival, let alone the dignity of personality, the openness of speech, or the freedom of creation!

If anyone dares to commit a similar atrocity and become a "Hitler 2.0," the laws of civilized society will drive people to use stronger and more effective means to constrain, stop, and punish them. The pursuit and trial of Nazi war criminals worldwide is a manifestation of the punitive role of the laws of civilized society.

## Four The state of creation

### 1 An overview of the creative state

The creative state is the various situations and states in which a creation enters into the creative process, releasing and exerting its creative effectiveness. Since all things in the world are creations and must enter into the creative process and release and exert their creative effectiveness, the creative state is the most fundamental and universal existence mode of all things in the world. In other words, any creation must exist in the form of a creative state in the world, and there is no creation that exists without a creative state. This is the universality of the creative state.

The state of creation is the various situations and states in which a creative object enters the process of creation, releases and exerts its creative power. As all things in the world are creative objects and must enter the process of creation, release and exert their creative power, the state of creation is the most basic and universal way of existence for all things in the world. In other words, every creative object must exist in the form of a state of creation in the world, and there is no creative object that does not exist in a state of creation. This is the universality of the state of creation. The situation in which a creative object enters the process of creation, releases and exerts its creative power is diverse and varied, that is to say, the state of creation is presented in various forms. This is the diversity of the state of creation. However, no matter how different or how varied, it is still presented as a state of creation.

Differences and changes are just different situations and conditions of the state of creation.

We can view the entire Milky Way as a huge creation. This vast creation is made up of many creations, including stars, star clusters, interstellar gas, and dust, including the solar system. As each component constantly enters new creative processes and releases and exerts its own creative potential in various ways, the Milky Way inevitably presents various creative states. The stars, nebulae, and other interstellar matter in the Milky Way as a whole rotate around the galactic axis, which is the Milky Way's rotational state. Various celestial bodies in the Milky Way, such as neutral hydrogen clouds, ionized hydrogen clouds, non-thermal, and supernova remnants, constantly produce radio phenomena, which is the Milky Way's radio state. The irregular magnetic field in the Milky Way can be called the Milky Way's magnetic field state. The irregular gas flow in the Milky Way can be called the Milky Way's wind state. There are also the Milky Way's light state, absorption state, halo state, and corona state, among others. Even the Milky Way's "Heavenly River" or "Silver River," the milky white band of light that spans the sky visible to the naked eye on a moonless clear night, is ever-changing in distance, brightness, width, density, direction, and duration.

Different creations have different creative states, and the same creation can also have different creative states. The creative state of a creation itself is also constantly changing and evolving. A male lion in a zoo can be in a sitting state or a lying state, and when eating, it can be called a gluttonous state, while roaring can be called a roaring state. There are also silly states, delicate states, sick states, powerful states, mournful states, and weak states, among others. Water is typically in a liquid state, but at temperatures below  $0^{\circ}$ C, it becomes a solid state,

and when heated to above 100°C, it becomes a gaseous state. Liquid, solid, and gaseous states of water also have an infinite variety of different shapes.

Humans are creative beings with wisdom. Due to the intervention of wisdom, the creative state of humans can be said to be particularly complex and infinitely rich. "Diverse" and "myriad" are far from enough to summarize and describe them. Broadly speaking, human creative states include sensory perceptual states, phenomenal states, thinking states, subconscious states, conscious states, inspiration states, emotional states, rational states, and so on. Each of these creative states can be further divided into several specific states. For example, sensory states can be divided into visual states, taste states, auditory states, olfactory states, tactile states, and sixth sense states; thinking states can be divided into lateral thinking, reverse thinking, associative thinking, fragmentary thinking, synthetic thinking, image thinking, thinking, abstract thinking, and so on. Additionally, human blood flows through blood vessels in a liquid state; humans have hundreds of bones throughout their bodies in a solid state; the oxygen humans inhale and the carbon dioxide they exhale are in a gaseous state; the human body has a certain magnetic field, which can be considered a field state; and the human body may radiate certain light waves, which can be considered a wave state, and so on.

Despite the ever-changing and infinitely diverse nature of the creative state of a creation, it is not without rules and laws. The creative state is the various situations and states that a creation presents during the creative process, and thus, it is undoubtedly a type of creation. Since it is a creation, it must be subject to the laws and regulations of creation. The law of constant innovation and change requires that the creative state

is always new and constantly changing; the law of addition and subtraction determines that the creative state is always in a state of constant addition, subtraction, and combination; the law of cultural accumulation guides human creativity towards the direction of progress, optimization, and humanity.

There are multiple ways to classify the different types of creative states, such as the physical and chemical classification method used in physics, the human and anthropological classification method used in biology, and the social and psychological classification method used in sociology. The author adopts a macroscopic classification method based on the philosophy of creativity. Using this classification method, the infinitely diverse and rich creative states can be roughly grouped into three categories: static creativity, dynamic creativity, and transformative creativity.

#### 2 Creative static

Creation static is relative to creation dynamic. As everything is constantly in the process of creation, macroscopically speaking, creation dynamic is absolute, eternal, and unconditional, while creation static is relative, limited by time and conditions.

Relative creative stasis can be divided into two situations:

The first situation where relative creative static exists is when compared to a creative entity that has entered a certain creative process, the creative entity that has not entered this creative process is in a state of creative static. For example, if a volcano in the Philippines is erupting, and a volcano in Japan is not erupting, then compared to the erupting volcano in the Philippines, the volcano in Japan that is not erupting is in a state of creative static. Another example is the Gulf War, where countries and

regions that have not experienced the war are in a state of creative static compared to countries like Kuwait, Iraq, and Saudi Arabia that have experienced the war.

The second situation is that for a created object itself, it is relatively in a state of creative stasis before entering the process of creation and after passing through the process of creation. Compared to when it is in a state of creative dynamics, it is in a state of relative creative stasis. The volcano in the Philippines before and after the eruption, compared to the volcano in the process of eruption, is in a state of creative stasis. The Gulf region before and after the war, compared to the Gulf region in the midst of war, is in a state of creative stasis.

There are at least two aspects of the significance of examining creative stasis:

The concept of static creation has at least two significances for examination. Firstly, it provides necessary conditions for understanding, distinguishing, and analyzing the qualitative regularity of a created object. Although everything in the world is a creation, it does not mean that everything is of the same type, kind, or category. Created objects have infinite and rich diversity. To comprehend, distinguish, and analyze the nature and characteristics of different types, kinds, and individual created objects, as well as to measure and determine their created quality and quantity, we must put them in a relatively stable and static state, namely static creation, to grasp them. For example, if a herd of horses on the grassland is in a state of intense gallop, we cannot determine each horse's physical characteristics, discern specific differences between horses, or examine their height, length, weight, age, or disease. Even to measure the speed of a horse's gallop, the horse must be in static creation at the start and end points of its run, or we cannot determine its speed.

From another perspective, galloping horses are undoubtedly in dynamic creation, but when they pass a certain point over a certain distance, they can be regarded as relatively static, which is a type of static creation in dynamic creation. Capturing the galloping horse's movements with a camera can record 24 frames per second, or 24 small pictures per second—still images of different moments in the horse's movement. These still images, or static creations, provide conditions for people to study and analyze the horse's movements, such as muscle tension and relaxation, joint bending, mane fluttering, action posture, and so on.

Secondly, creating static conditions serves as a necessary preparation and gradual process for creating dynamic conditions. Generally speaking, significant creative achievements, that is, new creations with high value indices in terms of both quality and quantity, are generated in a state of dynamic creativity. Although new creations also emerge during static creativity, their value indices are relatively low. Therefore, for human beings who strive for wisdom and creativity, there is an undeniable tendency to pursue higher value indices in their creations. Since higher value indices can only be achieved and realized during dynamic creativity, people always hope to shorten the time of static creativity and enter dynamic creativity as soon as possible. However, without static creativity, there can be no dynamic creativity. Static creativity serves as a necessary period of rest, preparation, incubation, and gradual development for dynamic creativity. Dynamic creativity is the inevitable result of the development and evolution of static creativity, and the two are interdependent and complementary.

Horses cannot run on the grassland without eating, drinking, and resting. Athletes cannot be active in the gym or on the field for twenty-four hours a day. A writer cannot spend 8,640 hours a year writing. Of course, the

value of horses lies in their running, and the brilliance of athletes is shown in the gym and on the field. The reason why a person is called a writer is that they have a running pen that can artistically express human wisdom and emotions. Therefore, the horse's eating, drinking, sleeping, and defecating are for better running; the athlete's rest, recuperation, and health care are for faster, higher, stronger, and better performance in the gym and on the field; when a writer puts down their pen and plays chess, takes a walk by the river, listens to music, watches TV, meets with friends, and so on, it is to prepare and brew for the next writing. Without the horse's eating, drinking, sleeping, and defecating, there would be no horse running; without the athlete's rest and recuperation, there would be no faster, higher, stronger, and better performance on the field; without the preparation and brewing of playing chess, taking walks, traveling, meeting friends, etc., there would be no shaping of the writer's ideas, portraying emotions, depicting the universe, or writing with skillful strokes.

Finally, I would like to emphasize the creation of static relativity. In fact, no matter what kind of creation of static, it is also a creation of static in the creation of dynamic. The volcanoes in the Philippines will certainly not erupt indefinitely, and during the dormant period, the volcano is in a state of static creation relative to the eruption period. At this time, the reference frame is the volcano in the eruption state. If this reference frame is changed to the sun, then the Philippine volcano will always be in a state of dynamic creation. The reason is simple. It has to rotate around the sun with the earth endlessly until the sun explodes and the earth is destroyed. Similarly, relative to the intense war state, the Gulf entered a state of static creation after the war ended. However, when the reference frame is changed, for example, to the moon, there is no static creation in the Gulf—the burning oil wells may still be smoking,

the people there need to heal their wounds and develop production; politicians are shuttling back and forth for lasting peace in the Middle East, scientists are trying to reduce and clear the environmental pollution caused by the war in the Gulf and even the whole world... In short, we cannot deny the existence of static creation, nor can we absolutize it. If we deny the existence of static creation, we cannot determine and analyze the nature, characteristics, differences, and value indices of creative objects. If we absolutize the relative static creation, we will violate the law of creation, and it will be equivalent to giving up and denying creation. After all, creation is an "activity", an activity of creative objects entering the process of creation, releasing and exerting creative efficiency, and producing new creative objects. If it is in an absolute state of "static", what is there to "act" and what is there to create?

## 3 Creative dynamics

It is more accurate to say that the creative dynamic is the most common and general mode of existence for everything in the world, rather than the creative static. As created objects, everything in the world must enter into the creative process, and must release and exert creative power. Without entering into this creative process, they would enter into another creative process. Entering into the creative process, releasing and exerting creative power is essentially a "dynamic" process, and new creations can only be generated in this creative dynamic. Therefore, the creative dynamic is the most fundamental and widespread mode of existence for all creations. Created objects and the creative dynamic are inseparable and exist in a mutually dependent relationship. Created objects are creations that exist within the creative dynamic, and the creative dynamic

is the creative dynamic of created objects. There is no creation that exists apart from the creative dynamic, nor does there exist a creative dynamic that does not have created objects as its foundation, source, essence, or support.

The creative dynamic can be divided into three types: the creative germination dynamic, the creative leisure dynamic, and the creative agitation dynamic.

#### • Creative budding dynamics

The creative sprouting phase is the phase where creativity begins to emerge. At this stage, the creative object has just entered a creative process, and has started to release and exert its creative energy. The new creative object is just sprouting, and may even be in its embryonic or budding stage. As described in an ancient poem, "the tiny lotus just shows its pointed tip," and "the grass appears close but seems far away."

The creative budding phase represents the beginning of a creative process, serving as a prelude, prologue, and foundation for the creative leisure phase and creative excitement phase. Without a doubt, without the creative budding phase, there would be no creative leisure phase or creative excitement phase, and the creative process, as well as the emergence of new creations, would be impossible to discuss.

During earthquakes, there are unusual activities in the underground rock structures, and during typhoons, there is a local accumulation of moist and hot air on the ocean surface. When a seed is planted, the sprout first emerges; when a hungry wolf comes out of its den, it looks ferocious. When an inventor suddenly comes up with an idea to create something, or when a writer is inspired to write about a character, an event, or a piece of work, these are all examples of the creative sprouting period. Whether in

the biological or non-biological world, the creative sprouting period is commonly present. No creative process can bypass this period, only the duration and form of the "sprouting" can vary.

Non-living things' creative sprouting phase has the characteristics of being non-sensory, non-desirous, non-conscious, and non-intellectual. Rocks underground do not feel or realize that they are going to cause an earthquake because of their abnormal activity; moist and hot air on the ocean surface does not generate the desire to blow a typhoon because of its local accumulation, nor does it produce and invest any intelligence, such as determining wind force, choosing a travel route, landing time, or where to come ashore, etc.

The creative germinal state in living organisms is vastly different from that of non-living organisms. Microorganisms and plants possess a stimulus-response ability in their creative germinal state, such as the sensitivity of seeds to temperature, humidity, wind, frost, rain, and snow, or the sensitivity of flower buds. Animals, on the other hand, have a creative germinal state that involves both sensation and instinctual desire, which of course originate from animal instincts. In the precursory phase of an earthquake, or the germinal state of an earthquake, rodents and snakes wander about restlessly, while dogs and chickens become agitated and uneasy. Similarly, when a hungry wolf emerges from its den, it must be because it feels hungry and needs to find something to eat. If it encounters a herd of deer ahead, its nervous system will produce the instinctual desire to hunt for food, and it will then follow, taunt, and wait for an opportunity to catch its prey.

The creative impulse in living and non-living entities differ greatly. Non-living entities, such as rocks, do not possess sensory perception, desires, consciousness, or intelligence. Rocks do not sense or realize that

they are about to trigger an earthquake, nor do they possess the desire to cause one. Similarly, moist air over the ocean does not possess the desire to cause a typhoon nor does it make conscious decisions about the wind speed, path, landing time, or landing location. Living entities, on the other hand, exhibit a different kind of creative impulse. Microorganisms and plants possess the ability to sense and respond to stimuli, such as seed germination and flower buds being sensitive to temperature, humidity, wind, frost, rain, and snow. Animals take this even further, as their creative impulses can be driven by both sensory perception and instinctual desires. Before an earthquake, rodents and snakes can be seen scurrying around while chickens and dogs become restless. A hungry wolf leaving its den is driven by the desire to find food and may sense the presence of a deer herd, triggering its neural systems to pursue, provoke, and capture its prey. For humans, the creative impulse is even more complex, as it involves not only sensory perception and desires but also consciousness and intelligence. The creative impulse of humans begins with a "spark" in their brains. For example, during the Eastern Han Dynasty in China, Cai Lun saw the weighty and expensive disadvantages of using bamboo slips and silk as writing materials. He first "created an idea" in his mind - the desire to invent a cheaper and more convenient material for writing. Then he used "tree bark, hemp head, and worn-out fabric, fishing nets to make paper" (from "The Later Han Book: Biography of Eunuchs"). Similarly, in the mid-15th century, German inventor Johannes Gutenberg first had the idea to improve the numerous flaws of woodblock printing in his mind. He then gradually invented a metal alloy suitable for making movable type, inverted type casting molds, printing ink, and printing machines in practice. He eventually established Europe's first printing press.

The creative impulse in artistic creation is often manifested as images

and ideas that appear in the artist's mind, sometimes clear and sometimes vague. In classical Chinese literary and artistic theory, there are concepts such as "merging of the mind and spirit," "the idea is at the tip of the brush," "the transfer of ideas brings marvelous inspiration," "searching for the most wonderful peaks to capture in writing" and so on, which all describe this creative impulse.

The "image" of the world-famous character Ah Q had been brewing in Lu Xun's mind for several years. Lu Xun once recalled this "image": "He was about thirty years old, with an ordinary appearance and the simplicity and stupidity of a peasant, but also a bit of the cunning of a vagrant. In Shanghai, one can probably find his shadow among the coolies and carters..." (from "A Letter to the Editor of Theatrical Weekly" in "Miscellaneous Essays from the Pseudo-Tower").

"Life and Death Are Wearing Me Out" is a representative work by Mo Yan, the Nobel laureate in Literature. In the preface of the book, Mo Yan mentioned that it took him only forty-three days from starting to write to completing the first draft. However, the prototypes of the main characters in the book had been active in his mind for forty-three years. These forty-three years were the period of "creative germination."

During the Tang dynasty's Tianbao period, Emperor Xuanzong sent the painter Wu Daozi to Jialing to sketch and paint. After several months, Wu Daozi returned to Chang'an empty-handed. Emperor Xuanzong was very unhappy to see that Wu Daozi had not painted a single sketch. Wu Daozi said, "Your Majesty, please don't be angry. I can accurately depict the scenery of Jialing's mountains and rivers without error, because every blade of grass, every tree, every mountain, and every stone along the banks of the Jialing River are all in my mind." Xuanzong didn't believe him, so Wu Daozi immediately picked up a brush and finished the exquisite masterpiece "The

Scenic Beauty of Jialing River for Three Hundred Miles" in less than a day. Without the initial "spark" in his mind, it would have been impossible for Wu Daozi to complete the painting so quickly and accurately after only several months of observation.

As we discuss here, I want to introduce two important concepts: creative coincidence and creative inspiration. "Qi" means an opportunity, a fit; "Yuan" means causal connection, fate. Creating a creative coincidence is to create an opportunity and fate for creation, that is, an opportunity for creation and a catalyst for it. A creative process often "sprouts" because of the triggering of creative coincidences. An unextinguished cigarette butt can cause a forest fire that lasts for months; a mouse entering a distribution box causes the entire enterprise to short-circuit and power outage. The unextinguished cigarette butt and the mouse entering the distribution box here are the creative coincidences that cause the forest fire and the power outage. Lu Ban went up the mountain and had his fingers cut by a toothed grass, so he invented the saw; Watt saw the boiling water in a pot making the pot lid snap, so he invented the steam engine; Newton saw an apple falling off a tree by itself and discovered the law of universal gravitation - the toothed grass cutting his fingers, the boiling water making the pot lid snap, and the apple falling to the ground automatically all constitute the creative coincidences that led to Lu Ban inventing the saw, Watt inventing the steam engine, and Newton discovering the law of universal gravitation. Leo Tolstoy occasionally found a clump of burdock flowers by the roadside that had been broken and damaged but stubbornly lived on, which gave him the desire to write the novella "Hadji Murad." The Russian painter Surikov accidentally saw a crow standing like a black dot on the pristine snow. For many years, he "could not forget this black dot," and then created the famous painting "Molozov's Daughter,"

featuring a protagonist dressed in black. Obviously, the broken and damaged but stubbornly surviving burdock flowers by the roadside, the crow standing alone as a black dot on the snow, and the meeting of Tolstoy and Surikov's gaze became the creative coincidences that led to Tolstoy's writing and Surikov's painting.

If we consider creative phenomena as a kind of creation, then creating serendipity also exists in non-human creation processes. However, creating inspiration is unique to human creation. The reason is simple: creating inspiration is part of intelligent creation, while non-human creation is non-intelligent creation, and therefore cannot produce inspiration. Creative inspiration is a sudden burst of creative thinking that is unique to humans and is a form of "pulse" in intelligent creation. In other words, the central nervous system in the brain suddenly emits a short and strong high-frequency intelligent radio wave like a massive pulsar. Regarding human creation, if creating serendipity is about seeing, hearing, smelling, tasting, touching, dreaming, and feeling something, creating inspiration is suddenly thinking or realizing something while smelling, tasting, touching, seeing, hearing, dreaming, or feeling something or afterward. Of course, what is thought or realized here is something filled with creative wisdom, has high or even very high creative value, and can bring significant or even very significant creative results to human society.

For example, the French mathematician Poincaré, while pressing the brake pedal with one foot, suddenly came up with a proof method for a difficult mathematical problem. The German chemist Kekulé had a dream in which a snake bit its own tail, leading to a sudden realization that benzene molecules also had a ring structure. Lu Xun, influenced by the words and actions of a cousin who suffered from persecution and developed mental

disorder, conceived the idea of exposing the cannibalistic nature of the authoritarian system, leading to the creation of his first great work, "A Madman's Diary," which showcased the achievements of the May Fourth literary revolution. Inspired by a mural depicting the "six realms of rebirth," Mo Yan designed the reincarnation of the protagonist, Ximen Nao, in "Life and Death Are Wearing Me Out," where he sequentially takes on the forms of a donkey, a bull, a pig, a dog, and a monkey until the sixth reincarnation, where he is born as a child with an incurable disease. The Polish composer Frédéric Chopin, living abroad, heard the news that Warsaw, which had already been liberated, was once again occupied by the Tsarist army and that thousands of patriotic individuals had been massacred. Overwhelmed with emotion, anger, and sleeplessness, he composed three world-renowned pieces in one breath, later known as the "C Minor Étude," the "A Minor Prelude," and the "D Minor Prelude," which were referred to as "cannons buried in flowers."

It is obvious that creating connections is the spark, inducer, and trigger of inspiration, and that creating inspiration is premised on and mediated by creating connections. The combination of creating connections and creating inspiration constitutes the initial state of some creative impulses in humans. However, it should be noted that not all types of connections can induce or trigger creative inspiration. In many cases, creating connections only results in a desire to create. Unlike creative inspiration, which is rich in high-quality human wisdom and appears in the form of short and strong high-frequency "pulses" in the mind, the desire to create is merely a desire, a thought, with much lower quality, quantity, and value than creative inspiration, and does not appear in the form of high-frequency pulses in the mind. For example, when a person sees a piece of clothing they think is pretty while walking down the street, they may

have a desire to buy it and wear it; when they see a type of food that looks delicious, they may have a desire to buy a portion and eat it; when they see a movie advertisement, they may have a desire to go watch it, and so on. These desires and thoughts of "wearing," "eating," and "watching" are only simple desires and thoughts, which are far inferior to the wisdom-filled "pulses" of creative inspiration, and naturally cannot be compared or spoken of in the same breath. However, creating connections and the resulting desire to create also constitute some of the initial states of human creative impulses.

There is no time limit standard for creative impulses, some can last for a very long time, such as the origin of life, which "sprouted" for billions of years; while others can be very short, such as some organisms that only "sprout" for a few days, a few hours, or even just a few minutes or seconds. The creative impulse of humans is generally very short-lived, what we often call a "momentary" impulse, which is probably equivalent to a fraction of a second, "like a brave man snapping his fingers, sixty-five moments." (Abhidharmakośa-bhāṣya by Vasubandhu).

The creative impulse is relative to a creative process. For example, in relation to a person's entire life process, the gestational period is the creative impulse; in relation to a single childbirth, the gestational period of the fetus is the moment of conception. Additionally, there are instances where a creative object only experiences a moment of "sprouting" within a creative process and does not transition or evolve into a state of creative excitement or stimulation. For example, a seed may germinate but then die from drought or flooding, a flower bud may be blown away by wind or killed by snow before it blooms. Similarly, many of our desires may simply flash in our minds without necessarily being realized or fulfilled, such as wanting to buy something but not actually buying it,

wanting to eat something but not actually eating it, wanting to say something but not actually saying it, wanting to write something but not actually writing it, and so on.

#### • Creative leisurely dynamics

The state of creative development is a transitional phase in the process of creation, characterized by transitional, intermediary, and processual features. It is transitional because after the creative impulse, the creative process generally goes through a period of creative development before evolving into a state of creative excitement. It is intermediary because creative development is a middle stage in the creative process, acting as a bridge and link between the state of creative impulse and the state of creative excitement. It is processual because creative development usually takes up most of the time in the creative process. In other words, most of the time in a creative process is spent in the state of creative development, which is the most difficult and arduous part of the creative process, requiring willpower, determination, resilience, and physical effort. While the new creation mainly forms in the state of creative excitement, the states of creative impulse and creative development together form the foundation for the state of creative excitement. In summary, the creative impulse and creative development are two important phases in the process of creation, with the latter being the transitional and intermediary stage that occupies the bulk of the creative process. Together, these two states form the basis for the state of creative excitement, which is where the new creation ultimately takes shape.

Our planet Earth originated from the primordial solar nebula 4.6 billion years ago. If we like the formation of the Earth's embryo to the stage of creative inspiration, and the final formation of the Earth's crust

to the stage of creative excitement, then the extremely long process of the formation of the Earth's core and mantle can be seen as the stage of creative movement. The creative movement stage of wheat growth is from the stage of tillering, to the stage of stem elongation, and to the stage of heading and flowering. The creative movement stage of a chick's birth is from the beginning of incubation to just before hatching. The psychological process of human cognition generally goes through four progressive stages, namely sensation, perception, representation, and thinking. Sensation can be considered as the stage of creative inspiration, while perception and representation are the stages of creative movement. It is through the "movement" of perception and representation as intermediate stages that sensory cognition can evolve into rational cognition.

An author's desire to write a certain work may be considered as the creation's initial impulse, and his process of collecting information, organizing materials, and outlining the work may be viewed as the creation's transitional phase or the creative doldrums. Even the arduous process of writing, which is occasionally punctuated by moments of inspiration, can be considered a part of the creative doldrums. For instance, it took Cao Xueqin ten years to write "Dream of the Red Chamber," and those ten years were his creative doldrums. Goethe spent sixty years writing "Faust," and those sixty years were his creative doldrums. Scientific discoveries and inventions frequently begin with a "spark" in the minds of scientists and inventors, followed by series of experiments, a verifications, calculations, and other processes of creation's doldrums before ultimately achieving success. For example, Ehrlich invented the (arsphenamine), which treats sleeping sickness and syphilis, after six hundred and six experiments, five hundred and five of which failed. Those five hundred and five failures were a part of Ehrlich's creative doldrums.

Curie and her husband spent months extracting radium, a radioactive element, a kilogram at a time from several tons of residual uranium ore, before finally discovering it. The process of extracting radium was a part of their creative doldrums.

Similar to the creation of the budding phase, there is no specific time limit for the creation of the leisurely phase, some are quite long, and some are quite short, depending on the specific creation process and the specific creation object. The creation of the leisurely phase for different creations is not the same. Even for the same creation, the creation of the leisurely phase is not always the same. What is the same is the "leisurely" phase — taking up more creation time, slower creation speed, and a more peaceful and stable creation form — this is of course relative to the creation of the budding and exciting phases.

#### • Creative exciting dynamics

The state of creative excitement is the eruption period of creation. It is the overall explosive outbreak of the creative effectiveness with a larger scale and higher index after the period of germination and leisurely movement. In a play, if the prologue is the period of creative germination, the development of the plot is the period of creative leisurely movement, then the climax at the end is the period of creative excitement. In a war, the planning and strategic decision—making are the period of germination, the deployment and confrontation of troops are the period of leisurely movement, and the actual fighting with real guns and ammunition is the period of excitement.

The creative explosive phase, or the creative dynamic state, is a period of high efficiency and large-scale creative output that follows the creative germination and creative leisure phases. If the opening scene of

a play is the creative germination phase and the development of the plot is the creative leisure phase, then the climax at the end of the play is the creative explosive phase. In a war, strategic planning is the germination phase, the deployment and confrontation of troops is the leisure phase, and actual fighting with real weapons is the explosive phase. The creative explosive phase and the new creation are intertwined, and the process of presenting the creative explosive phase is also the process of forming the new creation. If conception and pregnancy are the germination and leisure phases of creation, then delivery is the explosive phase. A brand new life is born with the screaming and shouting of the explosive phase.

Creating a state of excitement is the eruption period of creation, which is the large-scale and high-index overall outbreak of creative efficacy after the state of budding and development. In a play, if the opening is the state of budding, the evolution of the plot is the state of development, and the climax at the end is the state of excitement. In a war, strategic planning is the state of budding, the deployment of troops and the confrontation of the two armies is the state of development, and the actual fighting with live ammunition is the state of excitement. The process of presenting a state of excitement and the creation of a new creation are inseparable. The process of presenting a state of excitement is the process of forming a new creation in its final form. If conception and gestation are the states of budding and development, then childbirth is the state of excitement. A brand new life is born screaming and announcing its birth in this tumultuous state of excitement. Sometimes, the state of development is so short-lived that it almost merges with the state of budding and immediately enters the state of excitement, which is called the "state of inspiration" or "epiphany" for wise human creation. This situation is

common in scientific discoveries, technological inventions, and artistic creations. Kekulé associated the circular structure of benzene molecules with a snake biting its own tail, and "woke up from a dream of a lightning strike" and worked in an abnormally excited state of creativity all night long. In his article "My Experience of Writing Poetry," Guo Moruo recalled the situation when he wrote two poems: "My Mother Earth" was written when he was on vacation from the eighth grade of school. That day, he ran to the Fukuoka Library in the first half of the day and was suddenly attacked by poetic inspiration. He came out of the library and walked back and forth on the quiet stone road behind the library, sometimes lying on the road to sleep, wanting to truly and intimately feel the skin of "Mother Earth" and be embraced by her. - Looking back now, it seems a bit crazy, but at the time, it was really urgent. In that state of being pushed and encouraged by poetry, he finally saw her completion and hurriedly ran back to his residence to write it down on paper, feeling like he was reborn. "Phoenix Nirvana," the long poem, was written in two periods within a day. In the first half of the day, when he was listening to a lecture in class, poetic inspiration suddenly came, and he wrote the first half of the poem in his notebook. In the evening, when he was about to go to bed, the second half of the poem came to him, and he lay on the pillow and wrote it quickly with a pencil. His whole body felt a little cold, and even his teeth were chattering. That's how he wrote that strange poem.

After entering the state of creative excitement, human creativity is released and fully expressed, resulting in an unparalleled sense of creative pleasure. This often makes people ecstatic, intoxicated, and forgetful. Plato called it "inspired madness," Gogol called it "sweet shiver," Blok called it "mystical insight," Guo Moruo called it "neurotic episode," and we can call it "creative peak experience" or "creative climax

effect."

The climax of sexual intercourse between a man and a woman is a typical peak creative experience. At that moment, both the physical and mental aspects of both parties reach an extreme state of excitement. Physically, the heart beats faster, breathing quickens, blood pressure rises, limbs twitch, and the body feels feverish. In an instant, the ears and eyes seem to almost become unable to hear or see anything. Mentally, the central nervous system of the brain is highly stimulated, and a unique, indescribable, all-encompassing flood of pleasure comes rushing in, as if it wants to roll the entire head along with the body. There is a feeling of being thrown into the air and floating in the universe with a dizzying sensation. After the climax, both the man and woman feel completely relaxed, inside and out, extremely enjoyable, and indescribably wonderful.

The peak creative experience and pleasure in artistic creation and technological invention differ from those in sexual climax, as the former lasts longer, has a greater impact, and has more profound implications. The pleasure of sexual climax only lasts a few seconds, while the pleasure brought by artistic creation and technological invention can last for a longer period of time. After completing his poem "My Motherland," Guo Moruo's excitement did not dissipate, so he helped a fellow student carry their luggage for two miles, feeling extremely pleased with himself. Similarly, after entering a state of creative excitement, Gogol expressed himself on paper, but still found himself unsatisfied, so he danced in the street with a small umbrella, completely oblivious to the people around him, and eventually wore out the umbrella until only the handle remained. The most significant difference is that sexual climax is usually a private experience between two individuals and has limited indirect impact on society. However, the peak creative experience and pleasure in artistic

creation and technological invention not only bring the creator the greatest satisfaction but also have significant social implications. Modern science and technology are undoubtedly the most active factors in the new social productivity, while literary and artistic works, as Cao Pi puts it, are the "great enterprises of the nation" and "immortal events" (from "Treatise on Literature") that contribute to the accumulation, transformation, evolution, and development of human civilization.

The peak creative experience that arises from a state of creative excitement is not limited to just sexual intimacy, technological invention, and artistic creation. It permeates and manifests in various aspects of politics, military affairs, production, and daily life. The resulting sense of creative pleasure is not only limited to "sweet tremors". Extreme excitement, the brink of death, high tension and fear, the fullness of indignation and sorrow, and the bitterness of life are all undoubtedly encompassed in the creative pleasure experience. When Tang dynasty poet Meng Jiao passed the imperial examination, he experienced a peak creative experience when he wrote, "With the spring breeze in my favor, my horse's hooves fly. In one day, I see all the flowers of Chang'an. "Similarly, historian Sima Qian suffered palace punishment but persevered, "determined to investigate the intersection of heaven and humanity, to comprehend the changes of past and present, and to produce a comprehensive work," which was also a peak creative experience. When Qin Wuyang entered the Qin palace, he turned pale with fear, trembling all over. This was a peak creative experience. On the other hand, the brave Jing Ke, calmly presented his map, attempted to assassinate the Qin emperor, threw his dagger with a furious gaze, and even after being severely injured, he still leaned against the pillar, laughed, and cursed. This was also a peak creative experience. Jesus Christ's crucifixion, Hitler's suicide in his bunker, Gorbachev's 60-plus hours of house arrest, the Apollo spacecraft landing on the moon, and the Chinese women's volleyball team winning five consecutive championships are all undoubtedly peak creative experiences. In summary, the peak creative experience and the resulting creative pleasure are not limited to specific areas, but can be found in many aspects of life.

It should be pointed out that the peak creative experience, creative pleasure, and even creative excitement are not necessary in every creative process. Some creative processes only present creative stirring and creative flowing, without showing creative excitement. In other words, some creative processes end when the new creation emerges during the creative stirring or creative flowing, without the need for or occurrence of creative excitement. For example, the emergence and disappearance of certain desires, a tedious report from a bureaucrat, the lack of resolution of certain matters, and so on.

# 4 Creative abnormality

The state of creative aberration is relative to the state of creative normality. Creative normality refers to the common, general, universal, and orderly state of creation, while creative aberration refers to the rare, special, abnormal, and non-orderly state of creation. Compared with the process of presenting creative normality, the process of presenting creative aberration is accompanied by strange, bizarre, absurd, whimsical, and humorous phenomena from the participation of the creative object, the release and display of creative efficacy, to the generation of new creations. However, like creative normality, creative aberration is undoubtedly a state of creation. The new creations generated by the process of presenting creative aberration, which have the characteristics of being magical,

bizarre, absurd, whimsical, and humorous, are undoubtedly new creations that comply with the law of creation and have creative value.

The abnormal activity of sunspots, stellar flares in the world of stars, mysterious fireballs that appear out of nowhere, and once—in—a—century droughts and floods are examples of creative anomalies in the non—biological world. The ginkgo tree with fruits growing on its leaves found in Yiyuan County, Shandong Province, China, the natural tree formed by the combination of oak, pine, and birch in Neubrandenburg, Germany, and the bamboo shoot with seven stalks or apples growing on watermelon vines are examples of creative anomalies in the plant world. The horse with two heads and three legs born in a Soviet horse racing club, the color—changing deer found in the Shennongjia forest area of Hubei, China, the swarm of bees attacking Venezuela, the "Butterfly Festival" in Mexico, and the fifty cows in France collectively jumping off a cliff are all examples of creative anomalies in the animal world.

As the most advanced life form on Earth, human beings exhibit more complex and diverse examples of creative anomalies compared to other life forms and non-living phenomena. Physiologically, there are cases such as the "monkey woman" in Africa, the "wild woman" in Italy, the "wolf boy" in Peru, the "pig boy" in Liaoning, and the "hairy girl" in Anshan; there are cases of triple-eared and octo-limbed infants, a boy without skin, a man with six stomachs, a female clerk with four kidneys, and an octogenarian man with horns growing out of his head. There are also people with unique features such as the "crow man" of Mexico, the "crab man" of Fujian, the "ostrich man" of Zimbabwe, and the long-tailed inhabitants of the Arabian Peninsula. Additionally, there are people who do not eat or drink, a farmer who has not slept for 39 years, a worker who worked continuously for 96 hours, and an elderly man who walked backwards for more than ten thousand

miles. There are also physiological anomalies such as storing electricity in the body, breathing fire, secreting colored silk threads from the eyes, and growing rice seedlings in the ears. Phenomena of special abilities in humans involve both physiological and psychological aspects of creative anomalies, including specific character recognition, extraordinary perspective, direction and magnetic sensing, recognition of residual information, thought sensing, specific motor abilities, telekinesis, overcoming spatial barriers, and specific writing abilities. Additionally, qigong is another form of creative anomaly that involves the combined effect of physiological and psychological factors.

As the most advanced life form on Earth, human beings exhibit more complex and diverse forms of creative abnormalities than other living and non-living things. In terms of physiology, there are the "monkey woman" of Africa, the "wild woman" of Italy, the "wolf child" of Peru, the "pig boy" of Liaoning, and the "hairy child" of Anshan, among others. There are also infants with three ears and eight limbs, a boy without skin, a man with six stomachs, a female employee with four kidneys, and an octogenarian with horns on his head. There are also the "crow people" of Mexico, the "crab people" of Fujian, the "ostrich people" of Zimbabwe, and the "long-tailed people" of the Arabian Nights. There are also schoolchildren who only drink but don't eat, farmers who have not slept for 39 years, workers who work continuously for 96 hours, and old men who travel backwards for over ten thousand miles. There are also phenomena of human special abilities that are a result of both physiological and psychological factors, including the ability to recognize specific characters, extraordinary vision, directional and magnetic sensitivity, identification of residual information, thought sensing, specific action, telekinesis, space barrier breaking, and special writing, among others. Additionally, qigong state

is also a form of creative abnormality that results from the interaction between physiology and psychology. As intelligent beings, the human brain and nervous system are the headquarters of human wisdom. Therefore, human creative abnormalities are more often manifested in the mental and psychological domains, which in turn lead to behavioral abnormalities. The thoughts, emotions, and actions of patients with mental illness, brain disorders, and drug addiction are typical examples of creative abnormalities. Even ordinary people sometimes produce deviations from normal psychological phenomena, which often lead to abnormal, varied, and large or small abnormal behaviors.

Clearly, there is no strict and absolute boundary between creating normality and creating abnormality. In other words, there is no absolute creation of normality or abnormality in the world, and abnormality can exist within normality, as seen in cases such as when a person with a mental illness can appear calm and normal like anyone else. Similarly, normality can exist within abnormality, such as when a person has strange and thrilling dreams or talks in their sleep, which is considered normal behavior. As American psychiatrist Fisher once said, "Dreams are normal mental illnesses, and dreaming allows each of us to go crazy quietly and safely every night of our lives." (Thompson, R.F. ed. Physiological Psychology, translated by Jin Jianming et al., Science Press, 1981) Creating normality and abnormality are interdependent and can transform into each other. For example, when a rooster lays eggs or a mule gives birth to a it is a transformation from creating normality to creating abnormality. When someone overcomes foot binding or drug addiction or changes their bizarre behavior, it is a transformation from creating abnormality to creating normality. If abnormal behavior persists and is repeated over a long period of time, people will become accustomed to it,

and it will become the new normal. When disco first emerged, people who danced it were viewed as "abnormal" and faced criticism from society. However, as it became more common and accepted, disco became the new normal. Conversely, when normal behavior persists and is repeated over a long period of time, people may become tired of it and it may become abnormal. For instance, when Xianglin's wife first told the story of her husband's death by a wolf, it was normal storytelling, but when she continued to repeat the same story over and over again, it became abnormal. Furthermore, the judgment and evaluation of what is normal or abnormal can vary depending on factors such as time, location, race, ethnicity, social environment, and values. For example, Jia Baoyu in the classic Chinese novel "Dream of the Red Chamber, "who had eccentric behavior and deviated from traditional norms, was viewed as abnormal by many people of his time. However, in modern times, he is viewed as a unique and intelligent individual challenging traditional values. Similarly, in Western societies that value freedom, the nudist movement is considered a normal and natural expression of freedom, whereas in Eastern societies that value morals and ethics, it is seen as indecent and uncivilized. The practice of piercing holes in lips and noses or wearing copper bands on legs and arms is considered normal in some cultures, while it is viewed as abnormal in others. There are countless examples of this.

The study of creative madness among normal people can be said to have begun with the ancient Greek philosopher Plato's "Phaedrus". Plato referred to creative madness as "mania" and believed that there were two types of mania: one caused by illness, and the other caused by imitation of the gods. French philosopher Édouard Dujardin linked genius and madness together. Italian psychiatrist Cesare Lombroso even used the theory of epilepsy to analyze genius, believing that genius is epilepsy and epilepsy is genius.

China also has a similar saying: "Of ten great talents, nine are mad." American aesthete George Santayana pointed out: "The great minds of history have all benefited from a certain degree of stupefaction and some degree of madness. They are enclosed in a protective shell of ignorance and insensibility, which protects them from exhaustion and being bewildered by this overly complex world. But at the same time, that shell also merges with their many closest and highest interests. They are amused by the absurdity of their animalistic dreams; they are proud of their passionate and unrestrained dream mania, which sometimes makes them look amiable. Because great wisdom is inevitably still wild; it fights with strong enthusiasm and sometimes shows a foolish appearance." This passage is very insightful.

According to psychiatrist Sigmund Freud, every normal person is a potential mental patient, because every normal person has sexual desire, which is called "libido" in the original instinct. The difference between whether someone has a mental illness or not, that is, whether they are marked by creative abnormality, depends on whether their "libido" is satisfied, transferred, and sublimated. "As long as a person's sexual desire can be satisfied by the actual objects of the external world, he is healthy. Once his object is deprived and there is no substitute, he will develop neurosis." (Sigmund Freud, John Rickman, "Selected Works of Sigmund Freud", translated by He Mingming, Sichuan People's Publishing House, 1986) Freud believed that the essence of art is the transfer of human instinctual impulses, that is, the satisfaction of sexual desire and the sublimation of "libido".

The flawed universality of Freud's theories aside, there are many valuable and instructive aspects to his insights on the release and expression of creative energy (which includes but is not limited to sexual

energy). There are essentially two ways in which creative energy can be released and expressed: the normal way and the abnormal way. Artists use their art to dispel, transfer, and elevate their sexual desires, emotions, illusions, ideals, and musings. When the normal way is insufficient or incapable | of achieving this catharsis, artists consciously unconsciously resort to the abnormal way. There are various forms of abnormal creative expression, such as the pathological creations of novelist Steinfest and painter Van Gogh, the drunken poetry of the Seven Sages of the Bamboo Grove and the "Poet Immortal" Li Bai, the absurdity and black humor of the Eight Eccentrics of Yangzhou, Kafka, Camus, and Heller, the Dadaism and Surrealism of Duchamp, Breton, Picabia, and Dali, and the eventual suicide of poets Qu Yuan and Hemingway, and writer Sanmao, among others.

The author has stated that the creative process of presenting abnormalities in creation can generate new creations, just as the creative process of presenting normalcy can also generate new creations. For artists, the new creations that emerge in abnormal creative situations are often more innovative, unique, and artistic compared to those that arise in normal creative situations, thus increasing their artistic value. It is precisely through the presentation of abnormalities, specifically referring to mental illness, that Vincent van Gogh, who had only been painting for a decade, became the main representative of the later Impressionist movement (of course, we do not hope or encourage all artists to become mentally ill). "His mental illness gradually possessed his soul, and he wanted to bring tortured soul, "leading to masterpieces his "Self-Portrait," "The Postman Roulin," "Café Terrace at Night," and "Sunflowers." In these works, "he used swirling and wave-like brushstrokes to express the storms of his inner emotions. His madness became a

double-edged weapon; it liberated and inspired his artistic talent because without it, Van Gogh may have been nothing more than a diligent employee in an art shop. If madness saved Van Gogh from a mediocre and tedious existence, it only controlled this person fully, as he wrote in one of his exquisite letters: he was a 'lover of greatness'" (translated from Ernst Gombrich and Horst Waldemar Janson, "The Story of Art"). Similarly, without Li Bai, who said, "Drunk every day, like mud for 360 days," there would not have been the "Hundred Poems of Wine" or the ability to write immortal poems filled with magnificent imagination and passionate exuberance, enchanting Yang Guozhong to grind ink and Gao Lishi to take off his boots for Li Bai.

From the perspective discussed in this section, the creative excitement within the dynamic of creation that the author previously mentioned can also be seen as the abnormality within the normalcy of creation. When Gogol danced with a small umbrella in the street, Guo Moruo lay on the ground kissing the Earth, or Cao Yu wrote "Sunrise" with an explosive emotional outburst, shattering many cherished objects in the process, are these abnormal behaviors not "abnormal" enough?

This involves the relationship between creating static and creating dynamic (including creating cute dynamics, tranquil dynamics, and exciting dynamics) and creating normalcy and creating abnormality. As a sub-concept within the larger concept of "creative state", creating static and creating dynamic are a pair of categories, while creating normalcy and creating abnormality are another pair of categories. The two pairs of categories have differences and connections, and can be said to be intermingled with each other. Creating static and creating dynamic can be creating normalcy or creating abnormality, while creating normalcy and creating abnormality can be creating static or creating dynamic. This depends on the specific

creation, the specific creation process, and different reference systems for specific analysis. A mentally ill person in a state of abnormality may be sound asleep (creating static), or may be shouting and screaming (creating dynamic); a normal person sound asleep (creating static) may also be having a bizarre and perilous nightmare (creating abnormality). Abnormal behavior in mentally ill individuals may also go through a process of "cute dynamics", "tranquil dynamics", and then "exciting dynamics"; the psychology of normal individuals may also experience cute dynamics, tranquil dynamics, or even the desire and thoughts of creating abnormality, which may further manifest as cute dynamics, tranquil dynamics, or exciting dynamics of abnormal behavior.

If the "abnormality" of writers and artists (it must be pointed out that many successful writers and artists are not "abnormal") can bring valuable new creations - novel and unique works of art, then the "abnormality" of ordinary people often brings varying degrees of harm to themselves, their families, and society. Various abnormal behaviors are generally referred to as "personality disorders" or "character disorders". These include antisocial personality, sexual perversion, delusional personality, schizophrenic personality, alcoholism, drug addiction, etc. Personality disorders conflict with the Law of Creative Civilization, for example, the behavior of antisocial personality is characterized by A extreme self-centeredness, only seeking the satisfaction of desires, disregarding the harmful consequences of their behavior. B cannot tolerate setbacks in life, and will resort to any means necessary if they feel the need. C lacks a sense of responsibility and basic moral values, does not judge right from wrong according to civilized social norms and behavior standards, and does not feel guilty about their abnormal behavior. D lacks normal human emotions, is cold and ruthless towards others, lacks a sense of justice, and is unable to establish normal communication and friendship with others. E never admits that they are sick and believe that everyone is persecuting them. Since personality disorders do not comply with the Law of Creative Civilization, those who have them must be criticized, restrained, and treated by society as a whole, even though treatment is difficult and often ineffective.

# Five Creative process

### 1 Meaning of the process

The creative process is the program and trajectory of creation, carrying the passage of time. A complete and new creation can only be generated through the creative process. In other words, a new creation can only form as a whole after participating in the creation process, which follows a certain program, trajectory, and takes a certain amount of time. Without the creative process, there can be no new creation, and the existing creations will lose their meaning. Therefore, the existence of a creation is inextricably linked to the creative process, which is a necessary condition for the creation to exist. Only by entering the creative process can existing creations be considered creations, and only through the creative process can new creations have the opportunity to be born. The formation of the universe is a creative process, and the origin of life is also a creative process. Human activities such as thinking, eating, sleeping, working, socializing, marriage, and death are all creative processes that follow a certain program, trajectory, and take a certain amount of time.

The creative process provides opportunities, conditions, time, and space for the release and manifestation of the creative potential of the created object. The creative process is also the process of releasing and manifesting the creative potential of the created object. For advanced life forms with sensation and thought, the release and manifestation of creative potential inevitably come with varying degrees of creative pleasure or pain, whether weak or strong, brief or persistent. This is because when advanced

life forms, as active creative objects, enter the creative process, all their functional organs must inevitably respond and operate and fluctuate with the release and manifestation of creative potential, and the central nervous system of the brain will be excited, active, and connected in receiving, processing, and providing feedback. All of these physiological and psychological responses undoubtedly generate emotions such as joy, anger, sorrow, fear, love, hatred, and desire (or joy, anger, sorrow, thought, grief, fear, surprise) as well as comfort, pleasure, happiness, pain, and sadness, and so on. Animals emit various pleasant noises and even wag their tails and dance while hunting prey, pursuing mates, and caring for their offspring. Due to the intervention of intelligence, the creative pleasure of humans with wisdom is qualitatively different from the instinctive creative pleasure of animals, so it is much richer, complex, intense, and persistent. However, like the instinctive creative pleasure of animals, human creative pleasure with intelligence can only be obtained and satisfied through the creative process. Without the creative process, human creative potential, which is characterized primarily by wisdom, cannot be released and manifested, and creative pleasure cannot be discussed.

"The road ahead is long and winding, and I will seek and explore both above and below." This process of seeking and exploring is the difficult process of creation. "Fighting with the heavens brings endless joy; fighting with the earth brings endless joy; fighting with people brings endless joy." The process of struggling with the heavens, earth, and people is the creative process that brings endless joy. Politicians can only experience the joy of struggle by constantly engaging in power struggles; inventors can only fully demonstrate their exceptional character beyond ordinary people in the process of invention; artists can only achieve the

greatest spiritual pleasure and satisfaction they crave through continuous artistic creation. The cessation of creation means the end of artistic life. Those who can be called writers will feel this way: writing often means a painful process, but not writing can be even more painful. Writing is not only a symbol of "anguish" but also a "painful release." "Because there are things that must be said, I can't hold it in. In order to say what's in my heart, I pick up my pen and write novels, write articles." (Ba Jin's "On Creation," Shanghai Literature and Art Publishing House, 1983) Of course, the "pain" of writers and artists is undoubtedly a kind of joyful pain, different from the pain caused by trivial matters that ordinary people experience, and cannot be compared or spoken in the same breath. Sima Qian said, "My thoughts were clogged, and I couldn't find a way to express them." (Preface to The Records of the Grand Historian) Therefore, he "devoted himself to writing." The process of devoting oneself to writing is also the process of spreading one's "clogged thoughts." "Sending poems to friends in joy, entrusting poems to enemies in resentment. Whether it is the Chu minister leaving his state or the Han concubine leaving the palace; whether it is bones lying in the wilderness or spirits wandering with the wind; whether it is carrying a spear to a foreign garrison or killing the enemy on the border; whether it is a hermit wearing a single garment or a widow shedding all her tears... all these various experiences stir the soul. How can we express their meaning without poetry? How can we express their emotions without singing long songs?" Therefore, due to various reasons, one "sways one's emotions and expresses them in dance and song" (Zhong Rong's "Preface to Poetic Criticism"). The process of expressing emotions through dance and song is also the process of writers and artists "swaying their emotions." It can be seen that the process of creation and the expression and experience of emotions are mutually dependent and

inseparable.

If one pays a little attention in daily life, they will notice that the joys and sorrows of existence, the flavors of life, and the wonderful experiences are mostly manifested in the process of creation. Eating is not just about filling one's stomach, the act of eating is actually a process of aesthetic taste. Dancing is not just about physical fitness, the act of dancing is a process of releasing and communicating emotions. The sourness, sweetness, bitterness, and spiciness in romantic relationships between men and women are fully generated and manifested in the processes of mutual admiration, pursuit, love, misunderstanding, waiting, understanding, and so on.

American philosopher A. N. Whitehead established a form of "American progressive philosophy" in the 1950s, which was known as "process philosophy" and was "popular among ordinary Americans". In the view of process philosophy, the world is a dynamic process, in which nature, society, humans, and matter (molecules, atoms), etc., are all "organisms" composed of properties and relationships under certain conditions, and the characteristic of the organism is activity, manifested as a process. This process is the process of creating evolution. "In organismic terms, the only enduring thing is the structure of activity, and this structure is evolutionary." Therefore, process philosophy emphasizes the study of the structure of the organism as a whole, the relationships between its various parts, and the conditions that create the organism.

Influenced by process philosophy, there emerged in the Western art world a movement that emphasizes the process of creating art. This movement has two branches: conceptual art and land art. The former aims to emphasize the conceptual process of the artwork, believing that all planning and decision-making are completed during the conceptualization process, and

that the hands—on production is merely routine. Therefore, the important thing is the process of this activity, not the result. The latter attempts to break through the constraints of traditional art concepts and painting tools, turning static images into a dynamic process. Thus, the earth is used as the canvas and background, and only natural materials are used for appropriate treatment and processing, trying to pursue a harmonious artistic effect that integrates space and form, material and expression, nature and artifice, evoking a novel sensation in people towards the natural environment.

Process philosophy has influenced the field of theology and given rise to "process theology." Whitehead believed that people should view the world from the perspective of "process" rather than as a static entity. God is not only the creator of the world, but also the savior, who is involved in the "process of formation" of the real world. Therefore, God is not only the source and foundation of the process of creating everything in the world, but also omnipresent, omniscient, and omnipotent, and is present in everything. Whitehead's thinking led to "panentheism," which is the belief that everything in the universe is in God.

The author does not agree with "Process Theology" and "Panentheism". The author appreciates and agrees with the view of Process Philosophy, which sees the world as a process of creation and evolution from the perspective of "process". This viewpoint is compatible with the author's view of the creative process, and Whitehead's notion of "organism" can be included in the author's notion of "created beings". However, the creative theory is different from process philosophy. The author emphasizes the importance of the creative process and does not mean to place the results of creation in a secondary and negligible position, as process philosophy does. On the contrary, creative theory attaches great importance to and cherishes the

results of creation, that is, the birth and formation of new creations, which is the ultimate sign of the terminus of the creative process set by the creative law, and is the purpose of releasing and exerting creative efficiency. Without new creative results, this creative process loses its meaning.

In the view of creationism, the emergence of new creations is also a part of the process of creation. For a given creation process, the input of existing creations and the generation of new creations can be seen as the starting and ending points of this creation process. For example, for a farmer, spring plowing and autumn harvest can be seen as the ending point of processes such as soaking, preparing the land, and planting, or the starting point of processes such as threshing and selling grain. If we view a farmer's labor from the beginning to the end of the year or even throughout their entire life as a creation process, then spring plowing and autumn harvest are just two ordinary points within this constant or lifelong creation process.

Regarding the creative pleasure experienced by advanced life forms, although most of the pain and joy are experienced during the creative process, it is not to say that the creative pleasure diminishes or disappears when the creative results appear. On the contrary, with the birth of new creations, the creative pleasure often reaches a climax. The earlier mentioned creative excitement and peak experiences refer to this situation. The reason is twofold: first, the appearance of new creative results is inherently a part of this creative process, although it is the final part; second, as the creative process progresses to the later stage, the release and exertion of creative effectiveness often approach the limit, and the physiological structure and psychological mechanism of the creative subject also become correspondingly active and excited to the extreme. The

resulting creative pleasure naturally surges in the form of a climax, although its time is relatively short compared to the entire creative process. People who have given birth or have witnessed childbirth can easily understand this situation.

Therefore, I do not approve of exaggerating the importance of "process" to an absolute, unique, and infinite degree. When the importance of "process" is exaggerated to an absolute, unique, and infinite degree, the "process" loses its meaning if no new high-value creations emerge. For example, if architects only imagine buildings in their minds, musicians only compose new music in their heads, and novelists only think of stories in their minds, then there will be no towering new buildings, no beautiful and moving new music, and no captivating new novels in the world — what a tragic situation that would be!

When it comes to the pleasure of creation, architects, musicians, and novelists can only obtain it to a limited extent if they limit the creative process to their own minds, that is, if they only "think" about it and do not "materialize" it in the form of new creations to offer to human society. The great pleasure of creation is not so much generated in the process of "thinking" as it is in the process of "doing," that is, the process where "thinking" and "doing" are combined. Magnificence and glory will always belong to those who not only dare to "think," but also can "do" as creators.

After understanding the significance of the creative process, the author will further explore several categories closely related to the creative process: the time and space of creation, factors that facilitate or inhibit creativity, and the roles of the creative leader and follower.

## 2 Creative time and creative space

Creation time is a representation of the continuity and sequence of the creation process, which indicates how much time is spent and occupied from the entry of the creation into the creation process to the comprehensive and integral generation of the new creation. Creation space is a representation of the extension and conditionality of the creation process, indicating how large a scope a creation process involves and what conditions are required. In short, creation time means the duration of the creation process, and creation space means the size of the creation process. The relationship between creation time, creation space, and the creation process is extremely close: any creation process requires a certain amount of time and occupies a certain space to be completed. There is no creation process that does not require creation time and is not located in a creation space, and there is no creation time or creation space that exists independently of the creation process.

Creation time and creation space are interrelated, mutually restrictive, and inseparable. The passage and duration of creation time imply the existence and extension of creation space, and the existence and extension of creation space are inevitably accompanied by the duration and passage of creation time. Both are organically unified in the process of creation. The irreversible "one-dimensionality" of creation time, and the "three-dimensionality" with length, width, and height of creation space, together constitute a four-dimensional solid creation process.

From a macro perspective, if we consider the universe as a vast creation process, then creation time and creation space are absolute and infinite. This is because the universe is infinite – the creation, creation process, and creation itself are infinite – therefore, creation time and creation space are also infinite, meaning they are without beginning or end and without limits. However, from a micro perspective, for a specific creation

process, creation time and creation space are relative and limited. The sun has a specific creation time and creation space, and all human activities also have their relative and limited creation time and creation space. In general, when I refer to creation time and creation space, I am referring to relative and limited creation time and creation space.

Sure, please specify which topic you would like me to translate.

#### • Creative time

The discussion on creation time can be framed around three questions.

The first question pertains to the continuity of creation time.

The continuity of creation time refers to the fact that any process of creation takes a certain amount of time, and this time may vary greatly, from the formation of the Earth over billions of years to the blink of an eye of a lightning bolt or the rotation of a fundamental particle. Whether long or short, every process of creation must last and experience a certain amount of time. The length of the creation process determines the duration of the creation time, and vice versa, the duration of the creation time also indicates the length of the creation process. We can observe the duration of creation time by studying the length of the creation process, or determine the length of the creation process by analyzing the duration of creation time.

Because the length of the creative process is closely related to the value index of newly created objects, the duration of creative time becomes an important factor in measuring and determining the value index of created objects. For human creation, the size of the value index of creation is determined by the quantity and quality of creation. The quantity of creation is determined by the duration of creative time, under the same creative conditions, if the relative stability of creative quality is the same. In

general, the longer the creative time, the greater the quantity of creation, and the higher the value index of creation. For example, if two or more coal miners work in the same coal seam, use the same tools, have similar physical fitness, technical level, and mental condition, whoever works longer will mine more coal and have a higher value index of creation.

The second aspect of the discussion about the creation of time is its sequential nature.

The sequentiality of creative time refers to the fact that time is always a one-dimensional and irreversible process that moves forward in the direction of the past, present, and future. "The stream never stops flowing," time does not flow backwards, and the past always remains in the past. The sequentiality of creative time determines the sequence of the creative process. In other words, any creative process will undergo a sequence of events such as occurrence, development, and ultimately the formation of a new creation, and will eventually come to an end in this sequence with the passage of time. "The grass on the plain withers and flourishes year after year." A blade of grass can only grow from "flourishing" to "withering" and cannot go back from "withering" to "flourishing." Life begins with infancy, passes through adolescence, adulthood, middle age, and old age, and it is impossible to go back from old age to middle age, youth, or childhood. The creative process of an individual's life can only follow the sequentiality of creative time once, and the arrival of death means the end of the creative time and creative process of this life. The idea of "eternal youth" or "reincarnation" is just a beautiful wish of humanity. Therefore, cherishing creative time is tantamount to cherishing life, while wasting creative time is equivalent to wasting life.

Looking back on the past is useless, chasing the future is unpredictable,

and what matters is seizing the present — actively devoting oneself to high-value creative processes, releasing and utilizing one's creative power in a timely and sufficient manner, and striving to create new creations with a higher creative value index. This is an important inspiration and warning given by the sequentiality of creative time to people.

The regularity and selectivity of creating time.

The regularity and selectivity of creating time depend on specific creations and different creative processes. For some creative processes, the creation time is naturally determined, formed by a combination of various natural creation conditions that are beyond or minimally influenced by human power, which provides opportunities and sequences for time. For example, the creation time of a solar or lunar eclipse is naturally predetermined - when the sun and moon are in a certain range near the intersection of the ecliptic and the celestial equator, known as the "limit of eclipse," a solar or lunar eclipse is inevitably going to occur. Modern astronomy can accurately calculate and predict the creation time of solar and lunar eclipses, including the specific time, minute, and second of the beginning, middle, and end of the eclipse, and publish them to the world. Another example is the farming proverb "plant melons and beans after the Grain Rain," which means that the creation time for planting melons and beans is the "Grain Rain" in the 24 solar terms, which falls around April 20th on the Gregorian calendar. At this time, the weather is warming up, the rainfall is increasing, and the soil is moist, making it suitable for sowing and seedling emergence. Missing this creation time will delay farming activities, which will be unfavorable for seedling emergence and growth, and ultimately affect the harvest in autumn.

In natural creation, the creation time for non-biological and plant

creations is generally predetermined and follows a regular pattern, except for abnormal cases. For example, the start of summer is marked by the arrival of the heat, while the end of summer is indicated by the arrival of the cool, and peonies bloom in May while plum blossoms appear in December. As for animals, especially humans, their creation time is determined by nature but also has a degree of selectivity. After being born, humans can live for only around 100 years or so (the vast majority of people do not live beyond a hundred years, only a few people can surpass this age), which is predetermined by nature and cannot be surpassed by anyone. (Those who seek immortality through the elixir of life, such as Emperor Qin Shi Huang and Emperor Wu of Han, died even earlier. Freezing living patients in a refrigerator and hoping to revive them after several years of freezing is an extremely rare and exceptional scientific experiment that is beyond the reach of most people.)

What people can choose is only the specific creation time associated with certain specific creation processes. For example, when to hold a meeting and how long it will last, when to introduce or terminate a certain measure or regulation, when to start writing a certain work and how long it will take to complete, and so on. The selection of these specific creation times requires the use of intelligence and wisdom (as selection is an essential component of wisdom). Those who use their wisdom well will choose their creation time well, and the creative value index of their new creations will be high.

According to research by some scholars abroad, the optimal age for people to release and exert their creative efficiency, i.e. the age when their creative value index is highest, is mainly concentrated between thirty and forty years old. There are some differences in this optimal age depending on the specific creative process or field in which the creator

is engaged. For example, the optimal age for chemists is between twenty—six and thirty years old, for poets it's between twenty—five and twenty—eight years old, and for mathematics, physics, technological invention, it's between thirty and forty years old. Psychology has an optimal age of between thirty and thirty—nine years old, while music and painting have an optimal age of between thirty—five and thirty—nine years old. For novel writing, mainly long novels, the optimal age is between forty and forty—four years old. Generally speaking, scientists reach their creative peak at around thirty—five years old. After menopause, between fifty and sixty years old, there will be another peak in creative efficiency, which is called the "second creative peak". After the second creative peak, people's creative efficiency gradually tends to decline, with some individual exceptions of course.

The prime of life won't come again, and a day's morning won't come again; those who don't work hard in their youth will regret it in old age. Those who abandon their time for creation will surely be abandoned by time for creation. The regulative and selective nature of creation time is a serious and urgent reminder and warning to people: creation is best done while young!

## • Creative space

We can also focus our attention on three questions regarding the space for creation.

The first is the extensiveness of creative space.

The extensiveness of creative space indicates that the creative process has three-dimensional characteristics. The process of creation involves the release and exertion of creative efficacy by the created objects. The range of created objects participating in the creative process is quite

extensive. The universe is a system, and the world is a whole. From a macro perspective, Mars participated in the creation of Jupiter, and Jupiter also participated in the creation of Mars; the welcoming pine on Huangshan participated in the creation of the Gulf War, and the Gulf War also participated in the creation of Huangshan's welcoming pine. It's just that the creative efficacy released and exerted by Jupiter in the creative process of Mars was not as great as that released and exerted by Mars itself; and the creative efficacy released and exerted by the pollution of the Gulf War on Huangshan's welcoming pine was not as great as that released and exerted by Huangshan's welcoming pine itself (the opposite is also true). We cannot say that the rotation of Mars had no effect on Jupiter, nor can we say that the air pollution caused by the Gulf War had no effect on Huangshan's welcoming pine. The impact is always mutual. Due to the extensive participation of created objects, any creative process is vast and can be widely extended along the three-dimensional six directions of length, width, and height, stretching all the way to infinity. The universe is infinite, the created objects are infinite, and the creative process is also infinite. Therefore, the extensiveness of creative space is essentially the infinity of the creative process and the universe.

The extensiveness of creative space reminds us that when understanding the creative process, we should take a macro, holistic, systematic, and three-dimensional perspective. We only have one earth, and we are all residents of the universe village. The successful lunar landing of the American space shuttle is not only the glory of the American nation but also the glory of all mankind; the victory of the Chinese people in flood control and disaster relief is not only the victory of an eastern country on the earth but also the victory of the whole world. No nation should confine itself, isolate itself from the world civilization, remain stagnant,

or be complacent. In fact, many creative processes, such as improving the ecological environment, controlling air pollution, reducing disaster losses, dispelling the clouds of war, preventing epidemic outbreaks, and future space migration and space exploration, all require unity and cooperation among all nations in the world. Creation belongs to all mankind, and civilization belongs to the world.

The conditionality of creative space.

The creation space has two aspects: the extensiveness, which means the creation process has an infinite extension and expansion, and the conditional limitation, which means the creation space has limitations and conditions. When we talk about the extensiveness of the creation space, we refer to the infinitely vast universe as the reference system. When we talk about the conditional limitation of the creation space, we refer to a specific and limited creation process. The creation space is the unity of infinity and limitation.

The specific spatial range that a particular creative process can involve constitutes the conditions necessary for the completion of that process. In other words, the conditions required to complete a particular creative process are its creative space. The conditionality of creative space and the finiteness of the creative process overlap and are inseparable. The conditionality of creative space is, in fact, the conditionality of the creative process itself, and the finiteness of the creative process is the finiteness of the creative space.

The creative space constituted by the fertile land, advantageous dry climate, and scarce rainfall of the Nile River Valley was the condition for the birth and formation of the splendid ancient Egyptian civilization represented by pyramids and hieroglyphs. Similarly, the creative space composed of the fertile loess soil, temperate and subtropical climate, and

appropriate precipitation became the cradle for the development of Chinese Yellow River Valley agricultural civilization characterized by the use of bronze and iron tools. On the other hand, the deterioration of conditions, such as fierce intertribal wars, worsening climate, and malaria outbreaks in the jungle, caused some of the once prosperous Mayan civilizations in certain regions of South America to lose their suitable creative space and ultimately perish.

Each and every one of us lives within a relatively limited space, which serves as our creative condition. We cannot simply stamp our feet and jump to the moon to play football; we cannot chant a spell and experiment at the center of the earth; we cannot even freely choose an ideal living environment. Our creative space can sometimes be tense, narrow, and cramped. Such spatial conditions naturally affect the progress of the creative process and the emergence of high-value new creations.

Thirdly, the creatability of creative space.

For human creation, the creative space not only has conditionality but also has constructibility, that is to say, wise humans can create a suitable creative space for their own creative process. Man-made nature is the space conditions created by humans by transforming natural nature for their own survival and development, such as man-made forests, artificial grasslands, animal breeding farms, aquaculture farms, urban and rural ecosystems, and metal and non-metal materials, items, tools made from natural materials.

or the average individual creator, it may seem difficult to choose and create a large-scale living environment, but a small-scale living environment is indeed selectable and creatable. For example, one can choose a suitable workplace and a profession that allows them to fully utilize their talents, make friends with like-minded people, and decorate their living space as elegant, clean, and comfortable as possible, etc.

For outstanding creators, the feasibility of creating space means the expansion of the creative environment, which often provides various expected and unexpected opportunities for creative productivity. It is said that after graduating from the University of Zurich, Einstein founded an "Olympia Academy" on Gilas Street in Zurich - in Greek mythology, Olympia is a holy mountain where gods gather. In fact, this so-called "academy" was just a regular gathering of several young scholars with similar interests. They explored knowledge, researched problems together, talked freely and unrestrainedly, and did so for years. Einstein's epoch-making theory of relativity was inspired and encouraged by the conversations he had with these "academics". This "Olympia Academy" was a unique creative space created by Einstein and others, which became an important part of his entire creative career. It is no wonder that this creative giant wrote passionately in a letter to a friend in the last two years of his life, "Oh, Olympia Academy! I will be loyal to you forever and love you until the last moment of my life!"

## 3 Creative facilitation and creative inhibition

The combination of creative time and creative space constitutes the conditions for creation. These conditions encompass all the various factors that influence the creative process. Essentially, the conditions for creation are also a creative entity that participates in the creative process, releasing and exerting creative power, but to a limited extent, and with limited impact on the progress of the creative process and the generation of new creations. In other words, the conditions for creation are creative entities that participate in and exert a certain degree of influence on the generation of new creations.

The conditions for creation can be categorized into three main types: natural conditions, social conditions, and personal conditions of the creator. Natural conditions include everything in the natural environment on Earth's surface and in outer space, including natural factors such as light, heat, water, air, soil, and living organisms, such as rivers, lakes, seas, the sun, moon, stars, mountains, deserts, forests, flowers, plants, animals, and insects. Human-made natural conditions can be seen as a combination of natural and social factors. Social conditions are the total of human civilization, including ethnicity, race, political parties, country, cultural traditions, customs, technological level, production methods, economic foundation, superstructure, ideology, and more. The personal conditions of the creator include their internal structure, external form, physiological basis, psychological mechanisms, and more.

The impact of the conditions for creation on the creative process can be classified into two categories: promotion and inhibition. The author refers to the conditions that can have a favorable impact on the creative process as "creative promotion", while the conditions that can have an unfavorable impact on the creative process are referred to as "creative inhibition". Creative promotion can increase the creative value index of the new creation, while creative inhibition can lower the creative value index of the new creation. Using the terminology of physics, creative promotion is reducing entropy, while creative inhibition is increasing entropy. Using the terminology of systems theory, creative promotion is positive feedback, while creative inhibition is negative feedback.

The circumstances of creative promotion are easy to understand. The Earth's atmosphere and high thermal friction are the conditions that promote the creation of meteor showers. A sudden change in climate, changes in terrain and landforms, a sharp decrease in tropical plants, and

extraordinary astronomical disasters are the conditions that promote the extinction of dinosaurs. Fertile soil, mild climate, and abundant rainfall are the conditions that promote the creation of crops. A good ecological environment, superior political system, and harmonious social relations are the conditions that promote the survival and development of human beings, and so on.

Understanding creative inhibition is also not difficult. Mountains and valleys blocking the way, dams and gates intercepting the flow of rivers, are the conditions that inhibit the creation of the river's flow. Rampant deforestation and soil erosion are the conditions that inhibit the growth of forest vegetation. Bamboo flowering and die-off, muscle function degeneration, are the conditions that inhibit the reproduction of pandas. Serious environmental pollution, widespread epidemic outbreaks, frequent natural disasters, etc., are the conditions that inhibit the survival and development of human beings, and so on.

Creative promotion and creative inhibition often change positions depending on the creative process. The same creative conditions can be a promotion in one process and an inhibition in another. For example, the gentle spring rain that "comes stealthily at night, and moistens all things silently" is a creative promotion for crops and farmers; but for competitive sports events, ongoing construction projects, and pedestrians on the road, it is a creative inhibition. Family planning is a creative inhibition for population growth but is a creative promotion for a country's economic prosperity and the improvement of people's living standards. Generally speaking, social stimuli in a group setting (such as communication, competition, and evaluation) are creative promotion, which can increase the speed and quantity of creative output of individual creators and facilitate the release and development of creative efficiency and the

generation of new creations. A person working in a group or in a competitive environment can achieve higher productivity than working alone. However, there are also opposite situations, such as some students who perform well in daily studies but perform poorly in exams due to dizziness, mental tension, and poor performance, and some people who are fluent in everyday speech but stutter and become incoherent when speaking on a podium. In such cases, social stimuli (such as public competition, supervision, and collective evaluation) are not creative promotion but creative inhibition for the examinee or speaker.

For some creative processes, creative promotion and creative inhibition are interchangeable. Drinking a small amount of alcohol can invigorate the meridians, stimulate the nerves, and warm the body, which is obviously a creative promotion. However, excessive alcohol consumption can harm the body, lead to loss of control of speech and behavior, and even result in death, becoming a creative inhibition. Crops need sunlight, but if it shines too much for several tens or even hundreds of days in a row, it becomes a drought, and creative promotion is transformed into creative inhibition. For human creativity, strong creative inhibition often transforms into even stronger creative promotion. Without pressure, people are light and carefree, and wells don't produce oil without pressure. Creative giants are mostly ahead-of-their-time thinkers, and valuable creations often have an inverse relationship with social adaptability, and a direct relationship with the intensity of suppression, criticism, challenges, and difficulties from all sides. Despite being accused of heresy, expelled from the church, living in exile for many years, and ultimately being burned at the stake in Rome's Flower Square, Bruno unwaveringly adhered to the heliocentric theory. Nelson Mandela spent 28 years in prison but remained steadfast in his fight to abolish apartheid policies and gain political freedom for black South Africans. "Wen Wang was imprisoned and wrote 'Zhou Yi'; Confucius was exiled and wrote 'Spring and Autumn'; Qu Yuan was banished and wrote 'Li Sao'; Zuo Qiuming became blind and wrote 'Guo Yu'; Sun Tzu had a physical disability and wrote 'The Art of War'; Bu Wei was exiled to Shu and left behind 'The Lüshi Chunqiu'; Han Fei was imprisoned in Qin and wrote 'Difficulties of Speech' and 'The Grieved Lament'; the 300 poems were mostly created by virtuous and wise people who worked hard in difficult circumstances." (Sima Qian, "Letter to Ren An") The combination of lofty beliefs, tenacious willpower, perseverance, and superhuman wisdom is probably the internal driving force that turns creative inhibition into creative inspiration and creative fervor — creative promotion.

In the process of human creation, there often arises a situation where the creative subject actively exercises the power of reason and will to implement restraint. This kind of "restraint" is often carried out in order to achieve greater, stronger, better, and more effective "promotion". In other words, this "restraint" is only superficially a restraint, but in essence, it is still a "promotion" that is more valuable. The creative subject, through the exercise of wisdom, "suppresses and sacrifices certain strong but lower-level tendencies in the face of conflicting needs, in order to protect and develop other weaker but higher-level tendencies, thereby elevating human behavior and moral standards to a higher level." (From "Psychological Studies on Creativity" by Lu Shuyuan, Henan Literature and Art Publishing House, 2015) In the author's words, it is through this wise "restraint" that the effectiveness of human creativity is not wasted in the creation of low-value indices, but rather is concentrated and unleashed in the creation of high-value indices. Politicians value "restraint," as they say, "small impatience leads to big mistakes." Military strategists

also generally possess the qualities of calmness and composure, and are not panicked in the face of battle. Literature writers also generally pay close attention to the restraint of their emotions in their creative work, as the saying goes, "hot emotions, cold treatment." American Imagist poet Ezra Pound described poetry as a "half-man, half-horse monster," believing that its lower part is full of vigorous passion and impulsive energy, while its upper part should be composed of calm thinking and sober rationality. He also likened writing poetry to "riding a horse and shooting a gun," saying that a poet must have the extraordinary ability to urge the horse forward while also controlling the gun. "The reason why a poet is a poet is that he has a lasting emotion and a special control." (From "The Serious Artist," Modern American and British Bourgeois Literature Theory Selections, translated by Luo Shigang and Mai Renzeng, Writers Publishing House, 1962) In addition, there is also restraint in energy - "good steel is used in the edge of the knife"; restraint in technique - don't show off, don't be slick; restraint in structure - don't lose the whole for the sake of a part. "After writing, at least read it twice and try to delete any unnecessary words, phrases, or paragraphs without hesitation." (From "Answering Questions from Beidou Magazine" by Lu Xun) and so on.

The process of creation involves both promotion and inhibition, which are mutually opposed and interdependent. Promotion and inhibition coexist in every creative process, and each creation has both aspects of promotion and inhibition, which coexist and constrain each other. For example, the straight rails on which a train runs are a promotion, but the friction between the rails and the train wheels is an inhibition. The history and cultural traditions of a country and nation are clearly manifested as both promotion and inhibition. As a promotion, this means that no new culture can emerge out of thin air, and that new cultures must inevitably be based

on existing cultural traditions. For foreign cultures to take root and expand on their own soil, they must also be combined and integrated with the local traditional culture. Traditional culture, with its rich cultural accumulation, becomes the soil foundation, river source or reference source for new culture to take root, blossom and flourish. In other words, traditional culture not only participates in the creation process as a creation, but also plays a certain, even significant, promoting role. This promotion may come from the life vitality of the excellent components of traditional culture, such as democratic, progressive, open and scientific essence, or from the counteraction of the backward components of traditional culture, such authoritarianism, as conservatism, closed-mindedness and mysticism. As an inhibition, it means that traditional culture always has a limiting, restrictive, repressive or even suffocating effect on the birth and development of new culture, and this inhibition comes from the authoritarian, conservative, closed-minded and backward side of traditional culture, which often appears to be more powerful and stronger than its democratic, scientific, open-minded and progressive side. "It is a stable system that has been formed over thousands of years, resisting various environmental pressures. It is large in scale, has a complete self-regulation system and the ability to resist change, which gives it amazing historical inertia. Even after its economic foundation is destroyed, it continues to exert influence on people's ideas and other aspects of culture." (Zhang Xianglun: "The Harmony of Science and Art", p. 71-72.) Therefore, the process of the emergence and formation of new culture must inevitably involve long-term, sometimes peaceful, sometimes intense, and sometimes even bloody conflicts and contradictions. However, no matter how complex the contradictions, how intense the conflicts, or how tortuous the road, new culture will inevitably overcome and replace old culture — this is an iron law of creation. Although the victory over and replacement of traditional culture is a process of affirmation, negation, criticism and selection, rather than a complete smashing and total abandonment.

# 4 Creative leader and creative follower

The distinction between the creator and the created is relative to the specific creation process. In any creation process, it cannot be completed independently by a single creation entity, and there must be multiple creation entities involved. Among the numerous entities participating in the creation, there are always some that play a primary, guiding, core, or central role, while others play a secondary, subordinate, non-core, or non-central role. The former is defined as the "creator," and the latter is the "created." In short, the creator is the creation entity that releases and exerts the strongest, most numerous, and most enduring creative energy in a creation process, while the created is the creation entity that releases and exerts creative energy that is not the strongest, most numerous, or most enduring in that process.

In the Milky Way galaxy, the galactic center and nucleus are the creators, while all celestial bodies, including the visible and invisible ones, such as the galactic disk, spiral arms, halo, coronas, and the solar system, rotating around the galactic center are the created. In the solar system, the sun is the creator, while the nine planets, 2,958 asteroids, 48 natural satellites, and numerous comets, meteorites, and interstellar matter are the created. In a country's political life, the ruling party is the creator, while other parties, civil groups, and mass organizations outside the ruling party are the created. Within the ruling party, the

leadership group is the creator, while the ordinary party members are the created. Within the leadership group, the core leadership composed of a few individuals is the creator, while other members are the created. Within the core leadership, a prominent figure (usually the party's top leader or head, but there are exceptions) is the creator, while other core members are the created.

The distinction between the creator and the created should be linked to a specific creation process. Some creations may be creators in one creation process but created in another, and vice versa. For example, a forest may play the role of the creator in a particular ecological environment but may have a small or insignificant role in the global ecological environment and become the created. A bee may be an inconspicuous or even negligible created in the bee kingdom, but it is the creator in its own diligent work of collecting pollen.

In a specific creation process, the creator and the created are interdependent and cannot be separated from each other. A unit cannot have only leaders without the masses, and an article cannot have only a title and viewpoint without supporting arguments. Without the created, the creator cannot be a creator, and without the creator, the created loses its meaning. The creator is the creator of the created, and the created is the created of the creator. When we identify a creation entity as the creator, we are essentially saying that the other creation entities are the created. Conversely, when we identify a creation entity as the created, we are acknowledging the existence of the creator outside that entity.

The creator and the created are also mutually transforming and replacing each other. For example, in a monkey kingdom, a monkey wins in competition due to its strong and agile body, becoming the monkey king, the creator. The other monkeys of all sizes must obey its command and play

the role of the created. However, the monkey king cannot be the monkey king forever. With the passing of time, this monkey king will eventually be defeated in new competitions due to factors such as injury or illness and be replaced by stronger, more agile, and more courageous monkeys. Thus, the monkey that was originally created now rises to become the monkey king, transforming into the creator, while the monkey king that was originally the creator becomes an ordinary monkey and descends to become the created. In the relationship between humans and fire, in general, humans are the creators and fire is the created. Humans use fire to boil water, cook, illuminate, and warm up. However, once a fire breaks out and becomes a fire disaster, fire often becomes a creator that is merciless and reckless, while humans become the created. They may be unable to put out the fire and may even face the danger of being engulfed and burned to death by the flames.

The relationship between creative leaders and followers is one of mutual contradiction and mutual restraint, which can manifest in several ways. First, when the creative leader promotes creation, the followers may suppress it. For example, when the core leadership of a group wants to do something, but the vast majority of members are unwilling to cooperate, they may disobey and not collaborate. Second, when the creative leader suppresses creation, the followers may promote it. For instance, when most members of a group are eager to do something, but the leadership is not enthusiastic or disagrees, they may procrastinate, suppress, harass, attack, or even kill the idea. Third, some creative leaders and followers may promote creation, while others may suppress it. For example, when some members of a group are willing to do something, while others are not, and some leaders advocate for it, while others do not. In this situation, compromise or division can occur, and the two factions become conflicting, opposing, and mutually restrictive. Fourth, as a group, both creative

leaders and followers may be promoting (or suppressing) creation, but the entrance of external creative factors with strong creative efficiency may lead to suppression (or promotion) of the creation. For example, a group is organizing an outdoor artistic performance where the actors are playing the role of creators and the audience is playing the role of receivers. Both parties are enthusiastic about the performance. However, suddenly a strong wind and heavy rain come pouring down, or a herd of wild buffalo charge into the performance area. In this case, the outdoor performance cannot continue and must be interrupted.

The author previously stated that the distinction between creators and receivers is based on the degree and intensity of creative power released and utilized. If the degree and intensity of creative power released and utilized by both creators and receivers are equal or roughly equal, but they are in opposite creative directions, one promoting creation while the other inhibiting it, a temporary "stagnation" in the creative process may occur. This is known as "creative equilibrium". Creative equilibrium is a temporary stalemate and stability in the dynamic of creation. For example, in a tug-of-war competition, both sides exert equal force and neither can pull the red flag in the middle of the rope to their side. Similarly, in the face of a strong enemy, opposing opinions within a ruling group often emerge, with one faction advocating war and the other advocating peace. When the forces of the war and peace factions are equal, it creates a "creative equilibrium" that makes it difficult for the ultimate decision maker to make a decision. For example, in a romantic relationship, both parties may try to "conquer" each other, making promises and being affectionate. One may persistently pursue while the other may ignore out of stubbornness. At this point, a "creative equilibrium" is reached where neither can "conquer" the other. Obviously, during this creative

equilibrium, because the degree and intensity of creative power released and utilized are equal, the line between promoting and inhibiting creation, and between creators and receivers, becomes blurred. At this time, the creator also becomes the receiver, and the receiver also becomes the creator; promoting creation is equivalent to inhibiting it, and inhibiting creation is also equivalent to promoting it.

Of course, creative equilibrium is relative and temporary, and imbalance is absolute and long-term. No balance can be maintained for too long without being broken. There will always be winners and losers in a tug-of-war competition, and the ruling group in a conflict must choose between being hawkish or conciliatory. In romantic relationships, one party may always "give in" and be "conquered" by the other. At this point, creative imbalance replaces creative equilibrium, and the line between promoting and inhibiting creation, and between creators and receivers, tends to become clear again: promotion of creation may be greater than or stronger than, or less than or weaker than the inhibition of creation. The original creator may continue to act as a creator or become a receiver, while the original receiver may continue to be a receiver or rise to become a creator. The spiral of moving from imbalance to equilibrium and then back to imbalance drives the progress of the creative process, and new creations are ultimately generated through such a contradictory movement.

# Six Creative efficacy

## 1 The essence of creative efficacy

The essence of creative efficiency lies in the creative object itself, mainly from the inherent essential energy of its internal structure. In short, the creative efficiency of the object is its instinct.

It is clear that the author's concept of "instinct" is broader than the usual meaning of the term. Typically, instinct refers to innate behaviors that have been fixed through genetics during the evolutionary process, which are important for individual and species survival, such as a chicken incubating eggs, birds building nests, bees making honey, or babies crying for milk. Such behaviors are instinctual and do not need to be learned. The author's concept of instinct, however, includes but is not limited to the above-mentioned animal instincts. The author's instinct refers to the inherent energy that every creative entity possesses, primarily originating from its internal structure. In other words, whether it is an animal, plant, microbe, or non-living entity, any creative entity possesses an inherent energy mainly originating from its internal structure, and therefore has instincts. This instinct is the creative efficacy of the creative entity.

The reason why it is called "creative efficiency" rather than "creative instinct" is mainly to highlight the word "efficiency", which refers to effectiveness, utility, impact, and outcome. In other words, once a creative object releases and exerts its inherent essential energy, it must produce an effect. This effect itself is a new creative object and at the

same time participates, influences, and determines the generation of other new creative objects.

The creative efficacy can be examined from two perspectives: internal structure and external influence.

### • Internal structure

The diverse internal structures of different creations determine their diverse creative efficiency. There is no creation without an internal structure, and no creation lacks an internal structure. The internal structure of air is different from that of rocks, and the internal structure of rocks is different from that of sheep. Therefore, the creative efficiency of air is different from that of rocks or sheep, and the creative efficiency of sheep is also different from that of air or rocks. This is why air is air, rocks are rocks, and sheep are sheep.

Upon careful examination, the myriad of internal structures found in different creations are actually diverse creative processes taking place inside them. In essence, the creative efficiency is the new creation presented in the form of energy that is generated by the creative process taking place within the creation itself.

Taking water as an example, the internal structure of water is H2O, which means two hydrogen atoms and one oxygen atom are chemically combined together. This structure determines that water can only be a colorless, tasteless, transparent liquid with certain properties such as conductivity, heat capacity, and ability to dissolve other substances, instead of a combustible oil or a running dog, or anything else. The structure of water, i.e., the process of chemical combination between H2 and O, involves mainly the two original elements, H2 and O. If other elements participate extensively in this process, or the proportion of participating elements

changes, for example, not two hydrogen atoms and one oxygen atom, but three hydrogen atoms and one oxygen atom, or one hydrogen atom and ten oxygen atoms, it means that the structure of H20 has changed, and the new creation generated is not water but something else, and the resulting creative efficiency is also not the creative efficiency of water, but that of other creations. For example, heavy water, i.e., deuterium oxide, has a structure of D20. Despite being an isotope of hydrogen, the creative efficiency of heavy water is very different from that of water. Its melting point, boiling point, and specific gravity are all different, and it can be used as a neutron moderator in nuclear reactors, which water does not have this creative efficiency. Even for the same element, with the same proportion of atoms participating in the creation but different modes of participation, the resulting new creations are often different, and thus possess different creative efficiencies, such as graphite and diamond, both of which are made up of carbon (C) atoms but with different internal structures.

The various elements that make up a creation, i.e. the creative components involved in the internal creative process of a creation, still have their own internal structure and thus their own internal creative process. This creative process is infinite and never—ending. Water, for example, is made up of H2O, which in turn is made up of three isotopes: protium, deuterium, and tritium. The process of their formation is the creative process of hydrogen and its creative energy. Protium, deuterium, and tritium each have their own internal structure and creative process, with basic particles such as atoms, atomic nuclei, electrons, neutrons, protons, and photons participating in the creation of their internal structure. However, these basic particles are not truly "basic" as they also have their own internal structures and creative processes. There are even smaller creative components involved in their internal structure's

creation, such as gauge particles, leptons, mesons, baryons, and hyperons. The main interactions between basic particles are the strong, weak, electromagnetic, and gravitational forces, which are different ways in which the creative energy of basic particles is released and expressed. These different ways of release and expression result in the diverse internal structures of basic particles, leading to the creation, annihilation, and conversion of particles. This is yet another series of creative processes, resulting in basic particles becoming basic particles, atoms becoming atoms, and elements becoming elements. The root of the innate creativity of a creation lies here in the creative energy.

Compared to non-living matter, the internal structure of living organisms is much more complex. Every living organism is composed of nucleic acids (deoxyribonucleic acid or ribonucleic acid) that carry genetic information and proteins that play important roles in structure and function. In other words, the creative components involved in the formation of the internal structure of a living organism are mainly proteins and nucleic acids.

Proteins are long-chain polymer compounds made up of different amino acid molecules combined in various arrangements. Their creative energy mainly serves three purposes: (1) providing the framework for the internal structure of living organisms, (2) promoting various chemical reactions within living organisms to maintain high speed and order, and (3) providing various hormones necessary for life processes, such as adrenal cortex hormones, insulin, oxytocin, and so on.

Nucleic acids are large biomolecules composed of tens to millions of nucleotides linked together by phosphodiester bonds. Nucleotides, in turn, are composed of a nitrogenous base, a sugar molecule, and a phosphate group. The process of nucleic acid synthesis is highly complex, with a wide variety

of possible arrangements and sequences of nucleotides. The sequence of nucleotides in a nucleic acid chain determines its primary structure. Based on this primary structure, nucleic acids can fold and twist in different ways to form secondary, tertiary, and quaternary structures, each with its own unique functional properties. Depending on the extent and manner in which the sugar and base components are involved in their synthesis, nucleic acids can be classified into two major types: deoxyribonucleic acid (DNA) and ribonucleic acid (RNA).

DNA is primarily present in the nucleus of eukaryotic cells, the nucleoid of prokaryotic cells, as well as in mitochondria and chloroplasts, or in the cytoplasm of some cells in a free state. Most known bacteriophages, some animal viruses, and a few plant viruses also contain DNA. The creative function of DNA is mainly to store, replicate, and transmit genetic information. The main component of chromosomes (the carriers of genetic information) is DNA. The structure of DNA controls the synthesis of proteins, which can form specific proteins by arranging a large number of disordered amino acids in a specific sequence (genetic code); and through the various creative functions of proteins, life is full of vitality.

RNA exists in the cytoplasm and nucleus of all cells and in most known plant viruses, some animal viruses, and some bacteriophages. Its creation efficiency is mainly manifested in three aspects: (1) transfer RNA, which carries and activates amino acids in the process of protein synthesis; (2) messenger RNA, which serves as a template for protein synthesis and determines the order of amino acids in the peptide chain through a genetic code; and (3) ribosomal RNA, which, together with proteins, forms ribosomes and serves as the primary site for cell protein synthesis.

The release and expression of the creative capabilities of DNA and RNA have led to the most fundamental characteristics of living organisms, such

as metabolism and self-replication. In other words, the vital phenomena of living organisms originate from the internal structure of the organism, namely the creation process of nucleic acids and proteins and the release and expression of their creative capabilities. The structure and creation process of nucleic acids and proteins, as well as the complexity and diversity of their creative capabilities' release and expression, vary greatly, which determines the complex and diverse vital phenomena of living organisms.

Nucleic acids and proteins are the basic units of structure and function in living organisms, and the main components of cells, which are the building blocks of all living things. The classification of organisms is based on the different structures of their cells, which in turn are determined by their different internal processes of creation. Organisms without an obvious nucleus are called prokaryotes, while those with an obvious nucleus are called eukaryotes. Microorganisms are a group of small, structurally simple single-celled or multi-cellular prokaryotic or eukaryotic organisms. The simple internal structure of microorganisms determines that the release and expression of their creative abilities must be simple, primitive, and brief.

Through extremely long processes of evolutionary creation, the internal structure of cells has become more complex and advanced from simplicity and primitiveness. The more complex and advanced the internal structure is, the more abundant and powerful the creative potential released and utilized will be. The creative potential of plants is superior to that of microorganisms: there are many more species than microorganisms, with stronger stimulus response, more diverse and complex ways of reproduction, and more advanced evolution. Similarly, the creative potential of animals is superior to that of plants: the number of species is several times that

of plants (there are over 100,000 known animal species compared to over 30,000 plant species); their responses to the external environment are not limited to simple stimulus responses, but have evolved to the stages of sensation, perception, and even representation. For example, the sensory cells of jellyfish have a certain photosensitivity, the tentacles of hydra have a certain touch sensitivity, and invertebrates like bees have a certain perceptual ability, which they can use to build certain forms of beehives and communicate information such as the distance of food sources through dance language. Primates can pick out a red ball from seven colors after seeing a red ball, and can take out the same number of walnuts from a bag after seeing several walnuts — indicating that primates have a certain degree of "representational" ability. This "representational" ability is undoubtedly the basis for the production of thought, or, in other words, "representation" itself is a low-level form of thinking.

Human beings are advanced life forms, with internal structures much more complex than animals, plants, and microorganisms. The human body is composed of countless cells, with a morphology and creative capacity similar to that of other cells and extracellular matrix, which form the four major tissues (or structures) in the human body: epithelial tissue, connective tissue, muscle tissue, and nervous tissue. These four tissues combine in different ways to form functional units capable of releasing and utilizing different creative potentials, such as organs like the brain, spinal cord, heart, lungs, stomach, and intestines. These tissues and organs are organized into different creative systems that are characterized by performing one or several physiological functions, such as the musculoskeletal system, digestive system, circulatory system, urinary system, endocrine system, reproductive system, and nervous system. Each system has a unique internal structure, representing a unique creative

process. These creative processes permeate and coordinate with each other to form a whole. Human creative instinct, i.e., creative potential, is not only released and utilized by each system but also expressed as a new creative product through the coordination of various systems (especially the central nervous system) as a whole.

The human body is a highly complex organism, with an internal structure that is many times more intricate than that of animals, plants, or microorganisms. It is composed of countless cells, which form the four major tissue types or structures: epithelial tissue, connective tissue, muscle tissue, and nervous tissue. These four tissue types come together in different ways to form functional units called organs, such as the brain, spinal cord, heart, lungs, stomach, and intestines. These tissues and organs, in turn, combine to form different physiological systems that perform one or several distinct functions, such as the musculoskeletal system, digestive system, circulatory system, urinary system, endocrine system, reproductive system, and nervous system. Each system has a unique internal structure, which is the result of a distinctive creative process. These creative processes interpenetrate and coordinate with each other to form a cohesive whole. The innate creative capacity of humans, or their creative ability, is not only expressed and realized through each system but also displayed holistically through the coordination of all systems, particularly through the central nervous system. While animals, especially higher animals, have many of the organs and systems found in humans, some animal organs or systems are even stronger or more developed than those of humans, such as the eagle's eyes, the dog's nose, the horse's musculoskeletal system, and the mouse's reproductive system. The human brain and nervous system, however, are incomparable and unparalleled in any other animal. Humans dominate the world with their brains. The human brain and nervous system are the most advanced, complex, and developed of all animals. The brain is made up of two hemispheres, with the left hemisphere dominating in abstract thinking and being better at analyzing and rationally processing linguistic information, while the right hemisphere dominates in visual-spatial thinking and is better at processing non-linguistic information in an intuitive and holistic way. The surface of the brain's two hemispheres is covered by a layer of gray matter called the cerebral cortex. The cerebral cortex contains about 100 billion neurons made up of nerve cells and nerve fibers. The intricate connections and combinations between neurons form highly complex and diverse neural circuits. The complex and diverse neural circuits, along with their intricate connections, communication, and interruption, constitute the brain's creative process or thinking process, and the result of thinking is wisdom. In other words, the human brain's thinking function mainly comes from the complex and intricate internal connections of neural circuits in the cerebral cortex. Although the specific nature of these connections is still not fully understood, and even though our knowledge of them is limited, one thing is certain: the intricate internal connections of neural circuits in the cerebral cortex are the physiological mechanism on which the brain's creative ability depends. And wisdom is the release and expression of the brain's creative ability.

Any animal outside of humans lacks a highly developed central nervous system that can compare to the human cerebral cortex, which contains complex and intricate neural circuits. Therefore, animals' brains do not generate wisdom, although their nervous systems are also capable of releasing and expressing creative potential. The animal's response to the external world stops at a relatively simple level, from the simplest stimulus response, to simple sensation and perception, and finally to relatively complex

representation. However, humans do not stop at the level of representation. They continue to move forward by summarizing and abstracting perceptions and representations into concepts. Furthermore, they use these concepts to make judgments, reason, analyze, synthesize, and combine with imagination and inspiration to form wisdom. Finally, they externalize wisdom and invest it into new, concrete creative processes, striving to produce high-value, high-quality, new creations with the mark of wisdom. All of this is beyond the reach of any animal outside of humans.

### • External influences

The author states that the creative efficiency of a creation mainly derives from the essential energy of its internal structure, and this does not mean that external factors have no influence on the internal structure of a creation. In fact, no internal structure can completely eliminate the involvement and influence of external factors. There are no isolated creations in the world, and any creation is connected, conflicted, compared, and referenced to other creations. There are no isolated creative processes either, and any creative process permeates, intersects, entangles, and confronts with other creative processes. Therefore, rather than saying that creative efficiency comes from the internal structure of a creation or its internal creative process, it is more accurate to say that creative efficiency comes from the "combination" of the internal structure of a creation and external influences. In other words, external factors, as creations (although not the creators but the created), also participate in the internal creative process of a creation. In the components of creative efficiency, external influences should rightfully occupy a place, and even a quite important place. Even though the influence of external factors can only exert its effects through or on the internal structure.

The internal structure of water is H2O, but without the participation of other external creations, the creative energy of water cannot be exerted. Its colorless, tasteless, and transparent properties are presented in comparison to colored, flavored, and opaque creations; the release and exertion of its properties such as conductivity, heat capacity, and solubility of other creations are inseparable. The main components of the internal structure of living organisms are nucleic acids and proteins, but not only nucleic acids and proteins, there are also carbohydrates that provide energy for life activities, lipids that have favorable or unfavorable effects on biological metabolism, water and inorganic salts that have solvent effects and affect the existence of life, and adenosine triphosphate (ATP) that can provide a continuous source of energy for organisms, and so on.

The creative efficiency of animals is even more dependent on the influence of external factors. Plants are the main food source for animals, and without plants, there would be no animals. Animals need water, sunlight, and fresh air to survive; without water, air, and sunlight, there would be no life for animals. Animals also exist as a community, and individual animals cannot survive alone. The release and exertion of the creative efficiency of any particular animal rely on the release and exertion of the creative efficiency of other animals (even domesticated animals such as poultry and livestock still rely on humans for feeding). Animals even have their own "social" forms, reportedly with intricate divisions of labor and strict hierarchies; chickens, dogs, and birds all have their own "oral languages," while dolphins, bats, and elephants can communicate with each other through ultrasound or other sound waves.

Humans are intelligent animals, and intelligence inherently has sociality. For example, language, which is known as the "second signaling

is a product of communication and a crystallization of intelligence. If there were only one person in the world, there would be no language; if a group of people did not want to "use their brains," they would not produce language either. Communication and intelligence make up human society - communication requires intelligence, and intelligence cannot exist without communication. Therefore, rather than saying that a person's creative efficiency comes from the individual, it is more accurate to say that a person's creative efficiency comes from the society of people. In fact, there is no instinctual behavior that is not influenced by society, or there is no such thing as purely instinctual behavior. Even a newborn baby cannot escape the influence of social factors. During pregnancy, the baby's growth is affected by the mother's emotions, which are of course influenced by social factors (so-called "prenatal education" is also a kind of social education); when the baby is born, he becomes a member of human society, and the first objects he eats and grabs are usually his mother, who is a "social person". Therefore, fundamentally speaking, a person's creative efficiency is determined by the person's internal structure (especially the structure of the central nervous system) and other people or social factors. The social environment, as a creation, participates in the release and exertion of the creative efficiency of each specific individual.

It should also be pointed out that over hundreds of thousands of years, many social characteristics of human beings have gradually permeated, melted, and accumulated into the internal structure of the human body, becoming an important component of human internal structure, and inherited with the genetic mechanism of human physiology. As a result, some of human's social creative abilities have become instinctive creative abilities that do not need to be learned. This is what Swiss psychologist Carl Jung referred

to as the "collective unconscious". Jung believed that the existence of the collective unconscious is not determined by an individual's acquired experiences. The human psyche is predetermined by evolution, and therefore individuals are connected to the past not only with their own childhood, but more importantly with the past of their race, even dating back further in time, and even connected with the long process of organic evolution. The collective unconscious stores all potential archetypes. Humans inherit these archetypes from their ancestors (including human ancestors, pre-human ancestors, and animal ancestors), and they exist in the form of innate potentials in the human brain, which allows people to grasp the world and respond in the same way as their ancestors. Jung referred to these archetypes as "primordial images," such as the birth consciousness archetype, the death archetype, the hero archetype, the devil archetype, and so on. From the perspective of external factors affecting and infiltrating the internal structure, Jung's view is undoubtedly insightful and valuable.

Apart from social factors, natural factors such as the biological and non-biological environment outside of humans can also have various effects on human creativity, either large or small. For example, changes in temperature can often affect a person's mood and thereby their thinking. Serene and verdant surroundings can often make a person's brain clear and agile, and spark creative passion. On the other hand, children raised in a bear's den or wolf's den often lose some of their most basic creative abilities and instead acquire some of the creative abilities of bears or wolves, such as imitating bear calls, eating raw meat, and moving around on all fours.

# 2 Creativity

There needs to be a definition.

如: Previous definitions have all limited creativity to the realm of human creation. for example:

"Creativity is the sum of various abilities demonstrated and developed by the creative subject in the process of creative activities, mainly referring to the creative thinking that generates new ideas and the creative skills that produce new results." (Wang Jiawei and Yuan Can, editors: "Creativity and Creativity Development", Zhejiang University Press, 1986)

"Creativity is a general term for creative thinking and creative activities. The quality of creativity is determined by the degree to which innate conditions are developed through education, environmental influences, opportunities, and the search for spiritual pursuit by the individual. The level of intellectual ability, ability level, power level, as well as the overall development level of process factors, manner factors, and manifest factors are the measure of this development. "(Lei Jiangwang: "Creative Education", Xi'an Jiaotong University Press, 1989)

"Creativity refers to the cognitive and technical abilities demonstrated by individuals during the creative process. The ability to effectively combine existing knowledge and make it produce new effects; the ability to generate creative ideas and implement them; the ability to reorganize and create new knowledge, thoughts, and concepts based on previous knowledge, experience, and information obtained; and the ability to transform individual or collective knowledge into effective content and achieve it, are all included in the concept of creative ability." (Compiled by the Documentation and Information Center of the Chinese Academy of Social Sciences and Chongqing Publishing House: "New Dictionary of Social Sciences", Chongqing Publishing House, 1988)

My definition is relatively concise: Creativity is the release and development of creative potential.

The author's definition is obviously beyond the scope of human creation (of course, including human creation), which is different from the above definitions. All things in the world are creations, and all creations have creative efficacy. The release and exertion of creative efficacy constitute the creative power of creations. The sun is a creation, with creative efficacy and creative power; the moon is a creation, with creative efficacy and creative power; rivers, oceans, wind, rain, thunder and lightning, trees, flowers, birds, animals, insects, fish, books, newspapers, cigarettes, matches, ink bottles on the table, and so on, are all creations with creative efficacy and therefore have creative power.

The author's analysis shows that the creative efficacy is essentially the inherent energy of the internal structure of the creative object. Therefore, creative power can be seen as the fundamental or essential force of the creative object. Furthermore, the internal structure of the creative object is essentially a continuous process of creation within the object. Since it is a process of creation, it necessarily involves the participation of the creative object and the generation of new creative objects. Any creative object is not isolated but interacts with other creative objects, exerting various influences on them. The process of interaction is a process of mutual influence, and the result of this interaction is a kind of "force," a creative force, which causes changes in the shape, performance, and creative state (direction, speed, etc.) of all creative objects. In short, creative power is the externalization and objectification of creative efficacy. Creative power manifests and externalizes the creative efficacy of the creative object through the release and expression of the creative efficacy of other creative objects.

The diversity of internal structures of creative objects leads to a diversity of creative efficiency and the ways in which it is released and exerted, resulting in a diversity of creative power. In other words, the complex and diverse process of creation within the internal structures of creative objects and the interactions among participating objects lead to diverse creative powers. Based on the fact that creative efficiency is the "combination" of internal structures and external influences, the author relatively divides creative power into "creative unit force" and "creative joint force".

### • Creative individual power

Individual creative force refers to the creative force that arises from the internal structure of a creation. Each creation has a unique internal structure, and therefore, each creation has a unique individual creative force. Analyzing different individual creative forces can differentiate between different creations. For example, Saturn and Mercury have different internal structures. Among the nine planets, Saturn has the lowest density, is 740 times larger in volume than Earth, and has a mass 95 times that of Earth, while Mercury has the highest density, is only 5.6% of Earth's volume, and has a mass of only 5.58% that of Earth. The difference in internal structure gives Saturn and Mercury different individual creative forces. Saturn has a magnetic field and radiation belts, as well as a beautiful ring system, while Mercury has a magnetic field (with different strength from Saturn's magnetic field), but no radiation belts or beautiful rings. Mercury exhibits a "transit phenomenon", where the perihelion of its orbit advances anomalously by about 43 arc seconds per century, while Saturn does not. Analyzing and calculating the strength of magnetic fields and radiation forces or the anomalous advance of the "transit phenomenon" can

easily differentiate between Saturn and Mercury, without mistaking one for the other.

The internal structure of a banyan tree is much more complex than that of a chrysanthemum, so the individual creative force (growth force) of the banyan tree is necessarily much greater and stronger than that of the chrysanthemum. The stomach of a camel has twenty to thirty water sacs for storing water, while wild buffalo and domestic pigs do not, which is why the thirst endurance of camels is unmatched by wild buffalo and domestic pigs.

As the most advanced life form on Earth, human beings have a more complex internal structure, particularly the central nervous system, which correspondingly exhibits a more complex creative force. However, the concept of individual creative force still applies to an individual, or a specific system or organ within the human body. For example, a person's visual, auditory, and sexual abilities, as well as their movement abilities related to the skeletal and muscular systems, and their circulatory abilities related to the blood and heart system, and their digestive abilities related to the gastrointestinal system, can all be considered as individual creative forces. When compared to others, groups, and society (collective creative forces), the sum of an individual's abilities can also be viewed as an individual creative force. When people talk about someone being strong or weak in a certain ability, they generally refer to individual creative force.

# • Creative synergy

Creating synergy is relative to creating a single force and is the creative force generated by the combination of the internal structure and external influences of a creation. Since the internal structure of any

creation cannot exclude the influence of external factors, it is not an isolated and purely internal connection. Therefore, any creative efficiency is actually a comprehensive and synergistic force, which is why any creative force is actually a creative synergy. Relatively speaking, there exists a single creative force; however, from an absolute and comprehensive perspective, the concept of a single force no longer exists, as any "single force" is a form of synergy.

Collision forces, friction forces, electrostatic gravitational forces are all forms of creative synergy that exist widely in the non-biological world. Field states are also a form of creative synergy. For example, the universal gravitational field indicates a "synergistic" phenomenon of mutual attraction between any two creations in the universe. This creative synergy causes all creations in the universe to attract and constrain each other, forming a unified whole. This whole regulates, frames, and influences the creative processes and behaviors between different creations. The electromagnetic field is the collective term for the electric field and magnetic field. The electric field is the synergy of electric waves, and the magnetic field is the synergy of magnetic waves. The electromagnetic field is the synergy of the electric and magnetic fields: changing electric fields excite magnetic fields around them, and changing magnetic fields excite electric fields around them. interaction and excitation lead to electromagnetic waves spreading in all directions in the form of synergy.

The state of circles in the universe is also a form of creative synergy. For example, the atmosphere in the Earth's atmospheric layer is composed of a variety of gases such as nitrogen, oxygen, argon, and carbon dioxide that "synergize" to surround the Earth. According to the different intensities and ways in which various creations release and exert their

creative effectiveness in the atmosphere, and the different strengths and ways in which the creative forces of different creations interact with each other, people have divided the atmosphere into different layers, such as the troposphere, stratosphere, mesosphere, thermosphere, and exosphere; uniform layer, non-uniform layer; ionosphere, non-ionosphere, and so on.

The creative power in the biological world is also a result of creative synergy. The growth of plants, for example, is a result of the synergy or combination of various factors such as plant hormones, photosynthesis, water metabolism, mineral nutrition, respiration, resistance, induction, and ecological environment. Similarly, the vitality of animals is the result of the synergy or combination of their sensory power, motor power, feeding power, reproductive power, and other factors such as climate conditions, geographic environment, and animal population interactions.

The components of human creativity are much more complex and sophisticated than those of animals and plants. From the perspective of internal human structure, there are: (1) motor power — the release and expression of the creative efficiency of bones, joints, and muscles; (2) digestive power — the release and expression of the creative efficiency of the digestive tract consisting of the mouth, esophagus, stomach, and rectum, and the digestive glands consisting of the salivary glands, liver, pancreas, gastric glands, and intestinal glands; (3) respiratory power — the release and expression of the creative efficiency of the respiratory tract (composed of the nose, pharynx, larynx, trachea, and bronchi) and the lungs; (4) urinary power — the release and expression of the creative efficiency of the kidney, ureter, bladder, and urethra; (5) endocrine power — the release and expression of the creative efficiency of exocrine glands (salivary glands, sweat glands, sebaceous glands, etc.) and endocrine glands (pituitary, thyroid, adrenal, pancreatic islet cells, etc.); (6)

reproductive power - the release and expression of the creative efficiency of reproductive organs such as the testes, vas deferens, ovaries, and uterus; (7) circulatory power - the release and expression of the creative efficiency of the heart, arteries, veins, and lymphatic system; (8) sensory power - the release and expression of the creative efficiency of external receptors (eyes, ears, nose, tongue, skin), internal receptors (pressure receptors, chemical receptors, and other types of receptors in various organs) and the sensory cortex of the brain; (9) thinking and coordination power - the release and expression of the creative efficiency of the central nervous system composed of the brain and spinal cord, and the nerve branches throughout the body that are issued and coordinated by the central nervous system.

These nine types of creativity from the internal structure of the human body can be viewed as the innate or fundamental abilities of human beings. They can be seen as a creative synergy (where numerous functional organs within the system are all functioning), and also as individual creative forces (compared to other systems within the body). At the same time, there are no strict boundaries between them, and they also interact, permeate, restrict, and influence each other, still constituting a "creative synergy". The power of movement affects the power of digestion — physical labor and exercise can help digestion and increase appetite. The power of digestion restricts the power of movement — people with gastrointestinal diseases or loss of appetite will inevitably have a decline or loss of physical strength. Reproductive power requires hormones provided by the endocrine system, which in turn requires the circulatory system to provide nutrients and eliminate waste. And all of these fundamental forces require the power of thought to regulate, coordinate, and direct them.

As mentioned before, external factors are inevitably involved in and

influence the release and exertion of human creativity. Therefore, human creativity should also include natural factors and social environmental forces. These external influences mainly include: the forces of the universe, ecological environmental forces, geographical conditions forces, ethnic affinity forces, national coercion forces, social constraints forces, party and group influence forces, cultural influence forces, moral norms forces, technological stimulation forces, family affection forces, school education forces, the help of relatives and friends, and so on.

Human creativity is a synthesis and integration of various internal and external forces from the structure of the creative object, as well as natural and social factors. The resulting creativity is a holistic creative force, which is not simply the sum of various individual creative forces, but has a greater strength and value index.

The difference between human creativity and non-biological creativity lies in the fact that human creativity is a type of life force that involves sensation and thought, whereas non-biological creativity is a type of natural force that lacks sensation and thought. In comparison to the creativity of other living organisms, especially animals, human creativity is a complex combination of creative forces that emphasizes cognitive and social abilities. The creativity of other organisms, even those that are considered advanced, lacks the cognitive and social elements that are present in human creativity.

Upon closer examination, social power is also a type of thinking power, or we can say that social power originates from thinking power. We say that humans are social beings, or that human creativity has social dimensions, mainly because humans can manufacture and use labor tools for work, create language and use it for communication, thus forming society. The ability to manufacture and use labor tools and to create and use language is

undoubtedly the result of the release and exertion of human highly developed brain nervous system's creative effectiveness, i.e., thinking power — the result of intelligent creativity. Animals cannot manufacture and use labor tools, nor can they create and use language, because they do not possess a highly developed brain nervous system, do not possess thinking power, and cannot perform intelligent creative work. Therefore, thinking power is the most basic, core, important, and prominent creativity of humans. The presence or absence of thinking power is the only fundamental sign that distinguishes human creativity from non-human creativity. Creativity that has thinking power is human creativity, while creativity that does not have thinking power is non-human, animal, or other biological or non-biological creativity.

Human thinking ability is a kind of creative force that consists of four basic elements: perceptual ability, memory ability, imaginative ability, and decision-making ability. This creative force, as human thinking ability, is actually the result of intelligent creation, and wisdom is the crystallization of thinking. The power of thinking is the power of wisdom. In the next section, the author will focus on analyzing wisdom and creative wisdom.

# 3 sdom

Wisdom is the pride of humanity. In human creative efficiency, wisdom plays the role of the creator. It is only with wisdom that humans can ultimately be distinguished from non-human beings. Wisdom has four basic elements or components: (1) perception; (2) memory; (3) imagination; and (4) choice and externalization.

# Perception

Perception is the primary stage of wisdom, which includes four levels of progression: sensation, perception, representation, and concept, as well as three special forms: synesthesia, intuition, and inspiration.

Sensation is the primary stage of human intelligence, which includes four levels of progression: sensation, perception, representation, and concept, as well as three special forms: synesthesia, intuition, and inspiration. Sensation is the initial reflection produced by the human sensory organs, nervous tissue, and corresponding areas of the cerebral cortex in response to information stimuli from external objects. The information stimuli from external objects produce visual, auditory, olfactory, gustatory, and tactile sensations, while those from internal organs produce hunger, thirst, sexual, motor, and somatic sensations. Sensation itself is a creation, a result of the interaction between external stimuli and internal organs. Sensation is the starting point of cognition, and thus the starting point of thinking and intelligence. Without sensation, the external world and human brain organs would have no connection, the cerebral cortex would have nothing to do, and of course, intelligence and creativity would be impossible. Sensation is the key that unlocks the door between the external world and human intelligence.

If sensation is considered as the starting point of cognition, it has the characteristics of surface, specificity, and directness (only reflecting the surface phenomena or individual properties of certain creations). Perception, on the other hand, is at a higher level. It is a comprehensive reflection of the various creations, various surface phenomena, and their properties by the brain organs. Its content is more complex and its structure is more complete than sensation. Perception has the characteristics of integrity, understanding, constancy, etc., and can

be divided into spatial perception, temporal perception, and motion perception. If sensation is a door-knocking brick, perception is the passage leading to the hall of wisdom.

Representation is a higher level than perception. While perception is close to sensation and is a direct reflection of external objects, representation has the property of indirect reflection and can preserve or present various impressions of objects when they are not present (i.e., when external objects are not acting on sensory organs at the moment). Representation is based on perception and is a generalization of the image of the object after multiple sensations and perceptions. It reflects the overall outline and main features of the object and serves as a bridge and intermediary between sensation, perception, and concept. If perception is the passage to the palace of wisdom, representation has climbed the steps to the palace, and even stepped inside the threshold.

Concept is the highest level in the perceptual stage, which is not only a reflection of the concrete image of the object, but also a general and abstract reflection of the common features of a class of objects. The human brain's neural system has the creative ability to compare and integrate the various sensory materials obtained from perception, representation, and cognition, so that the essential attributes of a class of objects can be extracted and represented with appropriate vocabulary to form a concept. Concept is essentially the cell, cornerstone or constituent of intelligence. In the process of creating new ideas and theories, concepts play a very important role. A scientific discipline must have several basic concepts as its logical starting point, such as the definition of "creativity" in the first chapter of this book. Several new concepts often lead to the emergence of a new theory.

Synesthesia, also known as "cross-sensation," is a special form of

perception in the sensory system. It arises from the interaction between various senses, meaning that one sensation can trigger another sensation, or the stimulation of one sensation can be strengthened by the simultaneous excitation of another sensation, thereby combining into a more complete perception. The physiological mechanism of synesthesia is the intertwined infiltration of functional areas of the cerebral cortex corresponding to various sensory organs. In synesthesia, visual perception often plays a leading role, such as seeing red, yellow, and orange colors causing a warm feeling, seeing blue, green, and purple colors causing a cool feeling, or seeing a certain food causing a sweet smell and taste. Synesthesia is also the starting point of intelligence, and many intelligent creations originate from or utilize synesthesia. For example, the poetic line "Clear springs enter the eyes and bring coolness" (visual-tactile sensation), television instruction (visual-auditory sensation), popping candy (tactile-gustatory sensation), karaoke (visual-auditory-tactile-motor sensation), and so on.

Intuition is also a special form of perception. Intuition has characteristics such as intuitiveness, directness, and transcendentality, which means that perception of external creations can enter cognition directly without going through sensory perception, or directly enter representation and concepts without going through sensory and perceptual processes. Intuition is a part of intelligence, and it can often perceive the internal structure or certain inherent properties of creations directly or obscurely or clearly, without having to go through the surface phenomena of the creations. Many creations that are full of wisdom come from intuition or are related to intuition. Scientists often rely on intuition to make choices, make predictions, and propose new concepts, ideas, and theories. For example, the three different axioms about parallel problems were

discovered and proposed by the mathematicians Euclid, Lobachevsky, and Riemann, respectively, based on their own intuition. It is no wonder that Einstein said that he "believes in intuition and inspiration"; it is also not surprising that Kroitzsch made the one-sided assertion that "art is intuition"; even theories that greatly exaggerate the role of intuition have emerged, such as Bergson's intuitionism.

Intuition is a special form of perception and is closely related to but distinct from inspiration. Intuition has characteristics such as intuitiveness, directness, and transcendence, which mean that perception of external objects can enter perception directly without going through sensation, or can enter representation and concepts without going through sensation and perception. Intuition is a part of wisdom, and it often allows us to perceive the internal structure or certain inherent properties of external objects directly or hazily and clearly, penetrating beyond their superficial appearances. Many creative works that are full of wisdom come from intuition or are related to intuition. Scientists often rely on intuition to make choices, make predictions, and propose new concepts, ideas, and theories. For example, the three different axioms regarding the parallel problem were discovered and proposed by Euclid, Lobachevsky, and Riemann, respectively, based on their own intuitions. It is no wonder that Einstein said he "believes in intuition and inspiration", and it is also no wonder that Kandinsky unilaterally asserted that "art is intuition". There are even theories that exaggerate the role of intuition, such as Bergson's intuitionism. Inspiration and intuition are closely related but also different. Intuition contains or partially contains inspiration, but is not equivalent to it. Earlier in this article, the author mentioned the creation of an excited state, which he believed to be a "pulse" form of wisdom creation. In other words, the brain's nervous system emits short,

strong, high-frequency, and high-efficiency intellectual radio waves, like a massive "pulsar". This metaphorical summary is not yet an accurate definition. However, an authoritative definition that can summarize the essence of inspiration has yet to be seen. Some scholars believe that "inspiration is the crystallization of the fusion and convergence of conscious and subconscious". This definition has its profundity, but it seems incomplete because not all instances of the fusion and convergence of conscious and subconscious are inspiration. In the process of imagery thinking and abstract thinking, there are also instances of the fusion and convergence of conscious and subconscious. However, the lack of a consensus on the definition does not mean that inspiration does not exist. Inspiration undoubtedly belongs to a part of wise creation, and it is even a shining part with a relatively high creativity value index. Inspiration, which has features of suddenness, accidentalness, originality, and fuzziness, often enables the brain's nervous system to suddenly become enlightened and achieve the so-called "information essence transition phenomenon" - "the spirit is moved by the heavens, sleep and food are abandoned, concentration is at its peak, and the ears and eyes are fused, and strange words and profound expressions are presented in a state of trance" - "suddenly, like a spring breeze in the night, a thousand trees and ten thousand trees blossom with pear flowers"! With the grasp of inspiration and the combination with other wise methods, the appearance of new breakthrough creative works is not far away and is about to emerge.

#### Memory

Memory is a cognitive capacity generated by the human brain and nervous system. This capacity allows us to store and retrieve information, images, concepts, experiences, knowledge, and other mental contents that we have

perceived or imagined. Memory permeates the entire perceptual system and, together with perception, forms the foundation of imagination. Memory also permeates the entire imaginative system and, together with perception and imagination, forms the foundation of decision-making.

The physiological mechanism of memory is based on the neural connections in the brain. The basic processes and stages of memory include encoding, storage, retrieval, and reproduction. Encoding refers to the neural impulses triggered by external information stimuli, which enter the brain through certain channels and form temporary connections between relevant neurons. Storage means that through repeated actions, these temporary connections are consolidated and leave traces in the cerebral cortex of the brain. Retrieval and reproduction (recall, reminiscence) mean that these temporary connections and traces can be reactivated and excited under corresponding stimulus influences. According to research, the human brain has a tremendous capacity for memory. The memory storage capacity of the brain is estimated to be one hundred trillion units of information, which is equivalent to accommodating the knowledge stored in three or four libraries of the United States Congress (one of the largest libraries in the world, with a collection of 20 million books).

Memory can be divided into sensory memory, short-term memory, and long-term memory based on the duration that traces are maintained in the cerebral cortex. Memory can also be distinguished based on the different types of content and fields it pertains to, such as sensory memory, perceptual memory, representational memory, and conceptual memory, as well as image memory, abstract memory, associative memory, emotional memory, and volitional memory. For example, sensory memory, which includes visual memory, auditory memory, and gustatory memory, involves temporarily storing a large amount of raw information from external stimuli. This

information is then further processed using perceptual, representational, and conceptual methods. Therefore, sensory memory is undoubtedly the prerequisite prelude the entire of creative or to process intelligence. Representational memory, on the other hand, involves retaining or reproducing the impressions, images, and primary characteristics of the perceived objects in the brain. Infants develop representational memory around six months of age and are able to recognize and distinguish the faces of their mother and familiar people. When people recall past experiences, they mainly rely on representational memory. Representational memory serves as the intermediary between perception and imagination, enabling people to turn perceived things into knowledge and experience, thus preparing them for more complex and advanced creative intelligence.

Memory is a part of intelligence, and memory ability is a part of creativity. Every act of creative intelligence is accompanied and assisted by memory from start to finish. All the creations, big and small, in the human world are related to memory. Thinkers, scientists, artists, and inventors who have achieved remarkable creative results all possess good, even amazing, memory abilities. In the Tang Dynasty, Han Yu read and memorized texts with "effort equal to a common person's skill." In the Qing Dynasty, Shen Tao memorized the Thirteen Classics "as if pouring water from a pitcher." Mao Dun was able to recite all 120 chapters of "Dream of the Red Chamber," and could recite any chapter word for word. Hua Luogeng could memorize and recite entire pages of mathematical equations, while Mao Yisheng could recite pi to 100 decimal places. Many young people have been hailed as "child prodigies" simply because of their amazing memory abilities.

Of course, memory is only a part of wisdom, and a part of creativity.

Every wise creation is accompanied and participated by memory from beginning to end. All creations in the human world, big or small, are related to memory. Thinkers, scientists, artists, and inventors who have achieved remarkable creative results all have good or even amazing memories. During the Tang Dynasty, Han Yu read and memorized texts, "his skills equaled those of others"; during the Qing Dynasty, Shen Tao recited the "Thirteen Classics" like "pouring water from a jug"; Mao Dun memorized all 120 chapters of "Dream of Red Mansions," and could recite any chapter verbatim. In addition, Hua Luogeng could memorize and write entire sheets of mathematical formulas, while Mao Yisheng could recite pi to the hundredth decimal place... Many young people are also acclaimed as "child prodigies" simply because of their amazing memory. However, memory is only a limited part of wisdom, and its value is limited as well. The value of memory lies in its utilization and application in the creation process of imagination and selection. One can memorize a dictionary inside out, but if they do not know how to apply it and use the words and phrases they memorized in scientific research or writing articles, then that person is at most just a "dictionary." Moreover, for a society, such a "dictionary" may not be able to compete with a computer robot in terms of information storage and functional utility. The purpose of memory is to use it as a tool and input it into new creations. Austrian physicist Ernst Mach saw a noisy windmill when he was five years old, leaving a strong impression of the gear mechanism that drives the millstone. Later, this impression often emerged in his mind during his scientific research, becoming a stimulus and motivation. Russian writer Anton Chekhov once went rowing one evening and suddenly saw a pretty girl's head peeking out of a small house window. This formed a memorable image of the girl and inspired Chekhov to further ponder: who is this girl? What kind of person is she? Why is she in this small house? What is her

relationship with the old woman? The result of his pondering and tasting became the short story "The Darling." If Chekhov had not developed further intelligent thinking, then the image memory of this pretty girl would only have been a fleeting and temporary connection of neurons in Chekhov's brain, and would not have developed into an excellent literary work. Perhaps many people have had the image memory of this girl, but only Chekhov wrote "The Darling." The fundamental reason is that Chekhov used this memory as a starting point, premise, and motivation for further creativity, rather than just as a "memory."

Because memory is a part of wisdom, and it is also the "gene" of new intellectual creation, intelligent humans should: first, try to make useful memories last as long as possible — by strengthening temporary neural connections and deepening "traces"; second, try to make memories accurate, so that their content is not distorted, omitted, or mixed with other impurities — by accurately forming temporary neural connections, constantly comparing and choosing, and preventing confusion; third, be prepared to quickly retrieve memories — by systematically organizing and mastering the methods and techniques of memory retrieval. The ability to prepare for memory retrieval and to master and flexibly apply methods and techniques of memory retrieval is an important factor in measuring intelligence, whether human or machine, smart or foolish.

#### Imagination

If perception is the primary stage of intelligence, then imagination is the intermediate stage. Generally speaking, imagination is a mental process of forming new images based on perception and visual memory. It is the process of recombining old neural connections in the cerebral cortex to form new connections. The author's concept of "imagination" is much

broader than this "generally accepted" view. The latter essentially limits imagination to the realm of visual thinking, or equates imagination with visual thinking. The author's concept of "imagination" includes not only visual thinking but also abstract thinking, as well as image thinking that combines visual and abstract thinking, as well as association and guessing, fantasy and hypothesis, dreams and analysis, and so on.

Image thinking is the use of images to think, or mainly using images to think. Image thinking is associated with the perceptual stage of cognition. Representation is a synonym for image, and refers to the "image" left in the cerebral cortex by external objects. The essence of image thinking is to combine these primitive, scattered, and rough "images" in the cerebral cortex into novel, holistic, and exquisite images. It is to "think" images with images, and "create" images with images. Although the process of combining and synthesizing is repeated, the overall trajectory and trend is for old images to rise, transform, and grow into new images. New images are more vivid, richer, more typical, and more meaningful than old images.

Literary and artistic creation and appreciation mainly rely on imagery thinking. "The distant mountains look blue in the sunset, and the cold white house looks poor. I hear the barking of dogs from the firewood gate as I return home on a snowy night." This is a five-character quatrain written by Tang Dynasty poet Liu Changqing. The poem uses ten images: sun, mountain, sky, house, gate, dog, wind, snow, night, and person. These ten images were originally scattered individual "materials," but the poet optimized and combined them through imagery thinking, creating a group of rich and meaningful new images. When readers read this poem, a group of images will also emerge in their minds, such as the setting sun, the cold sky, the white house, and the firewood gate. The images in the reader's mind are of course

different from those in the poet's mind, and they are recreated by the reader to experience a sense of hardship in life. Not only poetry, but also other forms of art creation and appreciation rely on imagery thinking. Leonardo da Vinci's "Mona Lisa" comes from the smile of the model, Mona Lisa, and the smile of her birth mother, Caterina. When Beethoven composed his symphony "Fate," he must have thought of the many difficult moments in his life and the magnificent image of a hero "gripping fate by the throat." There are countless such examples.

Formal thinking is something that everyone possesses. Humans are inherently visual beings and everything they encounter is visual in nature, so it is almost impossible to completely eliminate visual thinking. Architects, when designing, must have an image of the new building in their minds; mathematicians, when calculating, must have graphical formulas to work with; astronomers, geologists, and physicists, when conducting research, rely on various models of construction. Even philosophers, who primarily rely on abstract thinking, still require the assistance and participation of visual thinking: profound and mysterious viewpoints require vivid and lively imagery to explain; dull and tedious ponderings require visual activity that is both emotional and interesting to regulate and nourish. And the "cells" of abstract thinking, concepts, also have their roots in imagery. All concepts originally stem from imagery, and all contain and carry primitive visual information.

Abstract thinking is thinking using concepts, or primarily using concepts. It is the process of further "abstracting" concepts formed in the perception stage. There are generally three ways of "abstracting":First, from judgment to reasoning. Judgment is an expanded concept, using one or more concepts to discern and define another concept or several concepts. Reasoning is making new judgments (conclusions) based on existing judgments

(premises). Second, from analysis and comparison to synthesis generalization. Analysis is breaking down the various components and characteristics of a whole group of concepts (general concepts) into their constituent parts (small concepts). Comparison is comparing the decomposed small concepts to determine their similarities and differences, hierarchy, essence and non-essence relationships. Synthesis is reconnecting the various components of a large concept or group of concepts, or combining individual characteristics or structural aspects of concepts into a new whole. Generalization is the process of connecting and linking creative products that have the same general characteristics reflected by concepts. Analysis and comparison are prerequisites for synthesis and generalization, while synthesis and generalization are the goals of analysis and comparison. Third, systematization and organization. Systematization is the process of combining various concepts, information, thinking results, and optimizing them into a holistic, related, ordered, and dynamic system in the brain. Organization is the process of categorizing various knowledge within the system in logical order, coding them, and arranging them in a queue to facilitate accurate and rapid retrieval and use.

Language and writing are the fundamental tools of abstract thinking. Judgement can be expressed in a simple sentence structure consisting of a subject, object, and verb, while reasoning is presented in a more complex sentence structure consisting of one or more clauses. Analysis, comparison, synthesis, as well as systematization and organization, are all based on language (i.e. concepts) and sentences with specific meanings. The level of abstraction in the meaning of the language used during the thinking process is a sign of the level of abstract thinking.

Just as abstract thinking inevitably permeates into imaginative thinking, abstract thinking also participates in imaginative thinking. There is no existence of literary creation without abstract thinking in imaginative thinking, or theoretical thinking without imaginative thinking. It's just that in the process of imaginative thinking, "image" is the creator and "abstraction" is the created, while in the process of abstract thinking, "abstraction" is the creator and "image" is the created. For example, in Liu Changqing's poem "Returning on a snowy night", the term "person returning" is a product of the communication and integration of these two kinds of thinking. First of all, "person returning" is a human being, an image of a human being; secondly, "person returning" is not just an ordinary person, but an abstract and generalization of a "returning" person from ordinary people.

The imagery thinking is a combination of figurative thinking and abstract thinking, where the so-called "imagery" is a meaningful image that has been abstracted and concretized into emotions and thoughts. The image has characteristics such as imagery, implication, and ambiguity. By stacking different images that have been deposited in the brain in chronological order to form a relatively complete unit of meaning, with a mapping relationship between the previous and the next image, it is called "image superimposition". Connecting several unrelated images together randomly is called "image juxtaposition", and converting one or several images into other unrelated images to achieve a sudden and strange effect is called "image transformation"; combining the two is "free association of images". The imagery thinking is widely used in artistic creation, especially in poetry. For example, the poem by Blaise Cendrars: "The winged octopus will navigate the ship made of sails every hour today, for the last time. This is an unprecedented feat. After this, you will feel a sun with both white and black rising in your hair."

"Association" refers to the intellectual activity in the brain of

linking one mental construct to another, including images, ideas, concepts, theories, and so on. There are various ways to classify types of association. One way is to divide it into simple association and complex association, based on the complexity of the process and structure involved.

Simple association is composed of three types of associations: contiguity association, similarity association, and contrast association. Contiguity association refers to the association formed between mental constructs that are close to each other in time and space, such as associating ink bottle with pen, writing paper, or article. Similarity association, also known as "analogy association", refers to the association formed between mental constructs that are similar in nature or form, such as associating a cat with a tiger or a leopard. Contrast association, also known as "opposition association", refers to the association formed between mental constructs that have opposite characteristics or are mutually exclusive, such as associating a desert with an oasis, a hero with a coward, or light with darkness.

Complex association includes relational association and semantic association. Relational association refers to the association formed between mental constructs that have complex causal, conditional, or progressive relationships, such as associating a cold with a fever, environmental pollution with biodiversity conservation, or a lecturer's promotion with a professor's treatment. Semantic association refers to the association formed between mental constructs that have inner meanings, such as associating the implicit educational significance in a literary work with extracurricular tutoring centers or the rectification of the book and magazine market, or associating the far-reaching historical significance of the "May Fourth Movement" with the blood and tears of patriots and the suffering of the Chinese nation.

Associations can also be classified based on the direction and development of their occurrence into forward association, backward association, lateral association, scattered association, and convergent association.

Forward association is a progression from small to large, from low to high, and in a step-by-step manner based on time and space. For example, from youth to adulthood, middle age, and old age; from the roots of a tree to the trunk, branches, and leaves. Backward association, also known as reverse association, is a process that goes against the order of time and space or leads to the opposite aspect of the stimulus. For example, from a gas stove to a charcoal stove, a wood stove, and even to the primitive campfire of early humans; from the feeling of pride and success to the feeling of frustration and depression when experiencing failure. Lateral association can be compared to the ability of the eyes to see things from the side. It is a process of connecting unrelated stimuli, including those located next to the stimulus or even far away from it. For example, Archimedes used the overflow of water from his bathtub to develop a method to compare the volume of different objects, while painter Shi Lu used the colors in chamber pot to inspire the color scheme of painting. Scattered association refers to the random occurrence of unrelated thoughts or ideas that may arise in a person's mind. Convergent association is the process of bringing multiple unrelated stimuli together to form a common point or conclusion.

Scattered association is the process of associating a dispersed range of creations from a holistic creation (similar to radiating out from the "center" to the "circumference"). Examples include thinking about various solutions to a problem, considering the various possible outcomes of an event, or proposing various hypotheses for a difficult question. Convergent

association, on the other hand, is the process of associating various dispersed creations towards a holistic creation (similar to converging from the "circumference" to the "center"). An example of this would be finding the best solution or the most accurate answer by selecting from various solutions or reference answers to a particular problem. Scattered association is also known as "divergent association" or "adventure association," which is an open-ended association, and the results of the association are diverse and uncertain. Convergent association is also known as "convergent thinking," which is a closed-ended association, and the results of the association are one-dimensional and certain.

Guessing is the inference and estimation of an unknown object based on association. Guessing has a certain degree of probability. Some guesses are verified to be consistent or mostly consistent with the actual situation of the object, while others are verified to be inconsistent or mostly inconsistent. For example, the prediction of Neptune is a verified guess that is consistent with the actual situation of the object, while the inference of intelligent life on Mars is a verified guess that is inconsistent or mostly inconsistent with the actual situation of the object.

Association and speculation are twin sisters. When they combine, they form what is called "conjecture". Association is undoubtedly an important component of intelligence, while speculation is a mysterious and tempting part of this component. In science, profound and mysterious conjectures often drive generations of scientists to work tirelessly in search of answers. Famous examples include the "Goldbach Conjecture" in mathematics and the "Four-Color Conjecture" in topology.

Fantasy is the creation of a non-existent and currently unrealizable object in the mind, with a desire for it to become reality. Yearning,

daydreaming, and meditation can be considered synonyms or related terms of fantasy. Fantasy is both illusory and possible, and it also has an inducing effect. Many human fantasies are transformed into reality through creative action. For example, during the Renaissance period in Italy in the 15th and 16th centuries, Leonardo da Vinci fantasized that humans could fly like birds. This type of fantasy was probably shared by many people at the time, but da Vinci not only "thought" about it, he also drew numerous sketches. These "fantasy drawings" had a positive impact on later generations, with one becoming the emblem of the present-day All Nippon Airways (ANA). Three hundred years later, in 1903, the Wright brothers in England finally sent the world's first airplane into the sky. Da Vinci's fantasy became reality. Similarly, "Qianliyan" and "Shunfenger" are mythical characters from Chinese classical novels "Journey to the West" and "Fengshen Yanyi," respectively. They can also be said to be two fantasies of ancient Chinese people. After the invention of the internet and smartphones by humans, these two fantasies can be said to have become reality. Some fantasies are almost impossible to become reality, such as someone fantasizing about immortality or being able to transform into seventy-two different forms like Sun Wukong.

Hypothesis is similar to fantasy in some ways, but it is mainly based on abstract thinking rather than imagination of visual images. Hypothesis refers to the preconceived notions, solutions or assumed explanations of a created object or phenomenon in one's mind through abstract thinking. When such a hypothesis is expressed in language or written form, it becomes a "hypothesis." If a hypothesis is proven, it becomes a scientific theory, otherwise it remains just a hypothesis. In 1903, Thomson proposed the atomic model hypothesis of "raisin bread" and suggested that positive charges were distributed throughout the atom, like raisins in bread. Later, Rutherford

and others bombarded atoms with alpha particles and found that some alpha particles did not move in a straight line but were significantly deflected, and some even rebounded. In Thomson's "raisin bread" model, there were not enough obstacles to cause such significant deflections of the particles. Therefore, Rutherford proposed an atomic model hypothesis similar to the structure of the solar system, where the central part of the atom was a heavy nucleus with a positive charge (sufficient to cause deflection or rebound of the incoming particles), and electrons rotated around the nucleus like planets around the sun. This hypothesis was soon proven and became a scientific theory, while Thomson's "raisin bread" model remained a hypothesis.

Dreaming is a type of "thinking" and refers to the passive, purposeless, and negative imagination that occurs in the human brain during a relaxed state of sleep, not under conscious control. Therefore, dreams can be called "dream thoughts." The physiological mechanism of dreaming involves the continued activation of certain groups of brain cortical cells that have not been completely suppressed. Dreams often revive some traces of the past that remain in the brain cortex and connect them together in an irregular, unordered, and illogical way with other elements such as the present, fantasies, and ideal creations (images, thoughts, scenes, etc.). From the perspective of psychoanalysis, dreaming is the externalization of the subconscious, representing the emotional experiences in the depths of a person's inner self. It reveals the tendencies and power of the subconscious and can enable people to gain a deeper and more comprehensive understanding of themselves.

Analyzing dreams is also a form of imaginative wisdom. The externalization of this imagination is the logical analysis and interpretation of strange and bizarre dream experiences. Austrian

psychologist and founder of psychoanalytic school Sigmund Freud firmly believed that "dreams do have some meaning, and a scientific method of interpreting dreams is possible." Thus, we see his insightful masterpiece, "The Interpretation of Dreams." American psychologist Stern Robinson and British psychologist Tom Corbett believed that dream cues can help people understand and identify their hidden anxieties and concerns, their efforts to work hard, their biased and difficult knowledge, and even their deeper consciousness and self-awareness. People can see and analyze more clearly their interests and environment in dreams. Therefore, they used the "symbolic interpretation of dreams" method, which relies on the cues of many "dream theory" scholars, to try to find the symbolic correspondence between things in dreams and real-life objects from physiological, psychological, and spiritual perspectives, and to find the implications and connections between them. They co-wrote the best-selling book "The Dictionary of Dreams."

For scientists, inventors, and artists, dreams and their interpretation often bring unexpected and beneficial inspirations, leading to the creation of valuable new works. Psychologist Otto Loewi dreamed of an experiment that could prove his theory of neural transmission, and upon waking he carried out the experiment exactly as he had dreamed, achieving success and winning the Nobel Prize as a result. Astrologer Hugh MacGregor obtained the correct method for creating a chart that indicated the position of the moon from 1800 to 2000 in a dream (a problem that had stumped many scientists before), and he created the chart based on the method shown in his dream, which was proven to be accurate and included in his book "Moon Calendars." Novelist Charles Dickens often dreamed of a vivid storm that woke him up in a panic, "as if the waves were roaring into my quiet room... I must set down everything that happened as it really happened." Thus, his vivid

description of a storm in "David Copperfield" was born. Such dream inspirations and descriptions, while not particularly common in the creative process of writers, are not rare either.

#### • Selection and externalization

The stages of choice and externalization represent a higher level of wisdom. If a person only stays at the stages of perception, memory, and imagination, without advancing towards choice and externalization, then this person cannot be considered a fully wise person. Human creative productivity is prominently reflected in the stages of choice and externalization. If perception, memory, and imagination can be compared to a huge "reservoir," then choice and externalization are the gates and spillways of this reservoir. If perception, memory, and imagination can be likened to a river rushing forward with great momentum, then choice and externalization are the discharge and surge of the river into the sea — although such analogies may not be entirely appropriate.

Choosing means discerning and evaluating the various concepts, viewpoints, knowledge, theories, methods, plans, attitudes, intentions, and other mental creations that are formed and accumulated in the mind through perception, memory, and imagination. It involves sifting and refining, separating the wheat from the chaff, and making shrewd, decisive, and insightful selections and decisions. Due to the constraints of natural, social, historical, and personal creative conditions, not all mental creations built on perception, memory, and imagination are necessarily true, precise, or of high creative value. Moreover, the world is constantly changing, and knowledge is exploding while scholarship is updating, what appeared to be true, precise, and of high creative value yesterday may not be so today. All of this requires discerning and evaluating the vast amount

of mental creations already present in the mind and filtering out the false, crude, low-value, and low-taste "wisdom," retaining the true, precise, high-value, and high-taste wisdom. Then, from the true, precise, high-value, and high-taste wisdom, select the most suitable, needed, efficient, and high-value wisdom for the current creative process and externalize it.

At a critical moment in the creative process, the ability to make high-value and high-quality wise choices is an important indicator of whether one is mediocre, intelligent or foolish. Making the appropriate choices will lead the creative process towards the desired outcome of the creator, while making inappropriate choices will often result in an outcome that is contrary to the creator's wishes. One wrong move can cause the entire game to be lost, whether in chess or in other creative endeavors. Zhuge Liang was undoubtedly full of wisdom, as evidenced by his famous quote "Victory is decided in the council chamber before the battle." However, in the Battle of Qishan, he made the mistake of selecting Ma Su, who was all talk, as the vanguard, resulting in a significant loss. Napoleon can also be classified as a creative giant, his strategic genius often leaving people speechless with admiration. However, in the Battle of Waterloo, he suffered a devastating defeat. An important reason for this was that Napoleon made poor choices in terms of strategy and personnel.

Selection is closely related to externalization. Externalization without selection is unwise, while selection without externalization is meaningless. Externalization is the transformation of a mental state creation into a physical state creation, which means that wisdom comes out of the brain and enters the creative process as a creation outside the self, becoming a part, and sometimes a dominant part, of the new creation generated by this process. The three ways of externalization are symbolization, objectification, and behaviorization.

Symbolization is the process of representing selected wisdom through symbols such as language, text, equations, colors, lines, patterns, musical notes, and melodies. Philosophers can only be considered as such if they express their thoughts (such as Confucius and Socrates) or write them down (such as Rousseau and Voltaire). Mathematicians must write out their selected equations (such as Hua Luogeng and Chen Jingrun) to be considered Similarly, mathematicians. painters and musicians create timeless masterpieces using lines and colors or musical notes and melodies, respectively, making Zhang Daqian or Xu Beihong the artists they are, and Mozart or Debussy the musicians they are. Even ordinary people, in their daily conversations, letter writing, and composition, appropriate words, phrases, sentences, structures, formats, tones, etc. Even blind or deaf-mute individuals must make choices in Braille or sign language.

Materialization is the process of expressing selected wisdom by creating tangible objects. Inventors rely primarily on physical objects to showcase their inventions. Without a visible, three-dimensional object, they cannot be considered inventors. For example, if Zhang Heng had not created the armillary sphere and the seismoscope, he would have only been known as a literary figure. Similarly, if Germans Benz and Daimler had only thought about the "car" in their minds, without actually making one, someone else would have claimed the title of the inventor of the first car. Today, we still hold Zhang Heng, Benz, and Daimler in high regard because their names are associated with physical objects such as the armillary sphere, seismoscope, and car, which allow us to witness their exceptional wisdom. Not only inventors, but also scientists in fields such as physics, astronomy, geology, and biology, need to use physical models to showcase their ideas, viewpoints, and research findings. A tailor's skill is displayed in their

clothing, a chef's level of expertise is demonstrated in their dishes. Without clothes that are stylish and finely crafted, or dishes that are aesthetically pleasing and delicious, a tailor's or chef's wisdom is just an "ivory tower" and cannot be appreciated. In fact, physical objects are also a type of symbol, a concrete, three-dimensional, visible, and touchable "symbol." Physical symbols often work in combination with other symbols such as language, color, sound, and so on.

Behavioralization is the process of expressing selected wisdom through facial expressions, limb movements, and various activities. Symbols and material objects are essential tools, objects, and supports of behavioralization. Essentially, behavioralization is also a kind of "behavioralization". For example, when a person chooses someone as their love interest among many opposite sexes, they express their affection through language symbols such as conversation and letters, material symbols such as gifts, and behavioral symbols such as eye contact and body movements. Choosing what kind of behavior to exhibit and when to exhibit it constitutes an important part of the wisdom of love. Similarly, political behavior expresses the wisdom of politicians, military behavior reflects the wisdom of military strategists, and scientific experiments by scientists, as well as the works and speeches of thinkers and writers, are all examples of high-value, high-standard intellectual behavior.

The phenomenon of "genius" is closely related to the basic content of wisdom mentioned above. The so-called "genius" refers to a person who, under the same basic internal structure (primarily the physiological mechanisms of the brain) and external influences (social and natural conditions that promote creativity more than they inhibit it), displays exceptional intelligence and makes outstanding contributions. The essence of genius is extraordinary wisdom. Extraordinary wisdom (or extraordinary

intelligence) must possess the following basic elements: meticulous, agile, and comprehensive perceptual abilities; accurate, rapid, and firm memory; rich, broad, and profound imagination; and wise, astute, and decisive externalization in decision—making. All four elements are indispensable and must be combined into a whole in order to be considered a genius. If one or two of the elements are missing, that is, if a person is only stronger than others in one or two aspects, he or she cannot be considered to possess extraordinary wisdom and is still some distance away from being a "genius."

# 4 Motivation, interest, emotion, willpower

Motivation, interest, emotion, and willpower are important components of creative effectiveness that cannot be ignored. These components can have varying degrees of impact on creativity, whether strong or weak, large or small, or long-lasting or fleeting, and are thus related to the release and expression of creative potential, the progress of the creative process, and the generation of new creations.

#### Motivation

Motivation is a behavioral tendency that arises in the brain due to a creative need. Motivation is closely related to creative desire. If there is any difference, it is that motivation has a stronger creative efficiency, and it often directly leads to creative behavior, whereas creative desire has a relatively weaker creative efficiency and does not necessarily lead to creative behavior. Motivation can also be regarded as a kind of creative desire that is closely related to creative behavior, while not all creative desires constitute motivation. Creative desire can flash through the brain and may not be realized, while motivation does not flash through the brain

and often requires repeated brewing, lingering for a period of time, and is often realized through externalization as creative behavior.

Motivation is a behavior tendency triggered by the creative needs of the brain. Motivation is closely related to the desire for creativity. If there is any difference, it is that motivation has a stronger creative effect, often directly leading to creative behavior; the creative desire has a relatively weaker creative effect and does not necessarily directly lead to creative behavior. Motivation can also be seen as a kind of creative desire, a creative desire closely related to creative behavior; whereas creative desire does not necessarily constitute motivation. Creative desire can flash through the brain and may not be realized, while motivation will repeatedly ferment, linger for a period of time, and often require externalization through creative behavior to be realized. According to different creative needs, motivation can be classified in various ways. One type of motivation mainly comes from the needs of the internal structure of the creative subject, such as feeling hungry and having the motivation to eat; feeling cold and having the motivation to keep warm. Another type of motivation mainly comes from external factors related to the creative subject, such as the need to renovate a house because it is dilapidated; the need to create a new group because a previous one disbanded. Some motivation mainly focuses on the creation of physical objects, such as seeing a nice piece of clothing and deciding to buy one to wear; some motivation mainly focuses on the creation of spiritual objects, such as believing that a certain faith is noble and wonderful and deciding to fight for it. Some motivation only stays in the brain for a short time before being externalized into specific creative behavior, such as wanting to visit a friend and quickly going to see them; some motivation ferments in the brain for a long time before being externalized into creative behavior,

such as wanting to eliminate a political or romantic rival, as the saying goes, "A gentleman's revenge is ten years late." Some motivation may even ferment in the brain for a lifetime, such as the pursuit of truth and justice and the yearning for an ideal society.

Any creation that possesses a brain and nervous system will produce motivation. Non-living things, microorganisms, plants, and lower animals do not have a brain and nervous system, and therefore do not have motivation. Higher animals have a brain and nervous system and will naturally produce motivation. Jackals and wolves will produce motivation to hunt for food, and apes will produce motivation to search for mates. However, the motivation of any animal other than humans is derived solely from instinctive needs, which are non-intelligent motivations, whereas human motivation is both derived from instinctive needs and social needs (especially social needs), and is an intelligent motivation.

Motivation is the starting point of a goal and the driving force and internal impetus of creative behavior. Motivation can inspire and propel people to actively engage in a creative process, actively release and exert their creative power, in order to achieve the expected and desired goal — the emergence of a new creation.

# • Interest

Interest is a positive psychological inclination linked to a certain emotional experience, in exploring a certain creation or engaging in a certain creative activity. The physiological mechanism of interest is a special type of excitement generated by the brain's neural system in response to certain external stimuli, which is common to all animals with a nervous system. For example, a cat may be interested in a mouse, and a dog in a bone. However, unlike interests in non-human animals which are

based on biological instincts, human interests are rooted in a combination of biological instincts (such as interests in food and sex), intellectual factors (such as interests in new ideas and perspectives), and social factors (such as interests in arts, sports, and religious activities). In other words, human interests are a fusion of biological, intellectual, and social factors, and the innate factors in human interests are indelibly marked by the stamp of intelligence and society.

As a part of creative efficiency, interest has a significant impact on people's creative behavior and process. For things that one is interested in, people always approach and study them actively and joyfully. Similarly, for a creative process that one is interested in, people always participate and engage in it actively and joyfully. It may be a bit exaggerated to say "interest is half of success," but it is unquestionable that interest can play an important role in inducing, promoting, catalyzing, and accelerating success.

Interests can also be divided into primary and secondary interests. Primary interests, also known as central interests, are generally the interests that people have in the profession they choose, engage in, or are passionate about. For example, scientists have an interest in scientific research, and writers have an interest in their works and writing. Secondary interests, also known as non-central interests, refer to people's interests in creative works and processes outside their chosen profession, such as collecting, stamp collecting, fishing, raising cats and dogs, playing cards and chess, etc. Creative giants are generally people with extensive knowledge and broad interests. For example, Marx liked the saying, "Nothing human is strange to me." Goethe not only made outstanding contributions in poetry but also had an interest in sensory physiology and biology and made important contributions in these fields. Da Vinci was not

only good at painting, but also had an interest in architecture, sculpture, natural science, and modern inventions.

According to the different objects of interest, interests can be divided into material interests and spiritual interests. Material interests refer to the love and inclination towards physical objects such as clothing, food, tools, and wealth. Spiritual interests refer to the love and inclination towards mental objects such as rational thinking, science and technology, artistic creation, and social interaction. Material interests are the foundation of spiritual interests, and spiritual interests cannot be separated from material interests. Although spiritual interests are at a higher level than material interests.

#### • Emotion

Emotion is a relatively strong mental and physical experience generated by a creation with a brain and nervous system in response to stimuli from external creations. Emotion is a compound of sensation and feeling. The reflection of external stimuli on the senses of humans or animals is called sensation. If this reflection is related to the inherent creative desire and motivation of humans or animals, producing either positive or negative emotional experiences that correspond or conflict, it is called emotion. Positive emotional experiences include pleasure, joy, contentment, love, and yearning, while negative emotional experiences include anger, hatred, boredom, fear, and sadness.

Emotions are intense mental and physical experiences that arise from external stimuli perceived by the brain and nervous system. Emotions are a combination of feelings and moods. When external stimuli affect the sensory organs of humans or animals, this is referred to as a sensation. If this response is connected to the innate creative desire and motivation

of humans or animals, either by coincidence, consistency or contradiction, a positive or negative emotional experience will occur. Positive emotional experiences may include pleasure, joy, contentment, affection, and aspiration, while negative emotional experiences may include anger, hatred, disgust, fear, and sadness. Although animal emotions originate from biological instincts and lack human intelligence, they can still be quite touching. For example, when faced with a butcher's knife, cows and sheep's eyes may be filled with tears, and they may emit a mournful cry. Mandarin ducks and swans always live and nest in pairs. When one of them dies, the other will stay for several days, unwilling to leave. Human emotions are closely related to intelligence. Any emotional experience of humans involves the participation of intelligence. Positive emotional experiences, such as liking and happiness, often arise from people's acceptance, welcome, and convergence towards certain creations. Conversely, negative emotional experiences, such as hatred and anger, often arise from people's rejection, opposition, and deviation from certain creations. Positive and negative attitudes are clearly based on the foundation of perception, memory, selection, and expression, which are all parts imagination, intelligence. After the loss of loved ones, people often grieve for a long time, and this grief is undoubtedly linked to the psychological process of memories of their words, deeds, and appearance, that is, "memory." When a creative process is about to start, just beginning, or in progress, people often envision various scenarios of joy, excitement, and ecstasy when the process is successfully completed, which leads to feelings of joy, excitement, and ecstasy. Such emotional experiences naturally involve the beautiful "imagination" of intelligence.

As a component of human creative potential, the release and expression of emotional efficacy in the form of creativity can have an immeasurable impact and strength. Intense emotional experiences can lead to exceptional and tremendous creative behavior. Take romantic love, for example, this intense and all-encompassing emotional experience of sweetness, bitterness, sourness, and spiciness has inspired, captivated, and driven countless men and women, as well as gifted individuals and beautiful ladies, throughout history and around the world. Because of love, some people commit suicide or murder, while others rise to great heights or fall into despair. Some people create masterpieces as a result of heartbreak, such as Goethe's "The Sorrows of Young Werther," while others engage in duels and lose their brilliant youth, like Pushkin.

## • Willpower

If motivation, interest, and emotion are generally possessed by animals to varying degrees, willpower is a highly complex psychological activity that is unique to humans. This type of psychological activity implies that humans can consciously and actively determine creative purposes, and externalize various creative abilities (especially intellectual abilities) into powerful creative actions to overcome various difficulties, and achieve and realize predetermined creative goals.

Purposefulness, decisiveness, perseverance, and self-discipline are the notable characteristics of willpower.

Purposefulness means that creative activities under the control of the will are always purposeful. Without a clear purpose, there is no human will. The purpose determines and guides the direction of creative behavior, and is the result that the will wants to achieve. The vast majority of human creations, such as politicians conducting political campaigns, scientists conducting scientific experiments, writers writing works, workers working, farmers farming, students going to school, and so on, are purposeful

creations, and therefore they are creations of the will. The purpose is a product of active imagination, established before the creative behavior, reflected and stored in the human brain in the form of appearance or concept, and constantly encouraging and inspiring the creators to externalize and achieve it. The purpose of mathematicians is to solve difficult problems like the "Goldbach Conjecture"; the purpose of astronomers is to explore the mysteries of the universe and bring the distant interstellar world to the benefit of humanity; and the recent goal of the Chinese people is to achieve modernization and national rejuvenation, making the Chinese nation powerful among the world. These grand goals embody the power of the will, inspiring and encouraging people to climb and strive for more.

The decisiveness of willpower means that, after wise deliberation, one can quickly and accurately choose a goal and resolutely commit to creative actions to achieve it. The story of Zhuo Wenjun, who chose the impoverished scholar Sima Xiangru as her ideal husband and eloped with him despite her parents' objections, is an example of decisive willpower. Many people who have abandoned their families, wives, and children, and possessions to pursue their chosen path of pursuing the light, have also demonstrated decisive willpower. There is a saying that "action speaks louder than words". If choosing a goal quickly and accurately is called "heart movement", then the resolute commitment to creative actions is "action". "Heart movement" is internal, while "action" is external. The decisiveness of willpower is manifested in "heart movement" and even more in "action". Without "heart movement", there will be no "action". However, without "action", "heart movement" also loses much of its meaning. "Heart movement" and "action" together constitute the decisiveness of willpower, and the two are indispensable and inseparable.

The quality of tenacity means that once the purpose is determined, the

creator can persevere with an unwavering, unyielding, and indomitable spirit to strive for and achieve it. Throughout history, people who have made significant contributions in various fields have all been possessors of strong willpower. Gandhi, the "saintly hero" of India, chose nonviolent resistance as a means to achieve national independence. For this, he practiced self-mortification, shed blood, fasted, went to jail, and eventually sacrificed his life. Russell spent ten years of hard work, neglecting his sleep and food, to write "Principia Mathematica." Li Shizhen spent thirty years living a life of hardship and persevering with unwavering determination to complete his masterpiece, "Compendium of Materia Medica." The future is bright, but the road is winding; there will be bread, but there will also be difficulties. You will encounter both flowers and thorns, as well as sunshine and snow and rain. The scenario of pie falling from the sky is too rare. Great creative achievements are always tortuous and particularly favor those with strong willpower.

Self-discipline means that when a creator is engaged in a creative process, they can effectively control themselves, restrain themselves, eliminate distractions, concentrate their energy, overcome temptations, regulate their emotions, and devote themselves fully to achieving the originally selected creative purpose. Qiu Shaoyun strictly abided by discipline and chose to be burned to death rather than expose his mission; Tang Xuanzang was determined to obtain Buddhist scriptures and did not succumb to the temptations of lust; scientists give up rest to conduct experiments, and writers are willing to endure loneliness to write. All of these examples demonstrate the power of self-discipline in action, effectively controlling oneself and allowing creative energy to be focused and directed towards a specific purpose without mental breakdown, disorganized thoughts, or dispersed energy.

Having a clear purpose, making decisive actions, persevering with resilience, and practicing self-discipline are the fundamental qualities of willpower. These four aspects are interconnected, interpenetrating, interdependent, and inseparable from each other.

Willpower plays a significant role in human creation. Many incredible and unimaginable miracles on earth can be explained through the examination of willpower and can be considered as the miracles created by willpower. However, we do not agree to separate willpower from other creative abilities of humans, nor do we agree to exaggerate the role of willpower to infinity. Schopenhauer, who advocates the philosophy of the will to live, and Nietzsche, who propagates the will to power, both elevate willpower to the status of the origin and essence of the world, believing that human will can create everything and dominate the universe. Such views cannot explain the creative phenomena of non-willed organisms and non-living things before the appearance of human beings and beyond human will, which is obviously incorrect.

# Seven Judgment of value creation

# 1 Creation of quality and creation of quantity

Creativity quality is an inherent regulative property within a created object, which distinguishes it from other created objects. Upon closer examination, the inherent regulative property within a created object is actually the characteristic of the object's internal structure, which is also the characteristic of the creative process within the object. The new created object generated by the creative process within the original object, as well as the novelty and uniqueness presented by this new object, constitute the creativity quality of the original object.

The molecular formula of methyl alcohol and ethyl alcohol is both C2H6O, which means that each molecule of methyl alcohol or ethyl alcohol contains two carbon atoms, six hydrogen atoms, and one oxygen atom. As a creation, carbon dioxide (C2), hexahydride (H6), and oxygen (0) participate in two different creation processes in different ways (i.e., the order of the arrangement of atoms is different) to form two different internal structures, thus resulting in the generation of two different creations—methyl alcohol and ethyl alcohol—presenting different creativity qualities: methyl alcohol is a gas, almost insoluble in water; ethyl alcohol, also known as alcohol, is a liquid that can mix with water in any proportion.

The creativity quality and the created object share the same identity. Every created object has creativity quality, and without creativity quality, the created object cannot exist; at the same time, creativity quality is the creativity quality of the created object, and without the creativity quality of the created object, it does not exist. Apes have their own

creativity quality, and humans have their own creativity quality; men have their own creativity quality, women have their own creativity quality, Old Wang has his own creativity quality, and Xiao Li has his own creativity quality. Radiating heat and light, and possessing strong gravitational force are the creativity qualities of the sun. Without the sun as a hot gas ball (with a surface temperature of about 6000°C and a center temperature of about 15 million K), there would be no sun radiating heat and light, and possessing strong gravitational force. Constant invention and creation are the creativity qualities of Edison. Without the intelligence, perseverance, and hard work of Edison, there would be no Edison, known as the "King of Inventions." Therefore, it can be said that a specific creativity quality is the created object itself.

The quantity of creation is also an inherent characteristic of a created object. This characteristic implies that the size, degree, speed, variety, etc. of a created object can all be expressed in quantitative terms. Just like how the creative quality is an inherent characteristic of a created object, the creative quantity is also an inherent characteristic of a created object. There is no created object that does not possess a creative quantity. Every created object has both creative quality and creative quantity, and they are unified. If creative quality is the internal structure of a created object, then creative quantity is the "quantification" of this content structure. If creative quality reveals the novelty and uniqueness generated by the creative process inside a created object, then creative quantity reveals the repetitiveness, accumulation, and various forms of the new creations generated by this process.

The molecular formula of water is H2O, and this hydrogen dioxide structure determines the creative quality of water, which is characterized by being colorless, odorless, and soluble in other substances. However, water not only has a creative quality but also has volume, weight, purity, temperature, water pressure, and flow rate, which are aspects of creative quantity. The release and manifestation of human creativity, which is primarily based on intelligence, demonstrate human creative quality, but human intelligence varies in degree, and creative efficiency can be large or small and can take various forms, which is the scope of creative quantity. The examination of the creative quality of a creative object is referred to as qualitative research, while the examination of the creative quantity of a creative object is referred to as quantitative research. Qualitative research provides the premise and foundation for quantitative research, while quantitative research more precise, systematic, and rational.

The creative quality and quantity are closely related and inseparable. Creative quality always has a certain creative quantity, and creative quantity always has a certain creative quality. A certain creative quality determines a certain creative quantity and determines the scope of the creative quantity. Creative quantity is based on and is the main body of creative quality. And a certain creative quantity is a necessary condition for the existence of creative quality. Beyond a certain limit of creative quantity, creative quality will undergo changes.

From the perspective of assessing creative value, both creative quality and quantity have their own emphasis. When examining creative quality, the focus is mainly on its novelty and diversity. The more novel and diverse a creation is, the better its creative quality and the greater its creative value. For example, when it comes to products such as televisions, color TVs are considered to have higher novelty and diversity compared to black and white TVs, making them of higher creative quality and value. Among color

TVs, those with remote controls, flat screens, automatic channel search, and 3D sound systems have even higher novelty and diversity, making them of even higher creative quality and value. Further still, digital, LCD, high-definition, and thin, lightweight TVs that can be hung on walls have even greater novelty and diversity compared to what was popular before, resulting in even higher creative quality and value. When examining creative quantity, the focus is mainly on its repetitiveness and cumulativeness. Within a certain limit, and assuming the creative quality remains relatively constant, the more times a creation of the same type and kind is produced, the greater its creative quantity and value. For example, before the advent of color TVs, black and white TVs were the only choice, so producing more of them meant greater creative quantity and value. Similarly, before the introduction of multi-functional and high-definition color TVs, producing more of standard color TVs meant greater creative quantity and value.

There is obviously a question of the degree of creativity here. Within a certain degree of creativity, creative quality and quantity are directly proportional and thus positively correlated with creative value. Beyond a certain degree of creativity, creative quality and quantity become inversely proportional, and therefore negatively correlated with creative value. When production of black and white TVs reaches a point of oversupply, producing more of them results in lower creative quality and value. This indicates that the degree of creativity, rather than being a threshold of saturation in creative quantity, is more accurately described as the limit of creative value for a given creation. Within this limit, increasing the creative quantity means increasing the creative value, while beyond this limit, increasing the creative quantity means decreasing the creative value. The formation of the degree of creativity is the result of the comprehensive

effect of various creative conditions and factors, such as the inherent quality of the creation and the degree of social need.

# 2 Index of value creation

The index of creative value is a scale to measure the value of a creation. In other words, the size of a creation's value is reflected by its index of creative value, with a higher index indicating a greater value and a lower index indicating a smaller value.

The main factors determining the creativity value index are: (1) novelty value; (2) creativity quantity; and (3) creativity degree.

The newness value reflects the degree of novelty and uniqueness of the created object, and is the most important core factor determining the high or low value of the creation value index. The newness value is derived from the comparison between new and old creations, and is the ratio of the newness components of new creations to the newness components of existing creations of the same kind. This can be expressed by the formula:  $N=(E/E+P)\times 999\%$ .

In the formula, N represents the newness value, E is the sum of the newness components of new creations, P is the sum of the newness components of existing creations of the same kind, 999% represents the ratio between the newness value and the creation quantity in the creation value index, i.e., the newness value accounts for 999 parts per thousand, while the creation quantity only accounts for 1 part per thousand.

The newness components of a creation can be resolved into several newness factors, each of which occupies a numerical value. For example, a manufacturer of refrigerators introduces a new type of refrigerator with the following newness components: (1) side-by-side doors; (2) frost-free cooling by wind; (3) cold drinks can be accessed from outside the box; (4)

energy-saving and noise-free; (5) automatic spoilage reporting; and (6) computer control. The six newness factors have a numerical value of E=6, while the newness components of existing refrigerators on the market (compared to the original single-door, single-temperature refrigerator) only include two newness factors, namely, double doors and double temperatures, with a numerical value of P=2. Thus, the newness value of the new type of refrigerator is:  $N=(E/E+P)\times999\%=6/6+2\times999\%=0.74925$ . Another example is a newly published novel that possesses eight newness factors: typical characters, distinctive personalities, intricate plot, touching details, beautiful language, unique structure, innovative design, and exquisite printing. That is, E=8. In comparison, novels of the same genre that already exist only have two newness factors, namely, distinctive personalities and intricate plot, with P=2. Therefore, the newness value of the newly published novel is:  $N=(E/E+P)\times999\%=8/8+2\times999\%=0.7972$ .

The creation quantity is also an important factor determining the high or low value of the creation value index, reflecting the degree of repetition and accumulation of the created object. The creation quantity is generally composed of the overall number of homogenous and isomorphic creations multiplied by 1‰. For example, if a certain new type of refrigerator produces 10,000 units, its creation quantity is  $M = 10000 \times 1\%$  = 10. Since the creation quantity is limited by the saturation limit, that is, the creation degree (d), the influence of the creation quantity on the value index is thresholded by the creation degree. Within the creation degree, the creation value index (C) is proportional to the creation quantity (M), while outside the creation degree, the creation value index (C) is inversely proportional to the creation quantity (M). This gives rise to two formulas:C1=N $\times$ M(d 以内)、C2=N/M(d 以外).

For example, assuming the newness value of a certain type of TV is 20

and its creation limit is 1 million units. If one manufacturer produces 800,000 units, then its creation value index would be  $C1 = 20 \times 800,000 \times 1\% = 16,000$ . Another manufacturer exceeds the creation limit and produces 1.5 million units, then its creation value index would be  $C1 = 20 \times 1,000,000 \times 1\% = 20,000$ ,  $C2 = 20/500,000 \times 1\% = 0.04$ . C1 + C2 = 20,000.04.

Obviously, the degree of saturation is a crucial factor for the creation value index. Generally, the degree of saturation is determined by the degree of social need, i.e., demand relations. The law of value maintains the degree of saturation at a standard level. As society continues to develop, the demand relations are constantly changing, and the degree of saturation accordingly undergoes changes. For example, in the past, people had a low demand for beef, and the degree of saturation of beef was relatively low. Now, with the significant increase in people's demand for beef, the degree of saturation of beef has also increased significantly. Similarly, in the past, people lived frugally, and plain cloth was good enough for them to wear, so the degree of saturation of plain cloth was high. Nowadays, people's living standards have improved, and they no longer like to wear plain cloth, so the degree of saturation of plain cloth has decreased significantly.

There are several basic issues to consider when examining the creative value index:

The first is that the creation value index is mainly applicable to human creation, but not exclusively so. Non-human creations also apply to the creation value index. Since the creation degree of non-human creations is mainly based on the demand of human society, the creation value index of non-human creations must be restricted and influenced by human creation activities. For example, the creation of field mice, as a link in the food chain required for ecological balance, undoubtedly has its creation value

index. However, its creation value index cannot exceed the creation degree set by humans, that is, the demand of human society. If the creation value index exceeds this creation degree, field mice become pests and humans will have to eliminate and suppress them.

The second is that the creation value index is targeted. Different creations have different creation value indices, and comparisons of creation value indices can only be made between creations of the same homogeneity, isomorphism, species, class, and system. The creation value index of a human being and that of a fish in water, a tree on a mountain, a star in the sky, or magma underground cannot be easily compared. That is, the creation value index of created objects created by human beings must also be distinguished under different circumstances: physical creations have a creation value index for physical creations, while creations that satisfy human spiritual needs have a creation value index for spiritual creations. The creation value index of creations that satisfy human material needs cannot be easily compared to that of creations that meet human spiritual needs. For example, the creation value index of a theoretical work or a literary and artistic work and that of one hundred million pounds of grain or ten thousand tons of coal are difficult to compare because they belong to different creation systems.

The third point to consider about the Creativity Value Index is that it is greatly influenced by the degree of creativity, which in turn is determined by social demand. Some creations, especially spiritual products such as scientific discoveries, technological inventions, theoretical constructions, and artistic creations, often have a forward-looking nature, which means that they may not be needed by society at present, but will be greatly needed in the future. Other creations, such as unearthed cultural relics, were needed by society in the past and are even more needed now

and in the future. To analyze the Creativity Value Index of these two types of creations, we can examine them from three perspectives: past value, present value, and future value. For creations with a forward-looking nature, their present value may be small because society does not currently need them, but their future value may be great because society will need them. For cultural relics, their past value may not be very high, but their present and future value may be significant. Creatology is a theory that focuses on the future and creating the future, and we value not only the past and present, but also the future. Therefore, we wholeheartedly encourage and welcome creations that have future value, are forward-looking, innovative, and have a high Creativity Value Index.

# 3 Category of creation (A)

Due to the fact that the origin of the world is creation and the essence of life is creation, everything in the world is a creation, making the activity of creation infinitely rich and complex. It is a difficult and challenging task to systematically and accurately categorize the infinitely diverse and complex creative activities. This book combines the requirements of creative value judgment and divides creative value categories into two series. The first series includes survival creation, developmental creation, emotional creation, and intellectual creation. The second series includes giant creation, human creation, ordinary creation, and group creation.

Let's start with the first series.

## Survival creation

Survival creation is the primary issue that all living creatures face.

Only by first solving the problem of survival and ensuring the maintenance and continuation of life, can other forms of creation become possible. Therefore, survival creation undoubtedly constitutes the premise and foundation for all other forms of creation, and is the most fundamental creative activity for all living organisms.

The survival of microorganisms requires nutrients such as amino acids, carbohydrates, lipids, water, and so on. Without these nutrients, microorganisms cannot survive. Approaching favorable stimuli and avoiding unfavorable stimuli can be regarded as both a basic life phenomenon of microorganisms and an instinctive way of protecting themselves and creating conditions for survival.

Plants can be divided into autotrophic and heterotrophic categories. Most autotrophic green plants require sunlight, water, carbon dioxide, and inorganic salts to absorb in order to survive. Without these nutrients, they cannot survive. A few heterotrophic non-green plants require ready-made organic matter to decompose, otherwise they will also be unable to survive. Therefore, the photosynthesis, water metabolism, mineral nutrition, respiration, reproduction and development, and resistance to adverse environmental conditions such as cold, drought, high temperature, waterlogging, salt, pests, and diseases, as well as the ability to adapt to external stimuli such as intensified stimulation, are all manifestations of plant survival creation. Plants do not have emotions, thoughts, language, do not need communication, and cannot form a "society". Therefore, all activities of plants fall within the framework of survival creation.

The survival creation of animals (referring to animals other than humans) mainly includes the following basic contents: feeding, drinking, breathing, reproduction, warmth preservation, sleep, and self-defense. Since animals cannot synthesize organic matter from inorganic matter and

can only obtain nutrients from plants, animals, or microorganisms, feeding becomes the first and most important basic content that constitutes their entire life's survival creation. The food source of wild animals is provided by natural food chains, while the food source of artificially raised animals is provided by both natural food chains and humans. Drinking water and oxygen intake are closely related to feeding. Cutting off the water source and fresh air supply is no different from cutting off the food source, which is tantamount to killing the animals. After solving the problems of feeding, drinking, and oxygen intake, the next step is to mate and produce offspring, which requires building nests to keep warm and defend against external attacks. Since each animal is a link in the natural food chain and there is always a risk of being eaten by other animals, animals must have certain self-defense capabilities, that is, if they can eat the other animal, they will do so, and if they cannot eat the other animal, they will try their best to protect themselves from being eaten by the other animal. At the same time, animals also need enough sleep to restore their physical strength.

The difference between animals and plants is that plants are purely focused on the creation of survival, whereas animals, in addition to survival creation, also engage in developmental, emotional, and even low-level thinking creations. However, animal developmental, emotional, and low-level thinking creations are centered around survival creation and are fundamentally different from those of humans that bear the same names. The vast majority of animal activities belong to survival creation, while other creations only account for a small part of the animal's overall creative activities.

There are similarities between human survival and animal survival. In order to survive, humans must first solve basic problems such as food,

clothing, shelter, sex, sleep, and oxygen intake. Without solving these basic problems, other creations such as politics, religion, culture, scientific research, and entertainment cannot be discussed. As Maslow said, "a person who lacks food, self-esteem, and love will first demand food. As long as this need is not met, he will ignore or push all other needs to the back." "If a person is extremely hungry, then besides food, he will have no interest in anything else. He dreams of food, remembers food, and thinks of food. He only has emotions for food and only needs food...such a person can be said to live by bread alone." {[US] Abraham Maslow, "Maslow's Humanistic Philosophy, "translated by Zhang Weibang, Commercial Press, 2005} "When the granaries are full, we know the etiquette; when our clothes and food are sufficient, we know what honor and disgrace are." (Guanzi: "Shepherds") Adequate food and clothing are the foundation of national prosperity. From ancient times to the present, people have always attached great importance to the creation of food and clothing, believing that "the five grains are the life of the people, the treasure of the country" (Fan Zi Jiran), and "pay attention to the cultivation of clothes and food, and don't deceive farmers' labor" (Tao Yuanming's "Two Poems on Relocation"). Even today, the decision-making level of the country regards solving the problem of feeding and clothing more than 1.3 billion people as the top priority in realizing "human rights," and takes pride in feeding one-fourth of the world's population with only one-twentieth of the world's land.

After the problem of subsistence is solved, the next basic survival creation is sexual intercourse. Subsistence sustains life, while sexual intercourse ensures the continuity of life. Ancient Chinese sages and wise men understood that sexual desire, like appetite, is a basic need that should be satisfied by everyone. As the saying goes, "Food and sex are both desires of mankind" (Mencius), "Drinking and eating, and male-female

relations are the greatest desires of people" (Book of Rites), and "The relationship between men and women and their dwelling place are the greatest ethics of human beings" (Mencius). The mating of male and female and the family built upon it create a need for a dwelling place, making housing creation a part of human survival creation. At the same time, there is also the issue of safety, which involves effective defense against external invasion and harm to ensure the maintenance and continuation of life. Therefore, safety creation is also a part of life creation. The creation of housing, clothing, and food partially overlaps with safety creation.

It must be pointed out that humans are creative beings with emotions and wisdom. Unlike plants and animals, human survival creation inevitably involves the infusion of emotions and wisdom. It is the integration of wisdom, emotions, and survival. This is the fundamental difference between human survival creation and the survival creation of plants and animals. The infusion of wisdom and emotions into survival creation is ubiquitous: cooking food is not only about filling one's stomach, but also involves consideration for color, fragrance, taste, appearance, utensils, and nutrition; clothing is not only for keeping warm, but also for pursuing novel and beautiful styles; sexual intercourse is not only for procreation and the continuation of life, but also involves the pursuit of wisdom, emotional entanglement, and aesthetic taste.

Here we must also mention the existentialism, also known as "survivalism". As an important philosophical movement in the 20th century, existentialist thought is complex, contradictory, yet often deeply insightful. In existentialism, "existence" is "being-in-the-world"; it is the fact that "I" am "in-the-world", and that everything else in the external world is a result of this. How does "I" exist in the world? Through pure subjective experience. Therefore, "existence precedes essence",

meaning that humans first exist as pure subjectivity, and only through free choice can they create their own essence ("I"). From the perspective of the philosophy of creation, existentialism reduces human existence to their inner subjective experience, which is biased but also has some degree of similarity and agreement with the emphasis on human intelligent creation, and this has some positive significance. However, the philosophy of creation does not agree with the idea that "existence precedes essence", because human existence is creation, and human essence is also creation. Existence, essence, and creation are directly identical. There is no distinction between which comes first.

Existentialist thinkers (especially Sartre) also divide existence into two categories: "Being-in-itself" and "Being-for-itself". "Being-for-itself" refers to conscious human existence, which is the "self", "Being-in-itself" is everything beyond "I" in the world. "Being-for-itself", an absurd and chaotic void. Humans are constantly thrown from "Being-for-itself" into "Being-in-itself", constantly moving towards and trapped in absurdity and nothingness. Humans are existence and nothingness. Nothingness means freedom, and freedom makes people unhappy. Humans are alienated from nature, opposed to society, in conflict with others, and separated from themselves, trapped in a lonely predicament. The way out is through choice, but choice is always blind and ultimately pointless, so life is nothing but a meaningless tragedy.

We have no intention or space to engage in a dialogue or debate with Mr. Sartre. We just want to point out that, in the perspective of creativity, the world beyond the "self" is not always absurd and chaotic, and unfortunate, distant, conflicting, separated, and challenging situations are not the only accompaniments of survival and creation. Happiness, closeness, harmony, cooperation, unity, and fulfillment are also part of

the process of creative survival. Choice is a vital component of intelligent creativity, and the outcome of choices can bring about significant creative effects, which are not always aimless and devoid of practical results. Every creation, though varying in value, contributes to the wealth of society and the accumulation of human civilization, and is not a futile effort. From the perspective of creativity, life is neither a tragedy nor a comedy, but a "drama" of creation. The "self" in existence is a creation, as well as your existence and others' existence. Our "existence" means valuable creations. Creation is accompanied by pain and joy. The higher the value of creation, the greater the pain and joy. The value of creation, which accompanies pain and joy, makes life rich, fulfilling, precious, and glorious.

## • Development creation

After resolving the issue of survival, the next challenge is one of development. Once basic needs such as food, water, clothing, housing, family and security are met, there is still a need to do something else, such as socializing, entertainment, reading and learning, mastering new skills, pursuing success, and so on. All of these fall under the umbrella of development and creation.

The main aspects of development and creation in animals are communication and entertainment. The need for survival serves as the inherent drive and behavioral foundation for animal communication, while verbal language and body language are the tools animals use to communicate with each other. Communication allows animals to connect and form an "animal society" to more effectively hunt for food, defend against external enemies, protect life, and reproduce. Communication also leads to the emergence of the highest ruler in animal society, such as the queen bee, ant queen, monkey

king, sheep king, deer king, and cow king. The highest ruler in animals is generally represented by the strongest and bravest male individual in the animal group, chosen through intense competition for leadership, which is an important aspect of animal communication creation. Animal entertainment creation, such as play and roughhousing, is also related to animal survival creation. The process of play and roughhousing is not just for entertainment, but also serves as a way for animals to hone their hunting skills and accumulate experience to protect themselves.

Human development and creation is much broader, richer, and more diverse than animal development and creation. Furthermore, human development and creation is not solely based on the need for survival, unlike animals. Although human development and creation is built upon the foundation of survival creation, it tends to go beyond that.

The need for communication drives humans to create language and writing, which in turn pushes human communication to new levels. The purpose of communication is twofold: first, to display one's creative efficiency and value, to gain recognition and respect from communication partners; second, to unite and form a creative force, in order to more effectively invest in and complete a creative activity. Communication is not without compensation, nor is it one—way; it is a bidirectional or multilateral exchange of desires for creative satisfaction, in physical or spiritual forms. In this sense, the essence of communication is exchange, the exchange of created objects in physical or spiritual forms. Any exchange behavior can be attributed to the creative motivation for expected returns, and indeed, returns are obtained in various ways — not only material, but also gratitude, appreciation, spiritual pleasure, psychological balance, and so on. Through creative communication, humans form a society of solidarity, harmony, mutual assistance, and cooperation that embodies the principle

of "I for all, all for me."

Entertainment creation is also a major component of human development and creation. Entertainment primarily provides spiritual fulfillment rather than material satisfaction. To trace the origin of artistic and athletic activities, one cannot ignore the primitive and rudimentary entertainment behaviors of early humans. In other words, entertainment creation is one of the sources of artistic and athletic activities. Human entertainment creation integrates more spiritual, intellectual, and emotional elements, which cannot be matched by any animal's entertainment creation. Most people do not pursue entertainment creation as a profession, such as singing, dancing, sports, or competitive games. The main purpose is to relax and enjoy themselves through various fun activities, such as dancing, playing chess, cards, fishing, playing, watching movies and TV, and enjoying cultural and artistic performances. These activities allow individuals to rest and adjust their physical and mental state, and to appreciate and enjoy the fun and pleasure they bring. Life is meant to be playful; leisure time is just as important as being busy. Many outstanding and talented individuals who have made significant contributions are creators who are both capable of working and entertaining themselves.

If seeking a profession as a basic means of livelihood can still be considered within the realm of survival creation, then the pursuit of further development after obtaining a career, such as reading and learning to enrich one's spiritual world, researching and innovating to improve one's skills, and striving for excellence, belong to the category of developmental creation. In a broader sense, developmental creation encompasses all creation beyond survival creation.

Renowned psychologist Abraham Maslow believed that the need for development is built upon basic survival needs and is distinct from them.

Humans are initially driven by a series of basic needs, but once those needs are met, they move on to higher levels and are motivated by more advanced needs. He summarized the development needs into fourteen aspects: completeness, perfection, fulfillment, justice, activity, abundance, simplicity, beauty, goodness, uniqueness, ease, optimism and humor, truthfulness, sincerity, reality, and self-satisfaction. These fourteen aspects are equally important and there is no hierarchy among them. In Maslow's view, the pinnacle of development needs is the need for self-actualization, which is the ultimate goal of development and creativity. Indeed, humans have "a desire to become more and more what one is, to become everything that one is capable of becoming." This is perhaps a natural inclination of human nature, and "humans are always seeking a more fulfilling self, pursuing a more perfect self-realization. In the sense of natural science, this is the same as an acorn seed urgently hoping to grow into an oak tree." Therefore, "a person must become what he or she can become."[Abraham Maslow's Motivation and Personality, translated by Yang Jisheng,Peking University Press,1999」

However, the problem is that "we have only awakened half of ourselves compared to the person we should become. Our passions are quelled, our blueprints are not unfolded, and we only use a tiny fraction of our mental and physical resources." {[US] Annie Dillard, Pilgrim at Tinker Creek, translated by Xu Qinwen, Shanghai Translation Publishing House, 1995}. Maslow believed that the vast majority of people have the ability to create, care for others spontaneously, be curious, constantly grow, love others and be loved by others, as well as all the other characteristics that self-actualizers possess. At the same time, he also saw that, in contrast to the trend of development, there is a tendency in human nature to be stagnant, willing to regress, afraid of development, and unable to

self-actualize. In light of this, Maslow called on civilized society to encourage, praise, and affirm the trend of continuous development and self-actualization in people, while attacking, suppressing, and denying the trend of stagnation and inability to self-actualize. He believed that the model for modern humans should be those who can fully unleash their inner potential, naturally express their inner nature, and actively pursue their goals, daring to think, speak, and act, rather than those who are pale and timid, or mediocre without any edges or corners.

#### • Emotional creation

Emotion is a general term for both emotion and feeling. It is a relatively strong physical and mental reaction created by the creative subject in response to stimuli from the external world. As a product and process of external stimuli, the nervous system, and internal and external sensory organs, emotions possess characteristics such as excitability, profundity, stability, and persistence, and can manifest in various forms such as love, hatred, fear, sadness, and nostalgia.

Humans are emotional beings. Emotions permeate every aspect of human creativity, and there is no creation that is devoid of emotional color. It's just that the proportion, strength, depth, and intensity of emotions vary throughout the creative process. Emotions seep into survival creativity, and people either like or dislike food, clothing, housing, furniture, or the opposite sex, or feel reluctant to leave, or think about it all the time. Emotions also infiltrate developmental creativity, and people have either been deeply infatuated with scientific knowledge, literary works, social activities, sports competitions, hobbies, etc., or they have been heartbroken and resentful or regretful and frustrated. Emotional creativity also blends and infiltrates with intellectual

creativity. There is no great and superior intellectual creativity without a heavy concern for human destiny, a deep feeling for all sentient beings in the world, and a sincere yearning for a better society.

Lack of emotions does not necessarily make one a true hero. The word "emotion" has captivated countless heroes, scholars, and beauties from ancient times to the present day, both at home and abroad. When moved by something, tears may fall like flowers, and the sound of parting may startle the birds. Outside the window, the rain falls softly, and the branches and leaves are intertwined with emotions. Human beings cannot do without art, and art is the crystallization of emotions. Artists, big or small, are all full of "emotions". Leo Tolstoy once said, "To awaken in oneself a feeling once experienced, and then, by means of movements, lines, colors, sounds, and words, to express that feeling so that others can experience the same feeling—this is the activity of art." Gabriel Garcia Marquez said, "Love is my only ideology. I emphasize that everything I do and everything that exists around me can be understood through love. "Fyodor Dostoevsky said, "In those long nights, I indulge in the excitement of hope and fantasy and the love of creation. I live with my imagination and the characters I have created, as if they were my relatives, real people. I love them, share their and sometimes even shed sincere tears for joys and sorrows, simple-hearted protagonist. "Great works are products of great love, hate, sorrow, joy, pain, and desire. Only creators who have experienced great emotions can create unprecedented, groundbreaking, unparalleled works.

The creation of emotions is not just a matter of creating individual emotions or emotions related to a small group of people. Some emotions often develop and arise within and cover a larger group. A group has its own emotions, an enterprise has its own emotions, a nation has its own emotions, and a country has its own emotions. For example, national sentiment is

gradually formed through a long history, and it is a group psychology and emotional orientation of a relatively stable social community with a common language, common territory, common economic foundation, and common cultural life. This psychological characteristic and emotional orientation are spontaneous, conscious, and vague, indicating that members of the group care about the destiny of the entire nation, prefer and are proud of the national cultural tradition, feel close to and love their fellow countrymen and national heroes, and hate and reject external enemies and national traitors. National sentiment and any group sentiment have both positive and negative aspects. The positivity of national sentiment forms the basis of patriotism, national unity, and national friendship; while the 1ead to closed and narrow-minded nationalism, negativity can self-satisfied small-country psychology, and national hegemony aimed at invading, controlling, and deceiving weaker countries.

#### • Ideational creation

Human beings are explorers of thought and exist and live based on their thoughts. The creation of thought is the patent of humanity. Even the most advanced animals outside of humans only create for survival, involving development and emotional creativity, but not thought creation. Thought creation is like a watershed that distinguishes the human world from the non-human world. As the French philosopher Pascal said in his philosophical masterpiece "Pensées": "Man is but a reed, the most feeble thing in nature; but he is a thinking reed. The entire universe need not arm itself to crush him. A vapor, a drop of water suffices to kill him. But, even if the universe were to crush him, man would still be more noble than that which killed him, because he knows that he dies and the advantage that the universe has over him; the universe knows nothing of this." Therefore, all of our dignity

lies in thought.

The creation of human thought can be divided into three levels: low-level thought creation, intermediate-level thought creation, and high-level thought creation. Low-level thought creation aligns with what the author refers to as "ordinary people's creation" and is a small cleverness or wisdom with a low creative value index that most normal people possess and permeates everyday life. Low-level thought creation only involves choosing from existing ideas and does not possess the wisdom to make wise discoveries in life or provide unique ideas of their own. Intermediate-level thought creation aligns with what the author refers to as "wise people's creation" and is a higher-value creative ability possessed by some people. Intermediate-level thought creation is characterized by not being confined to existing ideas put forward by previous people, having unique experiences and insights on society and life, having extraordinary discoveries in their field of interest or profession, and being able to express these discoveries quickly and accurately, providing exceptional viewpoints. High-level thought creation aligns with what the author refers to as "genius' creation" and is a high-value creative ability possessed by very few people with great intellect and wisdom. The unique characteristic of high-level thought creation is the ability to negate or surpass existing ideas put forward by previous people, have profound insights and wisdom discoveries unique to themselves on life, society, and the world, and thereby propose a profound, far-reaching, grand, and influential system of thought.

The three levels of thought creation form a vast pyramid of wisdom. Low-level thought creation constitutes the massive base of this pyramid, intermediate-level thought creation forms its midsection, and high-level thought creation occupies the top, condensing, commanding, and guiding all

human wisdom. Undoubtedly, among the three levels of thought creation, we admire and commend high-level thought creation the most. High-level thought creation is the essence of human wisdom, the "capital" that humans are most proud of and proud to possess, and the reliance on high-level thought creation allows humans to enhance their position as "the most intelligent beings" and to dominate and shine in the world.

The three levels of thought creation form a progressive sequence of ascent, with the path becoming narrower and more challenging as one moves up. The vast majority of people spend their entire lives within the framework of low-level thought creation and struggle in the small circle of small cleverness and wisdom. Some people can enter the intermediate level of thought creation, contributing to a certain degree of transcendent wisdom crystallization. These creators are already few and far between. Even fewer people can enter high-level thought creation, with the number being as rare as the marrow of dragons and the brains of phoenixes. However, one intermediate-level thought creation can be worth thousands of low-level thought creations; and one high-level thought creation can be worth thousands of intermediate-level thought creations. High-level thought creation is like the sun, intermediate-level thought creation is like stars, and low-level thought creation is like dust and clouds. Without high-level thought creation, the human spiritual world would be bleak, and without high-level thought creation, the footsteps of wisdom would still be stuck in the desert mud.

Advanced intellectual creations in China include the philosophical systems of Confucius, Laozi, Zhu Xi, Wang Yangming, Mao Zedong, and others. Similarly, in foreign countries, great minds such as Socrates, Plato, Aristotle, Gautama Buddha, Rousseau, Voltaire, Kant, Hegel, Marx, Schopenhauer, Nietzsche, Freud, Sartre, and Heidegger have created

influential philosophical systems. These great minds have made the vast world seem small through their deep and insightful thoughts. Confucius's philosophical system, with "ren" (benevolence) as its core, has covered the land of China for more than two thousand years, penetrating, rooting, and growing in the blood and marrow of the Chinese nation. It is still being "developed and enhanced" to this day. Plato's philosophical system, with the "ideal state" as its core, has influenced the political institutions of many countries for more than twenty centuries. His ideas of selecting capable individuals and gender equality are still shining today. Marx's "scientific communism" ideology has inspired and motivated billions of hardworking people suffering from poverty and torment to fight for an ideal society. Its power and influence have caused the world to tremble. Freud's psychological analysis—based philosophical system opened the door to a new understanding of the human subconscious world. This has enriched and deepened human spiritual life.

Intellectual creations have no end and will never conclude. Water flows downwards, while humans strive upwards. In the world of human spirituality, many towering peaks have already bowed down beneath the feet of their creators, while many more potential or visible peaks beckon to us. The magnificent and brilliant achievements belong to those who are tenacious and outstanding climbers.

# 4 Category of creation (B)

#### • Giant creation

There are two factors that determine the measure of the creations of giants, intellectuals, and ordinary people: the index of creative value and the magnitude of influence. The creations of giants are those which have an exceptionally high index of creative value, a wide-ranging and profound impact, and are created by individuals who possess exceptional creative ability. A high index of creative value indicates a significant contribution to the world and humanity. A wide-ranging and profound impact means having thousands of followers and believers. Their thoughts and actions are widely praised, quoted, and emulated over an extended period of time. Influence is also a form of creativity, and no one can escape the influence of others, especially that of giants.

Giant creations have several characteristics, which can be categorized as follows:

The first characteristic of creative giants is that they have their own unique system of thinking (or belief basis), and some of them are philosophers or thinkers. Their thoughts and theories have significant value and far-reaching influence, making countless people admire and follow them, and providing a reference for future explorers. For example, Immanuel Kant, who is famous for establishing a critical philosophy system and proposing the "Nebular Hypothesis", is a monument in the history of human thought. Later thinkers must study him seriously and cannot easily bypass Jean-Jacques Rousseau and Voltaire were both thinkers of the him. Enlightenment period. Rousseau is known for his works such as "Discourse on the Origin and Basis of Inequality Among Men," "The Social Contract," and "Confessions," while Voltaire is famous for his "Letters Concerning the English Nation" (also known as "Philosophical Letters"). Rousseau's pursuit of equality, criticism of property monopolies, and constitutional theory made him one of the pioneers of modern civilized society. Voltaire became an outstanding leader of the Enlightenment movement with his ideas of liberal democracy and advocacy for freedom. Creative giants who can be ranked alongside Kant, Rousseau, and Voltaire include Socrates, Aristotle,

Locke, Adam Smith, Descartes, Montesquieu, Malthus, Marx, Maslow, as well as Chinese thinkers such as Laozi, Confucius, Zhuangzi, Mencius, Zhu Xi, and Wang Yangming, among others.

Secondly, a large portion of the creation of giants belongs to religious and political leaders who have made outstanding contributions and far-reaching influences. Religious leaders such as Jesus and Saint Paul, who founded Christianity, Siddhartha Gautama, who founded Buddhism, Muhammad, who founded Islam, and Moses, who spread the teachings of Judaism, as well as Augustine, Martin Luther, Constantine the Great, John Calvin, Omar Khayyam, Ashoka, and Huineng, who made significant contributions to the perfection of religious doctrines, the reform of religious institutions, and the innovation of religious thoughts, etc. Political leaders such as Alexander the Great, the founder of the Roman Empire, Augustus Caesar, Lenin, the founder of the world's first socialist country, Gandhi, who advocated nonviolent resistance movements, and Qin Shi Huang, who ended the wars and as well as Genghis Khan, who successfully launched unified China, large-scale conquest wars, etc. Political leaders can occupy a large proportion in the creation of giants because they generally wield tremendous power, which means enormous control and influence. The enormous control and influence constitute the effect of creating giants that have a significant impact on a country and nation, even on the entire world civilization process. Obviously, Chinese emperors such as Emperor Wu of Han, Emperor Taizong of Tang, Emperor Zhu Yuanzhang of Ming, Emperor Kangxi of Qing, as well as Sun Yat-sen, Mao Zedong, Zhou Enlai, Deng Xiaoping, etc., and foreign leaders such as Napoleon Bonaparte, George Washington, Abraham Lincoln, Urban II, Isabella I, Queen Elizabeth I, William I, Cyrus the Great, Peter the Great, Emperor Meiji, etc., can all enter the ranks of the creation of giants like this.

There are several characteristics that distinguish great creators, and two of them are their exceptional talent in a particular field and their broad knowledge across multiple disciplines. Great scientists like Newton made significant contributions to mechanics by formulating the famous laws of motion. But he also made groundbreaking discoveries in optics, where he analyzed sunlight into its component colors, invented the first reflecting telescope, and in mathematics, where he was one of the founders of calculus. He also applied his laws of motion and gravitation to solve major problems in astronomy, becoming a leader in that field as well. Newton also made outstanding contributions to thermodynamics, acoustics, and physics. Einstein is another great scientist who can be compared to Newton. His major contributions were the theories of special and general relativity in 1905 and 1915 respectively. However, Einstein was a philosopher by training and received a PhD in philosophy from the University of Zurich. His first Nobel Prize in physics was not awarded for his theory of relativity but for his paper on the photoelectric effect. After World War II, Einstein became a well-known international activist against violence and a proponent of peace. Additionally, Einstein had a talent for playing the violin and was known for his quick wit and humor. Newton and Einstein are giants among giants, and few scientists can reach the heights they have achieved.

Of course, this does not mean that there are only two great creators in the world, namely Newton and Einstein. Many scientists, artists, and inventors, although not as great as Newton and Einstein, still shine like stars in the night sky, and their brilliance will forever shine in the annals of human civilization. These creators include Darwin, Columbus, Galileo, Euclid, Copernicus, Watt, Faraday, Shakespeare, Edison, Beethoven, Mendel, Didro, Bacon, Kepler, da Vinci, Picasso, Franklin, Pavlov, Leo Tolstoy, Hugo, Balzac, Tagore, Lu Xun, Guo Moruo, and so on.

#### Homo sapiens creation

The creativity of ordinary people falls between the creativity of giant creators and that of smart creators. The value index and impact of their creativity are lower than those of giant creators, but higher than those of ordinary creators. Generally, smart creators can make significant contributions in their professional fields and hobbies, have profound and unique understanding and experience of life and society, and can propose relatively concrete and fresh perspectives, creating a certain scope of influence.

If we examine more carefully, human creativity can be further divided into three levels: advanced human creativity, intermediate human creativity, and low-level human creativity.

High-level human creativity approaches that of giant-level creativity, and can still be described as extraordinary and outstanding. Examples include Jung's theory of the "collective unconscious," which modified and developed Freud's psychoanalytic theory, Adler's thoughts on "inferiority and superiority," and Fromm's humanistic psychology. In China, the "Art of War" by Sun Wu and Sun Bin, the medical skills of Bian Que and Hua Tuo, the rhetorical skills of Hui Shi and Gong Sun Long, Xunzi's theory of evil nature, Han Fei's legalist thought, Dong Zhongshu's interpretation of the "Gongyang Commentary," the academic thought of Sima Qian, the philosophical system of Lu Jiuyuan, the social thought of Gong Zizhen, Hong Xiuquan's revolutionary thought, Liang Qichao's reform thought, and so on, can all be classified as high-level human creativity. Scientists, writers, political reformers, social activists, military leaders who have made great contributions, world-renowned diplomats, translators who have produced many works, well-known artists, wealthy entrepreneurs, and others who have

received various Nobel prizes, can all be counted among the ranks of high-level creative humans.

Intermediate-level human creation falls short of advanced-level human creation. Experts, scholars, professors, researchers, writers, entrepreneurs, artists, composers, singers, dancers, film and television directors, outstanding journalists, and others who have made a certain contribution and impact can all be awarded the title of intermediate-level creative humans.

Low-level human creation is inferior to middle-level human creation, approaching the level of ordinary human creation. Skilled craftsmen and self-taught experts who have relatively advanced skills in various industries, as well as chefs, lawyers, teachers, doctors, editors, journalists, and others, can all become members of the low-level human creation team.

Human creation serves as a link between the creations of giants and common people. Generally, creating giants requires going through the stage of human creation, and it is based on human creation that one can make the leap to creating giants. Likewise, with hard work and effort, one can ascend from being a common person to the stage of human creation, and the three levels of human creation are not insurmountable. Take teachers as an example: ordinary teachers and lecturers can be considered as being at the low-level of human creation; promotion to a professorship brings one into the middle-level of human creation. Further development into a famous professor with influence at home and abroad would mean entering the high-level of human creation. Of course, in this context, lecturers and professors referred to are those who truly deserve the title, rather than those who are just in name.

Creating giants and creating intellectuals are both about creating

ordinary people in daily life, and sometimes even less significant than creating ordinary people, but they can understand creating ordinary people. On the other hand, creating ordinary people often cannot fully understand creating intellectuals and creating giants. The words and actions of creating intellectuals and creating giants often leave creating ordinary people bewildered.

## •Ordinary people's creation

Ordinary people's creations refer to the everyday creative activities that are commonplace and familiar to most people. The value and impact of these creations are much lower than those of human or giant creations, and may even be insignificant. The content of ordinary people's creations includes activities such as eating, drinking, excreting, dressing, sleeping, sexual intercourse, socializing, and various occupations necessary for survival, such as farming, manufacturing, trading, studying, military training, police duty, driving, and so on.

Ordinary people's creations also require wisdom — not necessarily great wisdom, but sufficient small wisdom. Appropriately applying small wisdom can make ordinary people's creations rich and interesting. For example, one can decorate and arrange their small household to be warm, comfortable, and elegant; meals can be eaten in various ways, fashionable clothes can be worn, and harmonious relationships can be pursued in intimate relationships. Additionally, finding small tips and making minor improvements in work can help to increase efficiency without expending too much effort. One can also use a bit of cleverness and tactics in social interactions to gain some small advantages or benefits. Ordinary people's creations are fundamental, repetitive, and mundane.

The fundamentality of ordinary people's creations refers to the fact

that they are the basic prerequisite for all human creations. Everyone needs to eat, drink, excrete, and sleep, including those who create human or giant creations. Only by effectively addressing these basic needs through ordinary people's creations, can people have the opportunity to engage in higher-value creations. In this sense, creating human or giant creations is also a form of creating ordinary people, since they are all interrelated and interdependent.

Creating humans and creating giants surpass the creation of ordinary people, but they cannot exist without the creation of ordinary people. Creating ordinary people is the foundation for the existence of the creation of humans and giants. Ordinary people are the receivers, absorbers, and materializers of the influence generated by human and giant creations. Military commanders who command thousands of troops must have thousands of troops to command. There is no marshal who is a "paper general." Intellectuals with exceptional wisdom must have countless people as their "followers." Without followers, intellectuals cannot be considered as such. Similarly, artists create works of art that must be seen and appreciated by a large audience. An artist without an audience is a virtual artist.

The repetitiveness of human creations refers to the fact that "similar" or comparable things are constantly being created by humans. Although in the philosophy of creation, there are no two identical things in the world, and every creation has its own uniqueness, the degree of novelty and distinctiveness can vary. Those creations that share basic consistency in their internal structure, external form, and creative efficiency, can still be relatively perceived as similar or "the same" creations. If such creations are repeated over and over again, it only means that the quantity of creations is relatively increasing while the quality (i.e. novelty and distinctiveness) is decreasing. For instance, we eat rice today, we ate

it yesterday, we'll eat it tomorrow and the day after tomorrow — it is necessary, but it is repetitive. Similarly, the cobbler at the crossroads, who repairs shoes, can be heard knocking away day after day throughout the year; the water boiler downstairs is always hissing and steaming away through summer and winter, pot after pot — it is not necessarily necessary, but it is still repetitive. Like a donkey dragging a millstone, humans create things that they walk around in circles until they die. Perhaps the process has been improved, the millstone has been replaced by a machine, and humans have become like a gear on a wheel or a "×" on a screen that sways and rotates as the entire machine moves, day after day, month after month, year after year, until they themselves or the machine are completely scrapped.

The triviality of human creations refers to the fact that most of the things that humans create, manage, and produce are small, fragmented, and complex. Pots and pans, trivial matters like chicken feathers and garlic skins, rice, flour, oil, salt, soy sauce, vinegar, and tea, as well as items such as cleaning cloths, mops, soap, and water, all typical household chores, reflect the triviality of human creations. Long-term and tedious trivial human creations can easily make people become shortsighted, petty, nitpicky, stingy, vulgar, selfish, and inferior. Some people have good natural talents, but unfortunately, they live in such trivial and small-minded ways that their intellectual brilliance is worn away by trivial matters. Some people are always trying to be clever and take advantage of others, but little do they know that taking small advantages means suffering major losses - intelligence that is not used on high-value creations lowers the quality of life.

As intelligent beings, humans have two value orientations: the pursuit of excellence and the pursuit of mediocrity. Pursuing excellence is

consistent with the essence of human creativity, while pursuing mediocrity is in conflict with it. Therefore, deep down, no one is willing to live an ordinary and mediocre life. Everyone wants to stand out and be extraordinary. The problem is that the desire for excellence is often suppressed and stifled by external and internal factors. Those who break through this blockade and suppression, and allow their desire for excellence to be externalized and realized, may become creators of intelligent or giant creations. Otherwise, they will live a life of mediocrity and regret. As for the claim of "pursuing mediocrity", it is either a psychological self-consolation or a cowardly escape. In the eyes of creation theory, a life of obscurity is no different from being a walking dead - what is the point of living if you do not pursue excellence? To be content with mediocrity is to be willing to decline and regress. It is even more despicable and pitiful than falling into corruption, as corruption still has negative value and can stimulate healthy legal creation and draw attention from social rescue departments. Mediocrity, on the other hand, often leaves you helpless. Large-scale mediocrity means a large-scale spiritual impotence that is difficult to cure. Such "impotence" is a tragedy for the whole society!

### • Collective creation

The Chinese sayings "Three humble cobblers equal Zhuge Liang" "Many hands make light work" and "One person contributes a handful of soil to build a towering mountain" vividly reveal the characteristics of collective creation. Collective creation refers to the combination of individual creative forces into a unified creative force, in which several or numerous individuals create together to form a single, cohesive creation. The resulting creation has tremendous creative efficiency, and often possesses

a high creative value index and strong influence. As the ancients said, "A single twig is easily broken, but a bundle of twigs is not" and "It is difficult for a single individual to make progress, but easy for many to move forward together." As the song goes, "Unity is strength, this strength is iron, this strength is steel; it is harder than iron, and stronger than steel..."

There are large and small creative groups, ranging from a political party, a nation, a region, a country, and even the entire human race, to a system, a group, a unit, an enterprise, and a team. Creative groups are composed of creative giants, creative geniuses, and ordinary creators. The creation of ordinary people is the "cell" of the creative group. Without "cells", the whole cannot be formed — the value of ordinary creators is reflected here. A few creative giants and creative geniuses often play the role of creative leaders in the creative group, while the majority of ordinary creators play the role of creative followers. An excellent creative leader is one who can harness the creative power of the majority of creative followers. "Riding on the wisdom of the people, there is nothing that cannot be done; using the strength of the people, there is nothing that cannot be achieved." (Huainanzi, Chapter on the Art of the Ruler) A leader who cannot concentrate and harness the collective wisdom of the group cannot be considered a good leader.

The necessity of group creativity lies in the fact that many creative activities of human beings cannot be accomplished by any single creative force alone, and must rely on the combined efforts of creative forces. No matter how powerful an individual is, he or she cannot reach the moon or stay on Mars alone. In the future, space migration cannot rely on just one or two creators. Improving the living environment, maintaining ecological balance, eliminating the smoke of war, and maintaining world peace all

require the concerted efforts of society as a whole, and of all humanity, to create together. The prosperity and strength of a country are not solely the responsibility of the top leadership; every member and every citizen has an imperative duty. When billions of people unite to form a highly efficient creative group, mountains can be moved and seas can be filled, and the impossible can become possible. The old saying goes, "Unity is strength, this strength is iron, this strength is steel; harder than iron, stronger than steel..."

The collective creation with the power of synergy reflects and embodies the collective wisdom of humanity, demonstrating the immense power of human conquest of the world. Whether it is the early formation of families, clans, and tribes, or later aggregation into nations and countries, they all embody the wisdom of each member of the group, merging each member's strength. If the creation activities of scattered and individual small groups are relatively prominent in hunting and farming societies, then industrial and information societies tend to have more centralized and systemized large-scale collective creations. Ιf labor-intensive capital-intensive industries concentrate on certain general collective wisdom, then knowledge-intensive and cutting-edge composite industries concentrate on a large amount of advanced collective wisdom.

Group creativity has an advantage over individual creativity (whether it's ordinary, intelligent, or genius creativity) that cannot be compared. Although group creativity is composed of many individual creativities, the efficiency of group creativity is always greater than the sum of the efficiencies of many individual creativities. Therefore, intelligent humans naturally have to consciously develop and strengthen group creativity. As a result, Silicon Valley in the United States, think tanks in Japan, expert systems in West Germany, the Zhongguancun Science Park

in China, and numerous societies, writing clubs, associations, conferences, committees, councils, research groups, alliances, clusters, forums, centers, institutes, clubs, academies, communities, and various engineering, companies, organizations, research institutions, and scientific academies have emerged.

# Eight In the view of creatology

Creation is the origin and essence of the world, and of human beings, so everything in the world is a creation, and all activities in the world conform to the law of creation. However, the essential and fundamental nature of creation does not replace the diversity of its forms. The essential and fundamental nature determines the diversity of forms, and the diversity of forms reflects the essential and fundamental nature. Certainly, creation is the essence of all human activities, but this does not mean that all human creations are the same pattern or form. In the eyes of the theory of creation, human activities are both an abstract activity whose essence is creation, and a concrete activity with diverse forms. This chapter aims to select and examine several complex, diverse, and colorful human creations in a brief and concrete way.

#### 1 Politics

Politics is the creation of power.

Control and influence are the basic contents of power. Control is a coercive form of influence, while influence is a non-coercive form of control. Power, consisting of control and influence, is a special form of creation. The emergence and existence of this creation implies that other creations (especially those known as "humans") will inevitably be controlled and influenced by it. Politics, therefore, is such a creative process, in which the creative subjects (political groups, politicians, and enthusiastic political participants) maximize their creative

efficiency by utilizing all intellectual and non-intellectual powers, adopting just or unjust, legal or illegal, open or secretive, violent or peaceful, cruel or kind, noble or mean, and other means available, and by all possible means, seize and possess the newly created creation, i.e., control and influence over others, the masses, the government, the military, foreign nations, mankind, and the world.

the creators of power, political groups, politicians, or enthusiastic political participants must maintain, strengthen, expand, and reinforce their control and influence over others in all their actions and words. The academic term "interest group" or "pressure group" in political science refers to social groups that purposefully and systematically influence the activities of government institutions, legislators, or administrative officials for their own interests. Although interest groups do not necessarily seek to control the government and related institutions, they must seek to consolidate and expand their influence over them in order to maintain, promote, and develop their specific interests. For politicians, the mature and successful politician is one who can maintain and consolidate their existing power, and continuously expand and strengthen their power on this basis. The politician who cannot expand and strengthen their power, or even maintain their existing power, is an immature and unsuccessful politician. Power is the entire content of a politician's career - with power, they have everything, and without it, they have nothing. Of course, this does not exclude the need for "hiding one's capabilities and biding one's time" style retreats or unexpected setbacks - temporary loss of certain power often means gaining greater power.

Power is a "collective force". Those who hold power are not the only ones involved in creating power. The objects of power, those who are controlled and influenced but do not hold power themselves, also

participate in creating power. In a totalitarian society, the totalitarian rulers acquire the highest power through armed uprisings, palace coups, legal inheritance, and other means. The consolidation and development of this power is based on the general obedience and recognition of the people. In order to maintain the long-term and widespread recognition and obedience of the people, totalitarian rulers use the means of "carrot and stick", with priests and executioners serving dual roles, conquering people from all aspects of spirit, material, and physical body. On the one hand, they vigorously promote the idea of "divine right of kings" and "supremacy of royal power", propagating the "three cardinal guides and five constant virtues", and making people willingly accept their rule. At the same time, they constantly offer small favors and kindness, implementing so-called "royal policies", "benevolent rule" and "moral governance", making people not only willingly accept their rule, but also grateful for it. On the other hand, they use violent tools under the wings of power, implementing so-called "tyranny", "severe rule" and "criminal justice", forcing obedience, suppressing rebellion, and subjecting anyone who disobeys or shows any disrespect to physical torture until they are completely eliminated. Under totalitarian rule, the people often lose their basic human rights. However, the loss of basic human rights for the majority of people precisely paves the way for a minority of totalitarian rulers to gain and strengthen their power. The loss of basic human rights often leads to political apathy, where people are not interested in politics and cannot participate in politics, which in turn promotes and strengthens the existence and continuation of totalitarian rule.

Power creation has a "magical" quality to it. This "magic" can easily make those who acquire and wield power feel self-important, mixing their own creative value with the creative value of power. They may think that

power is themselves, and themselves are power, leading to arrogance, recklessness, extravagance, and abuse of power. "It is not fair to say that only those who possess power are responsible," as Japanese scholar Daisaku Ikeda has said, "the people who relinquish power may also bear half of the responsibility. This is because the people also make the mistake of equating power itself with those who possess power and often submit themselves to them in a servile manner."

Abuse of power is synonymous with corruption. Power likes corruption, and corruption loves power. The more power is concentrated, the more serious the corruption, and this has almost become a law in political life throughout history. Power is a product of social life, and social life needs power. Proper concentration of power and scientific use of power can create enormous promotion for productivity and social progress. excessive concentration of power and abuse of power is a huge obstacle to creativity, which can only harm the development of productivity and become a hindrance to the progress of society. The only way to overcome corruption and prevent abuse of power is to "control power with power," that is, to restrain power with power. On the one hand, it requires political institutions, systems of checks and balances, supervision, and replacement mechanisms, that is, to hang a sword of wisdom with the "legal" deterrent force (which can be called the "metaphysical" control force) clearly over the heads of power holders, so that they have scruples when using power and cannot act arbitrarily. On the other hand, it requires active and effective political participation of all members of society (which can be called "physical" influence), that is, to fully exercise the most basic rights of civilized human beings, such as voting rights, speech rights, veto rights, etc., to participate in the selection of leaders and the formulation of policies, so that all policies are based on the interests of the majority of members of society and are accepted by the vast majority of people. At the same time, it also puts power holders under the supervision of the people who give them power, that is, the general public. The degree of political participation is an important indicator of a country's level of civilization. Human beings can create power, and they can also create the power to restrain power.

## 2 Economy

Economy is the creation of wealth.

Wealth is the general term for the creation of material conditions necessary for human survival and development, including what people commonly refer to as consumer goods, means of production, and natural resources. Wealth is co-created by humans and nature, meaning that humans and nature are the main participants in the process of wealth creation. Without the land, mineral resources, forests, water sources, sunlight, and air provided by nature, human beings would lose the basis for survival, let alone the creation of wealth. However, without humans as the creative subjects, the above-mentioned natural resources lose their meaning. Therefore, wealth can only belong to humans, and economic activity, which is the creation of wealth, can only be a part of human creation.

Here, the author emphasizes that wealth is a creation of material states, with a focus on the fact that material creations can directly satisfy the needs of human survival and development. This does not deny the wealth-producing nature of creators' experiences, skills, and scientific and technological ideas in non-material states. The experience, skills, and scientific and scientific and technological ideas of creators are potential non-material wealth. Only when these potential wealth elements are

incorporated into the creation process of material states and new material creations are produced to meet the needs of human survival and development, can the potential wealth be transformed into real wealth. If creators' experiences and skills, as well as scientific and technological ideas, do not participate in the creation of material states, i.e., creators bury their experiences and skills in their hearts or keep them hidden, and scientific and technological ideas always remain in the conceptual state without leaving the scientist's mind or laboratory, then such wealth remains a potential non-material wealth, and such creation can only be temporarily classified as non-economic creation. The essence of saying "science and technology are productive forces" or "the primary productive force" is that potential wealth can be transformed into huge real wealth.

The creation of wealth is fundamental because it corresponds to the creation of human survival. In order to maintain and prolong life, humans need a large amount of tangible goods, mainly consisting of consumption or living materials such as food, clothing, and shelter. Once these basic survival needs are met, people can engage in other forms of creation. If someone argues that politics, war, religion, art, love, and all other forms of creation are beyond economic or wealth creation, ultimately, they are still related to wealth creation or must rely on wealth creation as a basis, a purpose, or a support. I believe this statement is not wrong. Take politics as an example. Politics creates power, and power means control and possession of wealth. There is no power that does not control and possess wealth, and the more wealth one possesses and controls, the greater their power. Conversely, the greater the power, the more wealth one possesses and controls. Those who fear losing power are ultimately afraid of losing vested interests, namely, their power to control and possess wealth. Similarly, for religion, as a creation of faith, it seems to transcend wealth creation or economic activity, but in fact, no religion can exist without wealth creation as a foundation. There are no monks who abstain from the world, and believers can only devoutly practice their faith after at least their basic needs of food and clothing are met. Praying for divine gifts of wealth is also an important part of religious creation.

The creation of wealth is also cumulative because after people's survival needs are met, they continue to develop, and development certainly requires wealth. Development creation has no end, so wealth creation also has no end. Since the growth rate of wealth is often greater than the degree needed for survival and development creation, which can be said to grow in an arithmetic progression, while the accumulation of wealth often grows in a geometric progression, this is almost a rule. Excessive wealth accumulates when it cannot be consumed in a timely manner due to the needs of survival and development, forming wealth accumulation. For individual creators or small groups of creators such as families, wealth only meets the needs of survival, and if it also meets general development needs or has a surplus, it can be considered a basic level of prosperity. If wealth creation exceeds the needs of survival and general development, forming surplus and accumulation, it is considered a comfortable life or a small fortune. If a large amount of wealth accumulates, amounting to billions of yuan, it can be called a wealthy person or an economic tycoon. For a country, whether it can form huge wealth accumulation is an important indicator of its national strength. Developed countries in the world are all countries that have amassed and accumulated huge surplus wealth. Enormous wealth accumulation not only greatly improves the living standards of the people in these countries but also makes their leaders play a crucial role on the international stage.

Diversity is also a characteristic of wealth creation. Taking the

creation of wealth as an example, it not only includes the production and reproduction processes of wealth, but also the processes of exchange, distribution, and consumption of wealth. Production and reproduction are the processes that directly create wealth by producing physical goods. Exchange is the process of wealth circulation, distribution is the process of breaking down wealth from society to individuals, and consumption is the process of transforming wealth, satisfying the survival and development needs of creators, and providing the basis, subject, and object for the production, reproduction, exchange, distribution, and re-consumption of wealth. Initially, exchange and distribution were carried out through physical goods. With the continuous development of productivity and the increasing scope of exchange, direct exchange of physical goods became difficult. Thus, a special commodity, money, emerged as a general equivalent. The development of the commodity economy has expanded the functions and application scope of money, making it the embodiment, symbol, and synonym of wealth. Pursuing and accumulating money has become the main content of colorful wealth creation. In the eyes of the ruling group, "a state with ten thousand chariots must not be without a store of ten thousand pieces of gold and jade ornaments; a state with a thousand chariots must not be without a store of a thousand pieces of gold and jade ornaments; a state with a hundred chariots must not be without a store of a hundred pieces of gold and jade ornaments" (from the book "Guanzi: The Calculation of Mountain Rights"). In the eyes of the ordinary people, "money makes the world go round, "and "money talks, bullshit walks." The magic of money has led to the development of "worship of wealth" and "money worship," and even the formation of "alienation" psychology, where many evil behaviors and corrupt phenomena are bred. Money is regarded as more precious than life itself.

Wealth creation also has a collective nature. Isolated individuals cannot engage in standard economic activities. The accumulation of wealth is the result of collaborative efforts. All successful businesses, big or small, have one or two individuals with exceptional wisdom and outstanding perseverance, as well as several or even many loyal and capable collaborators. "One fence post needs three stakes, one hero needs three helpers." A giant or genius is always surrounded by a group of geniuses or ordinary people. Large business conglomerates, the European Economic Community, the Organization of Petroleum Exporting Countries, etc., in developed countries, all demonstrate and embody the enormous collective efficiency in wealth creation. Today, in the 21st century, the world has become a big family, and humanity has become a large group. The economy of any nation, region, or country can only have a way out and a future by joining the "global economic cycle," i.e., integrating into the global economy. Otherwise, to put it seriously, it may be forced to abandon its place in the world; to put it mildly, it may mean being squeezed into a corner of the earth and crying out in despair. The necessity, urgency, and value of reform and opening up lie precisely here.

# 3 War

War is the resort to force in the creation of power and wealth.

The meaning of resorting to force is to use weapons and violent means to resolve disputes.

War is the continuation and inevitability of politics. Politics creates power, and power means control and influence over other people, nations, countries, and political groups — especially control. War is the military means of forcibly competing for this control when non-military means are

inadequate. The use of force inevitably brings casualties and bloodshed, thus the saying that "war is the continuation of politics by other means, and politics is war without bloodshed." Nonviolent politics permeates war with its intense gunfire, and is inevitably accompanied by political propaganda, economic blockade, diplomatic division, and other non-military means.

War is both a means and a demand of the economy. The economy is the creation of wealth, and wealth means the production factors, living materials, and natural resources in tangible form. In the case where non-military means cannot obtain control and possession of the production factors, living materials, and natural resources that are controlled and occupied by other ethnic groups, countries, political groups, or creative groups, war uses violent military means to forcibly compete for (or defend) control and ownership of these production factors, living materials, and natural resources. The economy is the foundation, condition, and purpose of war. War requires economic support. Without a certain level of wealth accumulation, a certain scale of war cannot be waged. War consumes a large amount of manpower, material resources, and financial resources as a cost, while at the same time, it aims to obtain more manpower, material resources, and financial resources, namely, wealth. Since war seizes (or defends) and possesses wealth through violent means, we can say that the economy is a non-violent war, and war is a violent economy.

War is a product of collective creation. Individuals alone cannot start a war; at most it would be a fight to the death or a scuffle. War requires the participation of creating groups, usually larger, cohesive groups such as ethnicities, nations, religious factions, and political groups. The groups involved in war are typically led and commanded by a few creative giants, who then command and direct thousands of creative individuals, who

in turn command and direct countless ordinary individuals. The creative giants and creative individuals in war are usually called military strategists, generals, and marshals, while the ordinary individuals are mid-level officers and soldiers who fight on the front lines. The bloody war provides an excellent opportunity and grand stage for the creative giants and creative individuals to unleash their creative power. In every war, one or several "brilliant commanders," "national heroes," or "war madmen" and "mass murderers" emerge. These renowned creators build their glorious achievements on the creative efforts and sacrifices of countless ordinary individuals who shed blood and make sacrifices for their cause.

Due to the inhumanity and destructiveness of war, which always brings about appalling casualties and irreparable economic losses, people have always held a curse, rejection, and denial towards war as a whole. A clear-cut discourse against and condemnation of war, exposing its cruelty and brutality, can be seen in the literary works of thinkers, philosophers, historians, and writers throughout history and across cultures. For example, "No one is foolish enough to prefer war to peace." (Treasures of Western Thoughts, China Broadcasting and Television Press, 1991) "There is nothing more hideous than the sight of valuable and living bodies, and living creatures being turned into a heap of nameless corpses that are only beneficial to the growth of wild grass." (Treasures of Western Thoughts, China Broadcasting and Television Press, 1991) "War should never be fought. No matter what the reason, mankind must never repeat such a foolish act. At the beginning of the first volume of my novel The Human Revolution, I wrote: 'Nothing is more cruel than war, and nothing is more tragic than war.' This is my actual feeling deeply engraved in my heart since then." (Daisaku Ikeda, How I Passed My Youth, translated by Wang Shuhui, Taiwan Renren Press, 1987)

However, the undeniable fact is that wars have hardly ever ceased on the earth from ancient times to the present. As soon as the smoke of war clears in one place, the flames of war are ignited in another. Moreover, with the accumulation of civilization and the advancement of science and technology, the means and methods of war have also evolved from the ancient times of hand-to-hand combat with spears and swords to today's tanks, missiles, drones, and remote warfare. The practical reality of military action has shown the inevitability and necessity of war. Only war itself can explain the inevitability and necessity of war - political, economic, religious, cultural, and all other means outside of war cannot solve the various roots of disputes over power and wealth. When all the creative solutions outside of war fail to achieve the satisfactory results that both sides of the dispute hope to obtain, war creation becomes an inevitable creation.

Many thinkers have recognized to varying degrees the inevitability of war as a creative process. For example, "War itself is a cultural process, and only a culture that is to be saved will spontaneously erupt with such anger and courage as to go through the cultural 'self-mutilation'" {[German] Friedrich Nietzsche, "The Birth of Tragedy," translated by Jia Cuilian, Commercial Press, 1997. "If the adventurous acts in the cause of justice in war can be seen as a pursuit of the sublime and a respect for human dignity, then such a war may be endowed with a virtue. These virtues, the courage, fearlessness, sacrifice, and just behavior in war, are considered respectable precisely because they show respect for human nature and respect for human freedom and independence." {[German] Immanuel Kant, "On Perpetual Peace," translated by Huang Hongfa and Liu Yulin, Commercial Press, 1983. "The continuation of peace, even peace itself, has made human intelligence and courage increasingly withered. War is the occasion to show

the highest courage and the highest reason of the nation." {[German] G.W.F. Hegel, "Lectures on the Philosophy of World History," translated by Gao Sheshe, Commercial Press, 1993}. Eastern thinkers have similar views, such as "Holy war itself is equivalent to a devout pilgrimage" {[Arabic] Ibn Khaldun, "Universal History," translated by Yang Qiming, Commercial Press, 1993}. "To kill and pacify, killing is possible; attacking their country and loving their people, attacking is possible; stopping war with war, even fighting is possible." (Sima Rangju: "The Sima Fa: The Basis of Benevolence") "The responsibility of the revolutionary army is to turn an unequal world into an equal one." (Compiled by Liu Yongyao: "Quotations from Sun Yat-sen on the Governance of the Military," World Military Society, 1957).

The theory of creation emphasizes that any human creation must conform to the law of civilizational accumulation, and war is no exception. Any progressive and humane war that conforms to the law of civilizational accumulation is a just war, while any non-progressive and inhumane war that violates this law is an unjust war. Unjust wars that violate the law of civilizational accumulation will inevitably be suppressed and defeated by just wars that conform to this law - this is precisely the power of the law of creation.

# 4 Religion

Religion is the creation of faith.

The meaning of faith is an extreme belief and reverence in transcendent entities such as God, ideals, and idealism outside of the creative subject, and a willingness to strive and even sacrifice one's own life for them. Any faith has a religious nature. Creating a faith also means creating a religion.

Early religions were primarily based on the belief in numerous supernatural deities, manifested as worship of nature, animals and plants, ancestor worship, and totemism. Supernatural deities were the result of primitive people personifying the natural forces that governed their lives and survival. Primitive people believed that these natural forces had wills and souls like humans. They also believed that worshiping and seeking help from these natural forces with wills and souls could bring them many benefits.

In ancient times, religion mainly consisted of a belief in a singular spiritual entity that was independent of all things and tended towards unity. This independent spiritual entity was no longer a natural force and was not attached to any natural object, but rather transcended all natural forces and objects, and ruled over them, as well as over humans and everything in the world. This highest deity had many different titles, such as Ra in Egypt, Zeus in Greece, Brahma in India, Yahweh, God, Allah, Buddha, Jade Emperor, and so on. Ancient people devoted their physical bodies to earthly kings while devoutly dedicating their spirits to the heavenly "God."

Modern religions primarily believe in a non-realistic spiritual ideal. Supernatural gods are illusions, independent spiritual entities outside of everything are also illusions, and non-realistic spiritual ideals are also illusions, no matter how wonderful or lofty they may be. No one has ever seen a supernatural god or an independent spiritual entity outside of everything. What people see are just their own illusions. And ideals, no matter how wonderful and lofty they are, are just created in people's minds. Practice is the standard for testing truth. Modern science has irrefutably denied the existence of so-called "heaven," "pure land," and "paradise." As for the far-off and unverifiable beautiful "ideals," it is

best to think of them only as something we imagine in our minds, otherwise we may fall into religious delusion and extremism.

Religion belongs to the creation of wisdom, especially the creation of imagination, which is one of the components of wisdom. Compared with the difficulties of secular life, human imagination is rich and developed. Although one may not have the ability to overcome and conquer all the difficulties, the mind can imagine great superhumans or omnipotent deities who possess such abilities. Moreover, once such imagination is formed, one may feel that one has gained some of these abilities. Through further worship, prayer, and submission, one can gain more of the blessings and abilities of the superhumans or deities. Thus, this collective imagination is repeated, spread, and accumulated, and finally becomes relatively fixed under the power of will. The fixed imagination becomes a belief, and the whole-hearted belief leads to reverence, obedience, conversion, fanaticism, and intoxication.

Similarly, faced with many imperfections and dissatisfactions in the current world, people imagine a perfect and satisfactory future society in their minds, and stubbornly believe that such a society will inevitably come. Little do they know that for the humans who create development, there will never be a perfect and satisfactory society. Dissatisfaction is the nature of creation, and there will be no humans if everyone is satisfied. In the ancient human imagination, if they could "imagine" living the life we modern humans do now, it would have been like entering "heaven", yet in this "heaven", we still have many dissatisfactions and dissatisfactory things. We now imagine the human society thousands or tens of thousands of years from now, and think it is perfect and satisfactory, but for the humans living at that time, there will inevitably be new dissatisfactions and dissatisfactory things that we cannot imagine now. From this

perspective, humans will never have a completely perfect and absolutely ideal society. People always create and firmly believe in something that is unreal, unattainable, and never existed, and become crazy about it, revel in it, congratulate themselves on it, work hard for it, and strive endlessly - human intelligence lies here, but human foolishness also lies here.

Religion has tremendous cohesive power. "Shared aspirations" and "shared beliefs" are the closest bonds of faith. People identify, converge, unite and cohere under the banner of faith, forming enormous creative forces. This creative force is sufficient to create a nation, such as the Sikh religion with the Sikh people, a country, such as Islam with Iran, and also to profoundly influence many ethnic groups, countries and regions, such as Buddhism with Eastern countries, Christianity with the Western world, and Islam with the Arab world. Religion originates from faith. Different interpretations and explanations of the same faith result in different religious denominations, such as the Mahayana and Hinayana, exoteric and esoteric teachings, and the six schools and seven sects within Buddhism. It can even cause religious splits, such as the Eastern Orthodox, Roman Catholic, and Protestant denominations within the Christian system. The loss of faith signifies the decline of religion. People not only gather together devoutly because of shared beliefs, but also split and disintegrate because of faith divisions and crises.

Religion also possesses fanaticism. In terms of creating beliefs, believing and superstition are almost synonymous. Faith is a special intellectual ability, and its release and development often lead to a series of extraordinary religious behaviors characterized by excitement, stubbornness, mystery, strangeness, obsession, cruelty, madness, and so on. For example, some religions require killing people as sacrifices to please the gods, and some devotees willingly self-immolate to "ascend to

heaven"; some religions require monks to be fully naked during rituals, and female youths to dance with their genitals exposed; some religions advocate asceticism, meditation, flagellation, and even torture, such as lying on a bed of nails, pulling out hair, eating excrement, self-castration, holding only one hand up for a long time, standing on one foot, and so on. In real life, especially in political movements, people sometimes shout and cry like lunatics, and sometimes inexplicably burst into tears, even going crazy and resorting to violence such as beating, smashing, looting, burning, and killing, etc., all of which can be seen as religious fanaticism or Religious fanaticism or quasi-religious quasi-religious fanaticism. fanaticism is a derivative of faith creation, and it is the abnormality within the norm of creation. As long as there is a situation where one absolutely believes in non-realistic creations, such madness abnormality will not disappear.

#### 5 Art

Art is the creation of beauty and aesthetics.

Beauty and aesthetic creation are interrelated yet distinct processes. Beauty emphasizes the creation of the physical form of an object, while aesthetics emphasizes the creation of a mental state. In the case of artistic works, beauty focuses on the creation of beautiful works, while aesthetics emphasizes the appreciation of beautiful works. Both beauty and aesthetics can be seen as a creative process involving both the creative subject and the creative object. The creative product generated by this process is a novel, unique, harmonious, symmetrical, perfect, diverse and unified, beautiful, pleasant, and useful physical object, as well as a novel, unique, harmonious, symmetrical, perfect, diverse and unified, sublime,

joyful, and pleasurable feeling. Beauty and aesthetics are interdependent and cannot be separated. All beauty is aesthetic beauty, and all aesthetic experiences involve beauty. Beauty provides the physical basis for aesthetic experiences, while aesthetics is the spiritual foundation of beauty. Aesthetic experiences without beauty have no basis or significance, and beauty without aesthetics is valueless and meaningless for humanity.

According to the theory of creation, whether it is a beautiful, attractive and useful object or a sublime, pleasant and satisfying feeling, the most essential and crucial element that determines its creative value is the requirement for novelty and uniqueness. In other words, novelty is the most fundamental attribute of beauty and aesthetics. If a material object created has a unique and novel state, it can be said to be beautiful; if a spiritual creation is fresh and touching, it can be said to be aesthetic. When people say that past creations such as ancient architecture, calligraphy and painting, and traditional crafts are beautiful, what they really mean is that these creations continue to provide modern people with new perceptions and purposes. Defining beauty and aesthetics as creation is not wrong, and defining beauty as the creation of new, beautiful, attractive and useful objects and aesthetics as the creation of new, sublime, pleasant and satisfying perceptions seems to be more accurate.

Of course, the "objects" I am discussing here refer to objects that have been imbued with spiritual imprints and influenced by the subjective aesthetic experience of the observer. Since the emergence of humans on Earth, all objects that humans can encounter have been influenced to varying degrees by human culture. The "perception" I am discussing here does not simply refer to the physiological pleasure directly linked to sensory organs and the resulting perceptual pleasure. It includes not only physiological pleasure, such as sensation and perception, but also

psychological pleasure composed of representations, concepts, thinking, emotions, and wisdom. In the process of aesthetic appreciation, physiological and psychological pleasures complement each other and cannot be separated. Physiological pleasure forms the foundation of psychological pleasure, while psychological pleasure is the sublimation of physiological pleasure. For humans, who are characterized by creative intelligence, psychological pleasure often appears to be more important.

Artworks are the unity of the creation of beautiful, good-looking, good-sounding, and useful objects that are beautiful, and the creation of sublime, pleasant, and comfortable aesthetic experiences. Although various materials and techniques are employed and utilized in order to achieve this unity in various forms of art.

Literature is primarily the creation of artistic language, using language and words to shape beautiful images and works of art, providing vivid and moving aesthetic objects for literary appreciators. In the creative process of literary works, the writer who has profound thoughts, rich emotions, and mastery of a large amount of aesthetic materials is the creator, while the language of literature, suitable creative environments, creative atmosphere, creative tools, and the publishing system are the means of creation. After a long or short process of wise and diligent writing and publishing, novels, prose, poetry, reportage and other works are created that contain captivating plots, moving details, vivid character images, and complex emotional and intellectual conflicts. In the process of literary appreciation, appreciators who have a certain amount of life experience and aesthetic ability are the creators, while the literary works, appreciation environment, and aesthetic atmosphere are the means of creation. Appreciators gain sublime, pleasurable, and enjoyable aesthetic enjoyment through reading and savoring literary works, understanding and

combining their own life experiences and accumulated emotions, and engaging in further wise association and sublimation.

Other arts and literature share the same essence, but differ in their creative means. Drama is primarily the creation of artistic performance, using actors to portray characters and perform stories, to create beautiful images and works of art that provide the audience with a direct aesthetic experience. The creation of drama involves not only performers, but also playwrights, directors, set designers, music and dance designers, stage managers, audiences, and theaters, making it a typical collaborative creation.

Music is primarily the creation of artistic sound. It uses musical language such as sound and melody to shape beautiful images and works of art, providing the audience with aesthetically pleasing objects that can evoke emotions and spark imagination. Compared to other forms of art, music creation is primarily aimed at appealing to the listener's emotional response, making it particularly expressive and powerful in its ability to convey feelings.

Dance is primarily the creation of artistic body movements. It uses refined, organized, and beautified body movements and postures as the main means of expression, combined with other creative elements such as music, visual arts, and props, to shape beautiful images and works of art, thus providing viewers with a direct aesthetic experience. The earliest forms of dance were linked to human survival and religious creation, and represented the emergence and release of primitive vitality. The characteristics of dance include lyricism, rhythm, form, and the integration of time and space.

Visual arts primarily involve creating art forms using different techniques of artistry. The techniques of artistry include form, light, color, and the elements of point, line, and surface to create relatively static beautiful images or works of art, providing aesthetic objects for the viewer's contemplation. Visual art is divided into two major categories, sculpture and painting, based on the materials chosen and the tools used. Sculpture uses hard materials such as metal, stone, ivory, and bones or soft materials such as clay and wax to create three-dimensional images that can be perceived visually. Painting uses tools such as brushes and knives, and materials such as ink, paint, and oil to create two-dimensional images, compressed versions of three-dimensional space, on flat surfaces such as paper, textiles, plates, and walls, that can be perceived visually using design languages such as line, color, light and shadow, perspective, and composition. The creation of visual art has the characteristics of form and intuition, which can give the viewer a sense of spatiality and quality.

Film and television are creations of comprehensive art. Film art uses a camera to shoot a movie, and television art uses a video camera to shoot a video tape. Both use different angles, distances, and shooting methods to capture the aesthetic object, and then use different editing methods and color applications to compose the frame, and record or configure sound to create a vivid, novel, and specific aesthetic image that is enjoyable to a wide audience. Film and television are the crystallization of collaborative creation. They are a combination of time art (presenting content over time) and spatial art (unfolding and shaping images in space), as well as a combination of multiple creative participants (screenwriters, directors, actors, photographers, videographers, set designers, costume designers, prop masters, etc.), multiple art elements (literature, drama, music, dance, art, montage, etc.), and multiple expression techniques (close-ups, special effects, exaggeration, rendering, symbolism; dialogue, voiceover, off-screen sound; pushing, pulling, shaking, moving, rotating,

etc.). It is also a combination of artistic creation and scientific technological creation, with technology being the mother of film and television. Without the remarkable discoveries of optical research, and the invention and progress of filming, recording, broadcasting, receiving technology and equipment, there would be no movies or television, and almost every new achievement of modern technology has an impact on the expressive power of film and television. Film art is characterized by populism, specificity, realism, and humanism; television art, in addition to the characteristics of film art mentioned above, also has a higher popularity, timeliness, and flexibility than film art.

Artistic creation also includes architecture, photography, calligraphy, paper cutting, and so on.

The creation of beauty and aesthetics constitutes art. Although the beauty revealed, expressed, and shaped by art is infinitely rich, it can be broadly examined in terms of intellectual beauty, emotional beauty, and formal beauty.

The creation of art involves the creation of beauty and aesthetics. Although the beauty revealed, expressed, and shaped by art is infinitely rich, overall it can be examined in terms of beauty of thought, beauty of emotion, and beauty of form. Beauty of thought means that art is imbued with the artist's unique and profound psychological experiences and rational sublimation of the world, society, and life, containing the artist's novel and profound discoveries and revelations of truth, and shining with the brilliant wisdom of the artist as a thinker. When people read, watch, or appreciate art, they feel the power of thought, bask in the radiance of wisdom, and respond to the call of truth, thereby becoming noble, wise, strong, and upwardly mobile. Great artists from ancient times to the present, both in China and abroad, are thinkers, and it is only by

becoming a thinking artist that one can create great works that are different from the ordinary and have everlasting fame. Leo Tolstoy, Sartre, Tagore, Lu Xun, and others are all great artists as well as great thinkers. Of course, the beauty of thought in an artwork is different from the theoretical doctrines of philosophers; it is not a naked and direct preaching, but rather the integration of thought into vivid and concrete images, the visualization, concretization, and contextualization of abstract theoretical images.

The beauty of emotion in art means that the artist infuses their unique, profound emotional experiences and sentiments towards the world, society, and life into their artwork. It embodies the artist's fresh, unique, and deep emotional accumulation and experiences towards humanity and life, as well as their heartfelt love and sentiment towards life, loved ones, nation, nature, and the future world. The artworks created by the artist always reveal, express, and extol the sincere, ardent, and persistent love and feelings towards life, humanity, and the world. When appreciating art, viewers are often attracted by the emotional entanglement of the characters depicted in the artwork. They are moved, amazed, shed tears, and inspired by the noble, kind, persistent, passionate, and beautiful emotions depicted in the artwork. They are also angered, resentful, self-reflective, and repentant by the despicable, low, and filthy emotions exposed in the artwork. Only emotions are difficult to express in the world, and only emotions and righteousness are valued in the world. Artworks are all about the art of emotion, and the beauty of emotion makes artworks eternal.

Formal beauty means that the artist must choose the most fluent, harmonious, appropriate, and beautiful external symbolic form and internal structural form to express the beauty of the artwork's ideas and emotions. Both the external symbolic form and the internal structural form must follow

certain principles of formal beauty, such as novelty, fluency, harmony, balance, contrast, symmetry, proportion, rhythm, hierarchy, irregularity, and unity. Artworks must first appeal to the viewer's senses of sight and hearing. Only when the viewer is initially attracted and affected by the beautiful and pleasing formal beauty of the artwork, can they further appreciate the beauty of the ideas and emotions conveyed by the artwork. Therefore, formal beauty is often the prerequisite, guide, and external representation of the beauty of ideas and emotions. Artistic beauty should be the organic, natural, and exquisite unity of beauty of ideas, emotions, and form. Any beautiful idea or emotion must seek beautiful internal structural and external expressive forms, and beautiful forms must seek beautiful ideas and emotions as content. Artworks that only possess beauty of ideas or emotions without formal beauty, and artworks that only possess formal beauty without beauty of ideas and emotions, are both lacking in attraction, expression, and influence — vitality.

#### 6 Love

Love is the creation of mutual attachment, mutual longing, and mutual possession between men and women.

From a gender perspective, there are only two types of people in human society: men and women. Men cannot do without women, and women cannot do without men; to say that half of a man is a woman is the same as saying that half of a woman is a man. The need for survival and creation inevitably requires men and women to cooperate and depend on each other. Otherwise, there would be no way to sustain life or continue the human species, and human society would face the danger of extinction. Therefore, it is undoubtedly the biological foundation of love creation to create for

survival.

Basic does not mean everything. The developed internal and external sensory organs and the brain's nervous system have enabled human beings to develop emotional connections related to thinking and wisdom in addition to survival and creation, after satisfying the needs of survival and creation. Such emotional connections occur between men and women who cooperate with each other to sustain and continue life, and are expressed as "attachment," which is what we are going to talk about.

Attachment means entrusting at least half of one's own life value to the other person, which means being able to obtain the driving force for survival and development creation from the other person. The essence of attachment is to purposefully direct and release the most basic creative power of human beings, which is called "objectification of essential power." Through mutual attachment, men make women become their women, and women make men become their men; women also make men become men, their men, and at the same time make themselves become women, men's women.

Once attachment is formed between men and women, they always yearn to be together, as the saying goes, "Willing to be a pair of wings in the sky, and a branch that never separates on the ground," and do not want to be separated for long or even briefly, to the point of being described as inseparable and tightly bound together. "To become a pair of mandarin ducks is better than dying together as phoenixes. I would rather be a pair of mandarin ducks and not envy immortals." For the sake of attachment, people can choose not to be immortals, not to be kings, can even wage wars, sacrifice themselves generously, or even go bankrupt.

Attachment leads to yearning. Although both men and women who are attached to each other always yearn to be together, they often cannot due to various constraints, leading to "gazing at the blue sea and sky, night

after night with a heavy heart," and becoming "haggard for the sake of the loved one." Long-lasting and directed neural connections in the brain's cortex constitute yearning, which means that every smile, word, action, and everything else about the attachment object leaves an indelible mark on the nerve cells of the yearner.

As a result, you miss them, miss them, a thousand times, ten thousand times! You miss him when you eat, you miss him when you drink, you miss him when you wear thin clothes, you miss him when you lie on a thin blanket, you miss him when he's on a long journey, you miss him when he faces difficulties! You miss him so much that your heart burns, you miss him so much that tears flow like a river; you miss him so much that your liver and intestines ache, you miss him so much that your hair turns white! It is said that there are all kinds of sufferings in the world, but none are as painful as lovesickness; any other disease can be cured in this world, but lovesickness is hard to cure. The connection between lovesickness and "pain" and "illness" reflects the hardship and profound nature of love. As ancient poetry goes: "For ten years, life and death are two vast and misty realms, not thinking, yet impossible to forget"; "The spring silkworm dies, leaving nothing behind but its silk, the candle burns to ashes, tears beginning to dry"; "In the winter thunder, summer rain and snow, when heaven and earth come together, only then dare I part with you!"

However, from a creativity perspective, the "suffering" is not really suffering, and the "disease" is not really a disease. The unforgettable longing is actually part of the intention of creating love. Without deep nostalgia and strong yearning, it cannot be considered true love. Love grows in longing, and love matures in longing. Longing is like water, nourishing the flowers of love; longing is like fire, burning the sky of love.

Being unable to not love her, yet unable to be with her; after leaving

her, unable to not miss her — this is the standardized trajectory of love's creation, and also the fundamental story structure of all literary and artistic works with love as their theme, both past and present. Such a "three-part structure" has given birth to countless heart-wrenching tragedies and love songs that move both heaven and earth.

Love's longing is not simply longing for the sake of longing. The purpose of longing is attachment and possession, and attachment inevitably leads to possession, as attachment itself implies possession. Possession is not just empty words, but concrete actions of spirit and flesh. The content of possession includes both the heart and the body, that is, a connection of hearts and a fusion of bodies. For couples in passionate love, a connection of hearts implies a fusion of bodies, which often requires a fusion of bodies; and a fusion of bodies often strengthens the connection of hearts. Love that has a connection of hearts but not a fusion of bodies is incomplete, imperfect, and non-standard, just as "love" that has a fusion of bodies but not a connection of hearts is low-level, low-tone, and low-quality. The standard of perfect love is love that has both a connection of hearts and a fusion of bodies.

People all crave to possess, but they fail to realize that possession always means losing oneself while acquiring the other, that is, accepting and absorbing the creative power of the other, while also paying and dedicating one's own creative power. Creative power always needs to be released and exercised, and thus mutual possession is always ongoing. Possession is a way of showing the world: this living human being in front of me, from soul to body, everything belongs to me, at least at this moment, he/she is a part of my life. At the same time, possession is also a way of announcing to the world: I, this living human being, from soul to body, everything belongs to him/her, at least at this moment, he/she is a part

of my life. Clearly, love is a collaborative creation, and this collaboration makes two lives happy and brilliant at the same time.

Love creation, with attachment, yearning, and possession as its content, is still subject to the laws of creation. The law of addition, subtraction, and combination determines the way love is created, and the process of attachment, yearning, and possession is also the process of adding, subtracting, and combining love. The law of civilization accumulation determines the development trend of love creation. With the evolution of humanity, love must evolve from low to high, from barbaric to civilized, from repressed to open. All new creations in modern society will inevitably have an impact on love. The law of innovation and change puts forward essential requirements for love. Love is about embracing novelty and abandoning the old. Both men and women must strive to keep love fresh and new, so that charming love is always full of novelty, new interests, and trendy styles. They must constantly come up with new ways to attach, new content for yearning, and new feelings for possession, otherwise, the river of love will dry up, the tree of love will wither, and the flame of love will extinguish.

# 7 Death

Death is a creation of destruction and new life.

From a macro perspective, everything in the world faces the problem of destruction and creation. The old must give way to the new; the old must die to make way for the new. Ending one creative process allows another to begin. In the natural world, destruction and creation are always present. Oxygen is absorbed by animals and humans and exhaled as carbon dioxide, which is the destruction of oxygen and the creation of carbon dioxide;

carbon dioxide is absorbed by green plants and transformed into oxygen, which is the destruction of carbon dioxide and the creation of oxygen. There are no immortal plants or animals in the world. All living and non-living creations are in a state of destruction and creation. Destruction is a prerequisite for creation, and without destruction, there can be no creation; creation is the result of destruction, and any destruction will inevitably lead to creation.

For humans, there is death and life at every moment. In the process of destruction and creation, humans continue their lives and accumulate civilization. It is undeniable that just like the sun, moon, and stars that will eventually be completely destroyed, humans will also be completely destroyed one day. However, after all the destruction, there will inevitably be new suns, new moons, new stars, and new humans born in the universe.

For individual life, there is only one huge and thorough destruction of the whole, while small and scattered destructions occur throughout the entire life, happening at any time and anywhere. Cells metabolize, hair falls out, skin ages, and the mind renews... Life contains death, and birth is nurtured in death. Today's rebirth comes at the cost of yesterday's destruction; today's destruction means tomorrow's rebirth.

The complete and thorough destruction of an individual's life is what people usually call death. When a person's brain cells stop firing, their heart stops beating, and their breathing ceases, the flame of their life is extinguished, and the ship of their life has reached the shore or sunk. Humans are intelligent creatures, and when their life ends, their intelligent creations also stop. The end of intelligent creation marks the end of human creation and the beginning of non-human creation. After life ends, a person may become a handful of ashes or a skeleton, with the billions

of cells that make up their body dissolving into thin air or infiltrating the earth as yellow water. They may also be devoured by birds, animals, and insects and become a part of these creatures' life creation. Ashes, skeletons, smoke, and yellow water are all forms of new life that arise after destruction. However, these new creations no longer have a complete life, rich emotions, sparkling intelligence, or the essence of the universe and all things. Therefore, death is the transition from emotional creation to non-emotional creation, intelligent creation to non-intelligent creation, and life creation to non-life creation.

For an individual, wisdom, emotion, and life only happen once, and death marks the end and summary of their life. The journey of emotions comes to an end, the ship of wisdom crashes, and the melody of life creation reaches its final note. However, the significance of death is not only a one—time summary of life creation, but also the final and most valuable creation of life. Precisely because it is the "last time", it becomes even more precious; because it is the last flash of wisdom, the last emotional release, it becomes particularly poignant, particularly tragic, and particularly great.

In life, people are mostly similar, but in death, they are vastly different. Faced with death, some people writhe in pain, while others smile peacefully; some people are terrified like thunder, while others face death calmly as if returning home; some people are reluctant to leave and wish for immortality, while others choose to end their lives with joy as if drinking nectar; some people try to extinguish the oil lamp with their fingers and only pass away after snuffing the wick, while others dictate their last words and donate their corneas, skin, body, and property to the world; some people's bones may become weak, hearts broken, heads shrinking to their pants, or cold urine streaming down to their feet; while others

lift their heads and smile at the blue sky, lower their heads to comfort the vicissitudes of life, stand as steady as mountains, and display an air of superiority. Oh, death, the god of death, how many images of joy and sorrow, shock and envy, have you created among all living beings!

As a summary of the ultimate productivity of creation, humans not only passively and helplessly participate in the creation of death, but also have the ability to actively and intelligently create death. In the perspective of the theory of creation, suicide and euthanasia have special value and significance. Committing suicide before the mission of being human, which is to release and exercise productivity through wisdom, has been fully realized, is cowardly; while committing suicide after the mission of being human has been completed, that is, after productivity guided by wisdom has been fully released and exercised, is heroic. Life offers few chances to fight, and life also offers few chances to go "crazy". Heroic suicide is the last "fight" of life, the last "crazy" act. It displays the power of being human, that is, the power of creative wisdom, with a strong and firm sense of autonomy. We don't get to decide on life, nobody ever asked for our opinion, so can't we decide on death ourselves? Euthanasia means facing inevitable and helpless destruction with wisdom, painlessly and proactively embracing destruction, and moving towards it. There is already enough suffering in the course of life, so why should we suffer from the torment of illness and human suffering at the end of life?

Not afraid to live, why fear death?

Death is actually very "unfair" to human beings. The only thing that is fair is that "we must die", meaning that everyone, regardless of who they are, has to die. The inequality lies in the fact that the value of death is different. Those who create more during their lives will have no regrets after death. The more creative accomplishments and value one has,

the greater their creative power will be in death.

Eulogies, memorial tablets, epitaphs, farewell speeches, and so on, are written summaries of the lives of the deceased by the living throughout history. Here, the author might as well write a "eulogy" for oneself, as a tribute to the person they will become a hundred years from now:

Ladies and gentlemen, family members, friends, and comrades:

I'm gone, I've gone ahead of you all.

Creation, especially wise creation, has made my youth and life worthwhile. In the most precious years of my life, I did the most worthwhile things. Contemplation, hard work, and perseverance; perseverance, hard work, and contemplation... The civilization and progress of humanity called upon me, and hardship and pain have fulfilled me, while nobility and joy have sublimated me. At this moment, I feel particularly fulfilled, with every cell in my body immersed in a joyful solution. If this is a form of "happiness," then I must say that it is creation, the pursuit of excellence, and wholehearted dedication to creation that have shaped me, fulfilled me, and made me happy.

Ladies and gentlemen, family members, friends, and comrades, goodbye! Look, happiness is coming towards you with a smile, opening its arms and welcoming you with confidence. Happiness and joy belong to those who pursue excellence and dedicate themselves to creation!

The entire book was completed at Huiyu Hutong in Xi'an at 3:50 pm on November 8th, 1991. It was revised again at Maple House in Canada on January 19th, 2023, and for the third time on March 9th, 2023, also at Maple House in Canada. This English translation was completed by ChatGPT on April 28th, 2023, at Maple House in Canada.

#### Seeing the world from a different perspective - postscript to "Creology"

The idea of writing this book came to me three years ago on an unforgettable day. It was a late afternoon in early summer, and I was taking a walk with a friend along the lawn of Northwest University. When we talked about our recent plans, I said I wanted to write a book about the philosophy of creativity. This book is different from previous works on creativity which focus on the psychological and sociological aspects of creativity. Instead, I wanted to grasp creativity from the perspective of philosophy, including worldview and methodology. For example, we can view "creativity" as the essence of human and life, and the origin of all things in the world. In this way, it seems that we can transcend the philosophical debate between "materialism" and "idealism" - why do we have to argue about a seemingly not worth spending too much energy on issue with each other's noses and eyes in today's world on the verge of entering the 21st century, which seems so broad, rich, and wonderful? Why do we always force ourselves to accept only one or two people's absolute, limited thoughts, rather than stepping out of the limits, frameworks, and towards novelty and vitality?

With that, I began actively preparing and drafted several chapters. The following year, which was last year, also in early summer, I happened to come across the "Pyramid Library" series jointly published by Shanghai Cultural Publishing House and Hong Kong Haifeng Publishing House in a bookstore. The first set of books included "Essence of Thanatology" and "Essence of Fallacy Studies," which were exquisitely printed and had good content. This gave me the idea of joining my "Creatology" to this series. I immediately wrote a letter to the editor-in-chief of the series, Mr. Yu

Shihou, discussing the general content of "Creatology." Mr. Yu soon replied, welcoming my participation in the series and asking me to send in two sample chapters as soon as possible. I sent in the table of contents, preface, and first chapter. After reading them, Mr. Yu replied that he had decided to include my "Creatology" in the second set of the series and asked me to finish the entire manuscript before the end of August.

Completing a book of around 170-180,000 words within two months might be possible for some "quick writers," but for me it was quite stressful. Writing something with logical and philosophical reasoning is very different from creating stories or writing fiction, as it requires a considerable amount of thought before putting words to paper. At that time, I was criticized, punished, and demoted due to my support of students, and my right to edit and publish articles in the Xi'an Evening News was revoked for more than a year. Instead, I was assigned to the proofreading department of the newspaper. Proofreading requires extreme focus and attention to detail, as even a single mistake could slip past your eyes and nose. Although I only worked for two hours in the morning, after proofreading, my brain felt swollen and I didn't feel like doing anything else.

With various interruptions during the day, I only had time to really write at night. I rarely watched movies or TV shows. While surrounded by the laughter and mahjong sounds of others, I would spend hours sitting at my desk. On hot days, I would sweat profusely, and my hemorrhoids would act up and bleed. I couldn't work too late because I had to go to work early the next day.

I kept writing like this. Every time I finished a chapter, I would send it to Mr. Yu Shihou, who lived in Hangzhou University. I wrote at a pace of about one chapter per month, and Mr. Yu reminded me several times to finish it faster. But I just couldn't speed up. By the end of August, I

hadn't finished it yet, and by the end of September, it was still not done. During that time, I went out of town for other things. Finally, on November 8th at 1:00 pm, I finished the entire manuscript. "Finally finished writing!" I sighed, but I didn't feel particularly excited. I went out and bought two pounds of Halal cakes from Hui people's Food Shop, ate two pieces, and had a bowl of sour soup dumplings as a treat for myself. In the evening, a friend came to chat, but I was too exhausted to talk — finishing a book was like having an illness.

Mr. Yu informed me over the phone that the situation regarding the publication is not optimistic. Firstly, I did not complete the manuscript according to the schedule, causing a delay in the timeline. Secondly, a deputy editor—in—chief at the publishing house had objections to the main viewpoint in my book and was worried that the book could bring trouble to him and the publishing house (apparently, he had suffered losses in this regard before). This is probably the main reason for the current situation. Mr. Yu is quite open—minded and holds an appreciative attitude towards my book, from its viewpoints to its writing style. He does not want the book to be aborted. Therefore, he got into an argument with the deputy editor—in—chief, which was very intense. As a result of the argument, both sides made concessions, and they informed me that the book could be published according to the original plan, but my viewpoints needed to be "revised" to some extent.

Of course, I cannot agree to this. My viewpoints are the soul of my book, and to replace the soul with something closed and outdated instead of something fresh and innovative would render my book meaningless. The outcome is something that readers can easily predict, even though Mr. Yu has arranged for the entire manuscript to be retyped using a computer. Over the phone, Mr. Yu repeatedly told me that something of value will never

be buried. A good book will always find someone to publish it and someone to read it!

I also firmly believe in this, even though I may encounter various setbacks. As I write this postscript, the entire proofreading process has been completed twice, and the book is about to be typeset and printed. New Century Press has already published dozens of works by mainland Chinese writers and scholars, which have had a significant impact both domestically and internationally. Working with such a publishing house, I have not felt the slightest bit of dissatisfaction.

Choosing the title of the book was not an easy task. Initially, I followed the style of the "Pyramid Library" and titled it "Life Shines Because of This - The Essence of Creatology." I also considered using titles such as "The Call of Excellence - A Treatise on Creatology" and "Sowing a New Sun." Later, a friend suggested using "The Obscure Wisdom" as the title, considering the perspective of promoting the book in the market. The reasoning was that Mr. Hu Shi once taught his disciples three secrets to become famous: the top-notch secret is to be obscure, the second-rate secret is to criticize famous people, and the lowest secret is to praise famous people. Mr. Hu's advice was not wrong, but some friends objected to using it as the book title, considering that an academic book like this should not have such a name. Therefore, it was decided to simply call it "A Treatise on Creatology" - a dignified and straightforward title!

Of course, we cannot ignore the market perspective. Therefore, we added a few lines to the cover design that read, "Do you want to pursue excellence? Do you want your life to shine? Do you want to stand out? Do you want to create a sensation?" These questions can be seen as advertising copy, but they are also within the scope of the subject matter of "A Treatise on Creatology."

I am a person who likes to hold on to things, but I also dislike being too attached. I don't like to dwell on things I have already written, explored, or gone through. Therefore, many of the viewpoints and arguments in this book are inevitably incomplete. However, I believe that a novel and fresh incompleteness is better than a thousand or ten thousand outdated and perfect things. Once something is completely "perfect," it is close to being completely ruined. I just want to look at the world from a different perspective, and provide my friends with some lenses, lenses, and reference points, so that we can all live more in line with our creative nature as human beings.

Finally, I would like to take this opportunity to express my sincere gratitude to all the relatives and friends who have cared and supported the writing and publication of this book!

Pang jin December 29th, 1992, at the humble abode of Xi'an Daily Press.

The whole book was published by New Century Press in Hong Kong in May 1993, and some of its chapters were previously published in various newspapers and magazines, including "Meiwen," "Art World," "Shaanxi Radio and Television University," "Aesthetics and Beauty," and "Xi'an Evening News."

## Commentary 1: Creation: The Essence of Human Existence - Reading Pang Jin's "Creology" Chang Guangyuan

"Creation" is a sacred word that carries a rich and extensive meaning chain when studied from a semantic perspective. From an anthropological perspective, if we examine the human survival process in a more concrete way, we can understand the richness and breadth of its connotations. However, we cannot simply view "creation" as just a word. By simply observing any hardworking laborer who diligently pursues a life path based on human dignity, we will undoubtedly believe that creation is the essence of human survival. In a sense, the study of "creation" is not to explain the functions of nature, but to reveal the practical nature of human beings. As the famous saying in Western philosophy goes, "Man makes law for himself, and nature generates man. "Upon closer examination, these propositions are closely related to the fact that humans are creative beings. Ernst Cassirer, who believed that humans are symbolically creating animals, did not agree with a substantialist examination of human nature, but emphasized the functional aspect of human nature. He focused first and foremost on human labor, specifically whether it is creative or not. Creation belongs to humans. Losing creativity is, in a profound sense, a crisis for human nature.

I like Mr. Pang Jin's book "Theory of Creation" not because I agree with all his views, nor because of the enticing and provocative advertising-style questions on the cover, but because of his serious and candid attitude towards raising and solving problems, as well as his brave pioneering spirit. A group of humanities scholars in the knowledge

community are urgently calling for the humanistic spirit, inspiring people to think about ultimate concerns, and doing their best to rebuild our national spiritual home. This is obviously starting from the spiritual malaise. "What does the humanistic spirit" and "ultimate concern" include may vary from person to person, but treating people as masters who create and control their own destiny, rather than slaves (whether it be power or money) or tools (whether it be for oneself or for others), and pursuing excellence while being content with ordinary life should be a given. Pang Jin's "Theory of Creation" coincides with this era's current of thought and progress. On the book's title page, the author sincerely declares: "Between pursuing excellence and being content with ordinary life,I choose to pursue excellence; between succumbing to fate and conquering life, I choose to conquer life." Pursuing excellence and conquering life are themselves a tragic creative process. Those who aspire to this will inevitably have a unique and profound understanding of the meaning of "creation," and this is also what makes "Theory of Creation" not just a transfer of knowledge from one book to another, but a summary of human survival resonating with life's passions, filled with lofty ideals and active aspirations for upward struggle.

However, "The Theory of Creation" is ultimately the author's attempt to write a book on the study of creation, and it differs from previous works that have focused on creativity from the perspectives of psychology and sociology. Instead, this book seeks to grasp creation from a philosophical perspective, with a focus on worldview and methodology. Breaking new ground in this way is no easy feat. Even just viewing "creation" as the essence of humanity, of life, and of all things in the world requires significant effort to argue and clarify. Furthermore, the author's ambition is considerable. He seeks to "go beyond the philosophical debate between

'materialism' and 'idealism,'" "to take a different perspective on the world," and "to move beyond limitations, beyond frameworks, and towards novelty and vitality!" In retrospect, the author's courage and vision have played a positive role in promoting his ideas. In just a few months, he has collected materials, organized his thoughts, constructed a theoretical framework, and refined his writing. The result is a nearly 200,000-word overview of his unique insights into creation. Whether readers will agree with some, all, or none of the author's views remains to be seen. However, one thing is certain: readers will be inspired to enhance their own creativity and improve their creative behavior as a result of reading this book.

In terms of human nature in cognition, people tend to pursue the essence of things, admire universality, and take "generality" as the direct goal of cognition. Pang Jin is certainly aware of this truth. In "Theory of Creation, "he focuses on explaining the essence and laws of creation from multiple perspectives and provides as much argument and analysis as possible on the "creative process," "creative benefits," and "creative value judgment." In particular, the appendix of the book includes his master's thesis "On the Wisdom Creation of Writers," which applies the basic theories and principles expounded in "Theory of Creation" to analyze the psychology behavior of writers, which creative and is highly persuasive. Regarding the "law of creation," the author is not eager to give it an abstract definition, but based on the broad academic perspective of "infinite creation, infinite ways to release and exert creative efficiency, and infinite new creations, "he chooses "novelty replacement," "addition and subtraction combination," and "civilization accumulation law." After explaining the three layers of meaning of "accumulation" - "accumulation," "inheritance," and "filtering," Pang Jin puts forward several principles

for his theory of civilization accumulation law: the progress principle, the optimization principle, and the humanitarian principle. He clearly points out that "as a special law that restricts and regulates human creativity, the law of civilization accumulation requires people to abide by these basic principles in any creation. Once violated, they will be punished." This clearly shows that the author's advocacy of human creative consciousness and behavior is based on "civilization," and civilization is a process of "optimization" based on the foundation of "humanitarianism" and "progress." This demonstrates the author's meticulous thinking and his noble intention to establish basic norms for the value of creation.

Since the beginning of the 21st century, the practical and ideological representatives of every nation in the world have been actively preparing for the prosperity and development of their own nation, both materially and spiritually. It can be imagined that in essence, the new century cannot do without the competition of national qualities, nor can it do without the competition of creative consciousness and creative behavior. Objectively and seriously reflecting on the current situation of our nation, it should be said that there is both confidence and a lack of optimism. In the era of transformation, the phenomenon of "man being used as a tool" is becoming more and more common in the world, and money and power are competing to expand their domination over "the way of being human". Truly progressive, humane, and optimized creative behavior has to persist in an atmosphere of both support and dissolution. We urge society to pay attention to this spiritual phenomenon. This certainly does not mean that we must use a value sequence to strengthen control, but rather that we must actually pay attention to cultural education and gradually develop the inherent strength of people in a healthy way. Based on this, I would like to recommend Mr. Pang Jin's "Theory of Creativity" to everyone.

(Originally published in the 10th issue of "Mei Wen" magazine in 1994.)

(Chang Guangyuan is a renowned literary theorist. He has served as the director of the library, the head of the literary theory teaching and research department, a professor of literature at the Chinese department, and a doctoral supervisor at Shaanxi Normal University. He is an honorary member of the Chinese and foreign literary theory association, an executive member of the Shaanxi Writers' Association, and a vice chairman of the Shaanxi Literary Critics Association. He has authored several books, including "Subjective Literary Theory," "20th Century Western Literary Theory, "The Humanistic Spirit of Chinese Literature," "A Study of the Creative Psychology of Lu Yao, Jia Pingwa, Chen Zhongshi, Zou Zhi'an, and Li Tianfang, ""Literary and Cultural Studies, ""The Humanistic Perspective of Literary Theory, "Marxist Literary Theory," and "On Chen Zhongshi." His book "Literary and Cultural Studies" won the Excellent Teaching Achievement Award in Shaanxi Province, and his work "Poetry Creation Psychology: An Interpretation of Sikong Tu's 'Poetry Criticism'" won the Third Prize for Excellent Social Science Achievement in Shaanxi Province.)

## Commentary 2: The Philosophy of Creation and the Creation of Philosophy - Reading Pang Jin's "Creology"

#### Liu Xuezhi

While creativity is not an unfamiliar concept, previous works mainly focused on psychology and sociology, paying little attention to the ontology of creativity. Fortunately, it is very gratifying that Mr. Pang Jin has made significant breakthroughs in his book "The Philosophy of Creativity". He regards creativity as a philosophical category and has established a new and vibrant philosophical system of creativity that transcends conventional wisdom. We admire Mr. Pang's courage and perseverance.

The book "On Creativity" lays a solid theoretical foundation for its philosophical system by providing a highly original definition of "creativity." According to Mr. Pang Jin, creativity is "the activity of a creative object participating in and releasing and exerting creative efficacy, completing the creative process, and thereby producing new creative objects." What is novel about this definition is that it expands creativity to include the entire world, including both humans and non-human non-living entities. This definition gives creativity philosophical ontological significance, making it a unique system of creativity theory: not only is creativity an essential characteristic of human nature, but the world itself is inherently creative. Humans participate in creativity with their unique wisdom, so human nature is characterized by intelligent creativity. The creative wisdom of humans is only a part of the world's

creativity, as non-intelligent and non-living entities also participate in and release and exert creative efficacy in their own unique ways. Everything in the universe is a creative object and also participates in creativity; the world not only originates from creative objects with creativity as their essential feature, but also originates from creativity itself. All things in the universe are always in a state of creativity, so the universe is eternal because of creativity. The author's expansion of the scope of "creativity" is the breakthrough point of his theory, making "creativity" more novel, rich, and close to the essence of creativity in terms of its connotations. Once a theory that was already stagnant finds a breakthrough, it gains the momentum of a surging river.

The proposition that "the world's essence is creation" easily brings to mind the ancient Chinese philosophical concept of harmony between heaven and man. The Book of Changes states that humans should "harmonize their virtues with those of the heavens and the earth, match their brightness with that of the sun and moon, and accord with the order of the four seasons." From the perspective of creative theory, this can also be understood as the heavens and earth creating the natural world necessary for human survival, the sun and moon creating light, and human beings adapting to and harmonizing with nature, which is also a form of creation. Humans adapt to the environment through this creative process, and the environment becomes more and more suitable to meet human needs, forming a contradictory unity between heaven and man. Zhang Zai, a scholar from the Song Dynasty, proposed the idea that "nature is the source of all things," and said that "the body is constrained by heaven and earth, and the nature is led by heaven and earth. The people are my siblings, and all things are my companions." He viewed heaven (the universe) and man (humanity) as a manifestation of the same creative force ("the heavenly change is the transformation of all

things' energy"). The scholar Cheng Hao also believed that "the benevolent see the universe and all things as one body." The universe exists eternally because of creation, and heaven and man are unified in this way, demonstrating the significant meaning of the creative theory proposed by Mr. Pang for the advancement of philosophical issues.

What's important is that the author has established a new, highly three-dimensional system of creative theory with a broad perspective, exploring the laws of creativity from various angles, such as the "law of newness, change, and replacement," "law of addition, subtraction, and combination, "and "law of cultural accumulation," among others. Based on the understanding that all activities in the universe can be seen as creative activities, the author defines the laws of creativity as follows: the created object must go through a creative process, must release and unleash creative potential, and must produce new creations. This is the 1aw understood in philosophy. The author then carefully comprehensively examines the state of creativity, the process and trajectory of creativity, the energy and power of creativity, the quality, degree, and value index of creativity from multiple angles such as "the state of creativity, " "the process of creativity, " "the efficiency of creativity, "and "the value judgment of creativity." Many of these concepts are first proposed by the author, and many of the ideas are novel and surprising, such as "the state of creativity is the most basic and common way of existence for everything in the world, " and "creative power is the release and unleashing of creative potential. "These propositions are full of profound philosophical implications. The author's meticulous analysis, concise language, and extensive research make this book a testament to the author's painstaking philosophical creation. The purpose of the author in writing "On Creativity" is to help people "view the world from a different

perspective" and to show that humans came to this world as creative beings.

"Human nature, mission, purpose, and everything else depend on creativity."

Without creativity, there is no world, no humanity, and nothing at all.

In summary, only by understanding the world and recognizing it from the perspective of creativity can we live "more in line with human creative nature."

If you want to pursue excellence, if you want your life to shine, if you want to stand out from the crowd, if you want to achieve unexpected success, then I suggest you read "The Theory of Creation". Perhaps you will gain a strong passion for creation from it!

(Originally published in the "Sanqin Evening News" on April 4, 1994; "Art World" magazine, issue 5, 1995.)

(Liu Xuezhi is a renowned philosopher, professor, and doctoral supervisor at the School of Philosophy and Government at Shaanxi Normal University. He is also the Vice President of the Chinese Confucius Society, a director of the International Confucian Association, an academic committee member of the Chinese Confucius Foundation, the honorary president of the Shaanxi Confucius Society, the vice president of the Shaanxi Philosophical Society, and the president of the Shaanxi Association for the Study of Guanxue and Shixue. He has authored many books, including "The Course of Chinese Philosophy," "Interpretation of Confucianism and Taoism," "Confucianism, Taoism, and Buddhism and the Spirit of Chinese Civilization," and "The History of Guanxue Thought.")

# "Epilogue to Volume One of Pang Jin's Collected Works: The Theory of Creation - Chinese and English Editions."

"The Theory of Creation was written in 1991. After its publication by Hong Kong New Century Publishing House in 1993, renowned literary critic Professor Chang Guangyuan and distinguished philosopher Professor Liu Xuezhi wrote and published insightful reviews of the book in 1994. Here, I would like to express my sincere gratitude to these two esteemed gentlemen for their invaluable contributions!"

In 2016, I bid farewell to my position as a deputy editor of the newspaper's supplement. After retirement, with relatively ample time on my hands, I contemplated organizing and compiling the writings I had accumulated over several decades into a collection. Consequently, "The Theory of Creation," which was written thirty years ago, found its place as the first volume of the anthology.

Before my retirement, due to my family's decision to work and live in Canada, I had the opportunity to visit Canada every year for several years. During this time, through a fortuitous encounter, I had the pleasure of meeting Mr. Long Muhua, who worked for a Chinese media outlet in Toronto. Mr. Long became aware of my research and writing endeavors and subsequently wrote an interview article about me titled "Pang Jin: The Leading Scholar in Dragon and Phoenix Cultural Studies." It was published in the May 7, 2009 edition of the "Xinbao" newspaper.

In November 2010, Mr. Long founded Haihui Publishing House in Canada and invited me to serve as the deputy chief editor. To celebrate this

occasion, I specially composed an embedded name poem titled "Congratulations on the Opening of Haihui Publishing House." The poem goes as follows: "The vast sea embraces a hundred rivers, A wise heart transforms into a voyage vessel. Setting sail with favorable winds at the helm, Navigating a path to realms beyond the heavens."

In August 2011, Mr. Long and I, along with several colleagues who shared a passion for dragon culture, initiated and established the Dragon and Phoenix International Federation in Toronto. In the same year, I served as the chief editor for the compilation of the "Flying Dragon Blessings—Proceedings of the 2011 Guizhou Yuqing Dragon Culture and Ethnic Unity Forum" (published by Chongqing Publishing House in 2012). We extended a special invitation to Mr. Long to contribute an article titled "Dragon Culture in Canada" and recommended his attendance at the forum, transcending the distance.

After assuming the role of deputy chief editor at Haihui Publishing House, I participated in the editing and review process of several books published by the company. I also wrote prefaces for the following publications: "108 Heroes of Toronto," "Whispers of Maple Country," "Whispers of Maple Country 2," "The Flowing Sound of Heart River," and "Love in Canadian Dollars." Additionally, my own collection of poetry and verse, "Dragon Sentiments and Phoenix Melodies: Selected Poems by Pang Jin," was published by the same company in 2015.

Since there has been such a friendly collaboration with Haihui Publishing House and Mr. Long Muhua, it would be fitting for the "Pang Jin Collected Works" to be published by Haihui Publishing House, now renamed as the Canada Xian-Ontario Publishing House. Mr. Long informed me that the name change to "Xian-Ontario" was primarily due to the publishing house being located in the western part of Ontario Province in Canada.

Interestingly, "Xian-Ontario" contains the characters "Xian," which represents my hometown, and "Ontario," which has two interpretations. The first is "roughly" or "approximately," while the second is "grand strategy" or "far-reaching plans." The notion of "grand strategy" gives a sense of excellence.

"The Theory of Creation" has remained valuable to readers even after several decades since its initial release. With the emergence of the powerful ChatGPT chatbot program, I thought of using it for the translation and creating a bilingual version of "The Theory of Creation" in Chinese and English. ChatGPT proved to be remarkable, as it completed the translation of the entire book in less than a week. The book, which was originally over 170,000 words, has now expanded to over 470,000 words. This is clearly a result that aligns with the ideas in my "Theory of Creation," showcasing the dynamics of novelty, variation, and combination.

With the advancement of the internet, digital science, and the widespread use of smartphones, e-reading has become a trend. Considering this, for the new edition of "The Theory of Creation," I plan to adopt a combination of electronic and printed formats.

I would like to express my gratitude to the Canadian Xi'an Ontario Publishing House and Mr. Long Muhua!

Wishing all the friends who are fortunate enough to encounter this book the best!

Pang Jin

June 28, 2023, at the Maple Palace in Canada