

技术、环境与人 Technology, Environment and Human Being



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摘要

过去，我们认为技术是被动的、中性的，只是人类用来达成自我目的的工具。但现在，我们发现技术本身具有某种自主性和能动性。通过技术，人和环境始终处在一种动态的关联之中。技术能动性意味着设计者、技术创作者都无法确切地预知新的技术会带来哪些后果，技术在今天具备强大的引领性的力量。

关键词

技术；环境；人；能动性；动态关联

Abstract

We used to believe that technologies were passive and neutral tools for people to achieve their goals. But now we start to realize that technologies have certain autonomy and dynamism. Technology has created the dynamic association of humans and the environment. With the progress of technology, neither designers nor inventors would be able to accurately predict the consequences of new technology. That is why technology today is a strong leading force.

Key words

Technology; Environment; Human Being; Dynamism; Dynamic Association

许多技术是为了人类生活的舒适和方便而诞生的，但也导致了环境污染，您是如何从哲学的角度看这个问题的？

吴国盛（以下简称吴）：过去我们认为技术是被动的、中性的，只是人类用来达成自我目的的工具。但现在，我们发现技术本身具有某种自主性和能动性。在前工业化时期，技术的这种反作用似乎不太明显，但工业化以后，技术对人和环境的改造作用极为显著。例如“守时”的观念就是技术改造的结果，钟表的技术逻辑促使人产生了守时的观念。

技术实际上一直在发挥它的能动性，对人和环境同时进行了重新塑造。在古代，“愚公移山”是一个神话，那时人们不认为人类的活动能够改变自然界的本质，人类只能模仿自然、追随自然。然而今天，人类的技术甚至已经成为一种地质力量，能够对自然环境进行极大的改造，通过技术，人和环境始终处在一种动态的关联之中。

您如何理解人与自然、建筑以及环境之间的关系？

吴：以作为自然环境的荒野为例，它并不是指单纯的自然，而是按照艺术家的眼光被设计出来的，但是这种设计未必能实

现保护自然的初衷。美国人关于自然保护区的荒野设计，目的是希望人们到荒野中去放松自己，摆脱现代工业文明造成的压抑。但是问题在于荒野设计仍然是人为设计，其在多大程度上能够真正地释放工业文明对人造成的压抑，实现人与自然的和谐共处，仍然是一个问题。因此，关于自然的设计，肯定需要同时考虑这三者，通过技术的方式实现人类心中的自然。

再以“空间”的创造为例。数学中的空间是抽象的空间，而“空间创造”中的空间是指人类生活的空间。过去，我们认为自然科学意义上的空间是基本的、基础的，人生活的空间建立在它的基础之上。其实应该反过来。人总是先生活在一个地方，基于某种生活经验再来展开我们的认识。生活空间的创造才是最原始的创造，数学空间则是第二位的。从希腊人的广场和剧场所反映的民主政治——公共空间中有着清晰的公共属性，到巴黎咖啡馆作为一种现代性的扩展方式，都属于原始的空间。咖啡馆不仅仅是喝咖啡的场所，也是艺术家的沙龙，甚至是现代科学知识的诞生地。这个意义上的空间是被创造出来的，这种空间创造过程与那个时代的政治文化条件高度关联。

设计应该可以说是一种技术和艺术的结合，您怎么看待设计对于当代生活的意义？

There is often a tension between technology, the environment and us. A lot of technologies were born in order to create a more comfortable and convenient life for people, but they have also brought us environmental problems such as pollution. How do you think of this issue from a philosophical point of view?

Guosheng WU (WU hereafter): We used to believe that technologies were passive and neutral tools for people to achieve their goals. But now we start to realize that technologies have certain autonomy and dynamism. The consequences of technology did not seem obvious until industrialization. It has dramatically changed the environment and modern life since then. An example is the idea of “Punctuality” was created along with the invention of clocks.

In fact, technology has always been showing its dynamism. It has reshaped both the life of human beings and the environment. “The Fool Moves Mountain” is only an ancient myth. In the old days, people did not think that their activities could change the fundamentals of the nature. They thought they could only imitate the nature and follow its lead. Today, however, human technology has even become a geological force, which has dramatically reshaped the natural world. Technology has created dynamic association of human beings and the environment.

How do you understand the relationship between man and nature, architecture and environment?

WU: For example, the wilderness of natural environment does not really mean pure nature. It is a designed nature created by artists. The design may not be able to achieve our original goal of protecting the nature. The national parks in the United States were created in order that people can relax in the wilderness and escape the oppression of modern industrial civilization. However, the problem is that the landscape design is still a kind of artificial design. It is questionable that to what extent it can release the oppression of industrial civilization to human beings and achieve the harmony of man and nature. Hence the design of nature is in fact a realization of the human’s image on nature through the use of technology and consideration of the three together.

Taking the creation of “space” as another example, in mathematics, “space” is abstract. The “space” that we are talking

about refers to the living space of humans. We used to think that the space in natural science is the original space and the living space is built upon it. As a matter of fact, it should be the reverse. Human beings usually expand our acknowledgement of a place with the accumulation of certain life experiences after inhabiting there. The living space should be built first and the mathematical space comes in later. The Greek plazas (Agora) and theaters reflected their democratic politics and distinct public property of public spaces, and the Paris cafes function as an expression of modernity’s extension. They both belong to the category of original spaces. Coffee shop is not only a place for drinking coffee, but also a salon for artists. It may even be the birthplace of modern science. In this sense, a space is built, and its process is highly related to the political and cultural conditions of that era.

Design can be described as a combination of technology and art. How do you consider the meaning of design to our contemporary life?

WU: Taking cell phones for example, we can barely tell the boundary between art and technology. From the beginning, cell phones started with a keyboard as their input system, which later evolved into a touch screen. Apparently that does not only involve design, but also embodies the human nature. The action of “moving fingers” is almost coincident with the human will. Operating with fingers is actually a typical operation of human will. Steve Jobs had a very good point on this. He believed this was the dynamism of technology. With that said, neither designers nor inventors would be able to accurately predict the consequences of new technology. That is why technology today has a strong leading force.

The purpose of the Bauhaus Movement in the early 20th century was to allow most people to live in a house. That is why the residential designs of that era were relatively simple and low-cost. Later on, most cities began to compete in copying this building style driven by commercial interests. This resulted in the increasing homogeneous identity between different cities. What do you think of the impact of this particular technology on cities?

WU: Squares and circles are the two most common forms in modern architecture. These styles fit the logic of modern technology

吴：我们现在几乎已经无法区别艺术和技术的界限。以手机为例，一开始采用键盘的形式，后来演变为触摸屏，这其中显然包含设计的概念，但其中也有人性的根源。“动动手指”这个动作与人的意志几乎是一致的。用手指来操作，实际上是一种人类意志操作的典型。史蒂夫·乔布斯的观点非常好，他认为这是技术能动性的体现，技术能动性意味着设计者和技术创作者都无法确切地预知新的技术会带来哪些后果，这也是为什么技术在今天具备强大的引领性力量的原因。

20世纪初的包豪斯运动，是为了让大多数人都住上房子，因此住宅建筑设计得比较简洁且造价低廉。后来受到商业利益的驱动，大部分的城市开始竞相模仿这种建造方式，导致很多城市具有越来越高的相似性。您如何看待这种技术对城市的影响？

吴：我们可以看到，现代性建筑中方与圆的形式是被运用得最广泛的。这种风格满足现代技术追求高效的逻辑。一个城市的现代化程度，从其建筑的几何化程度就可以看出来。包豪斯运动在欧洲只是其中的一个代表，为了尽快建造出廉价的房屋以供大多数人居住，条件决定了风格的出现。在一个物质贫乏的时代，一味追求独特的建筑风格，恐怕是一种更大的“恶”。所以对这个问题而言，单纯的价值判断并不具备意义。

现代技术逻辑的单一性问题在于它是不是作为唯一的方案在进行。现在中国的城市状况之所以很糟糕，与现代逻辑的单一性在蛮横地起作用大有关系。在中国还存在这样一个问题，中国文化强调大一统，不鼓励多样性的生长，这样的思维惯性或文化习惯也体现在今天的工业化时代中。

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此关注他的思想？

吴：芒福德其实是一个多面手。除城市建筑之外，他所专注的领域还包括技术史。他对技术有独到的看法，认为技术不是一个被动的工具，而是人类表达自己、成就自己的一个必要的中介——人类通过技术变成人。芒福德在《技术与文明》一书中，主要研究了原始技术，并扩展了技术的含义。他并不仅仅把技术当成工具，而是从工具扩展为器具。不仅如此，他还强调技术的关键不是制造工具，而是自我成就，心灵是人类之所以成为人类的关键。他认为，人类第一次使用金属不是用来制作刀和犁，而是用来制作装饰用的项链和指环；人类最早驯化的植物，不是大麦、小麦或玉米，而是鲜花，这是非常惊人

的。因此他认为技术根本就不是外部的工具，而完全是人类内心自我驯化的一种表现。

他对现代技术的反思也很深刻，例如他认为航天飞机与金字塔的性质是相同的，其目标都是走向死亡。而且它们都需要庞大的技术支撑，需要很多人共同完成，需要一个集团社会来组织。所以芒福德认为，其背后真正的含义是一个社会组织。这个社会组织是僵化的、反生命的、无机的，但是有机社会的目标是要释放每个人的心灵，让每个人获得自由，而技术却是在抹杀个人，抹杀自我意识的觉醒。这些思想都具有相当高的哲学深度。

技术根本就不是外部的工具，而完全是人类内心自我驯化的一种表现。

随着技术的发展，人类通过很多方法，包括征服、改造、保护和设计，已经成为环境的一部分，那您认为当今人与自然的关系，以及人类自身生活的前景是怎样的？

吴：生态主义下的景观设计，其行业基础应该与其他生态主义的基础相同。例如保护自然，为什么保护自然？保护它的什么？这些都是问题。我认为保护自然和征服自然的性质是一样的，如果人是从属于自然的，人类怎么可能保护自然？实际上人类还是保护自己，保护自己的生存方式。但人类至今还没有弄清楚，走上工业文明的道路究竟意味着什么？我们为什么要实现工业化、全球化？所以环境保护的哲学基础是不牢靠的。按照普遍的理解，为了保护生态，就不应该推进全球化，因为小规模、封闭的环境才能保护多样性。与此矛盾的是，工业化的特点就是标准化、流水化的生产。工业化确实提高了生产效率，改善了大多数人的生活条件，福特汽车就是一个典型的工业模式，它将汽车由奢侈品变成了日用品。应该怎么评价福特的功与过呢？福特让全体人民都享受到汽车的自由和便捷，但却带来了污染、能源消耗和单一化。人类的生活比较复杂，所以需要结合多种条件来考量什么样的生活模式才是合适的。因地制宜，“宜”比正确更重要。不是说某一种生活方式是最理想的，大家都去模仿，而是对于此时此地的你来说，什么样的生活方式是最适宜的，才最关键。LAF

which uses high-efficiency as a major priority. The geometry of these buildings tell us about the city's modernity. The Bauhaus Movement in Europe was just one of the tendencies to create as many low-cost houses as possible for most people. All these situations determined its external style. In that era of scarcity, it would be even seen as a greater "evil" to go after a unique building style. So it is meaningless to make judgments simply on its values in this circumstance.

The problem of the homogeneousness of the logic of modern technology is determined by whether or not it is working as the single solution. The main reason for the very bad situations in China's cities is the homogeneousness of the modern logic. Another issue we have here is that our culture encourages uniformity and discourages diversity.

Lewis Mumford is well known as an urban historian. As a philosopher, why are you so interested in his thoughts?

WU: Mumford was actually a generalist. Urban architecture was only one of the areas that Mumford was devoted to. So was the history of technology. He had a very unique view on technology. He believed that technology was not a passive tool. In fact, it was a necessary medium for people to express themselves and make themselves. The reason why we become "human" is that we can take advantage of technology. In his book *Technics and Civilization*, Mumford mainly studied the original technics and he expanded the definition of "technology". He saw technologies not only as tools, but also devices. He also stressed that the key to technology was not making tools, but allowing humans be humans. Our souls were the key to being humans. He thought it was very striking that the first time man used metal was to make decorative necklaces and rings, instead of knives or ploughs and the first plant cultivated by man was flower, not barley, wheat or corn. He believed that technology was not an external tool, but an expression of self-cultivation in the human heart.

He also reflected profoundly on modern technology. For example, he believed that the nature of spacecraft was the same with the pyramids. Death was the end to them both. And they were both supported by mega technologies and required a lot of people to work together and a social group to organize. Mumford believed that the real meaning behind them was a social organization. A

social organization was rigid, anti-life and inorganic. But the goal of our organic community was to release the soul of each person and allow personal freedom. Technology, on the contrary, obliterated individuals and the awakening of self-consciousness. All these ideas have considerable philosophical depth.

With the development of technology, man has become a part of the environment through many ways, including conquering, transforming, protecting and designing. What is your perspective on our current relationship with nature? What do you think our future life would be like?

WU: The basis of ecological landscape design should be the same with the basis of other ecological design. Taking the protection of the nature for example, why should we protect the nature? Protect it from what? These all are the questions we need to answer. I think the idea of protecting the nature is the same with the idea of conquering the nature. If man belongs to the nature, in what ways could we protect the nature? In fact, humans are just protecting themselves, protecting their own ways of survival. But we are still not clear about the meaning of industrial civilization, industrialization and globalization. The philosophical foundation of environmental protection is not reliable. In theory, we should not encourage globalization for the sake of environmental protection. Only small-scale and enclosed environment can guarantee diversity. Paradoxically, industrialization is characterized by its standardized mass production. Industrialization has indeed improved productivity and the living conditions of most people. Ford is such a typical industrial example of this. It has changed the role of a car from a luxury to a daily necessity. How should we evaluate the merits and demerits of Ford? It indeed allows all the people to enjoy the freedom and convenience, but it has also caused pollution, energy consumption, and homogeneousness. Human life is complicated. In order to find out what kind of lifestyle is the most appropriate, we need to consider the various conditions in a comprehensive way. Action should accord to local conditions. Being appropriate is always more important than being correct. It is not saying that a certain kind of lifestyle is the best and we should all follow it. The key is to find out what kind of lifestyle is the most appropriate for you being here right now. **LAF**