



时间 2019年4月1日 **地点** 北京市清华园 **拍摄** 俞孔坚

早春的清华园内，在一位冥思苦想的学者雕塑背后，两位园林工人正驾驶着硕大的挖掘机给几棵山楂树松土。这位清华园中的智者也许在问：这是人类的胜利还是失败？

Date April 1, 2019 **Location** Tsinghua Garden, Beijing **Photographer** Yu Kongjian

In the early spring of Tsinghua Garden, behind the statue of a scholar, two landscape workers were driving excavators to loosen the soil for hawthorn trees. The static scholar may be wondering: is this a victory or failure for our creative future?

警惕智能工具的陷阱

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摘要

接连发生的波音飞机坠毁事件引发了笔者对于智能工具的思考。笔者认为，智能工具的作用是为人类服务并帮助人类解决问题，而非给人类的生活和工作带来负担。基于自身调研、绘图、查阅资料等实践经历，笔者对于将智能工具应用于人类活动，特别是景观设计领域持乐观态度，并认为智能工具在获取更准确的数据的同时，可为设计师争取更多时间去做更具创造力的工作，促使其实现作为设计师的价值。笔者呼吁应当警惕智能工具的陷阱，不应让智能工具替代人类的创造行为，以避免使人类生活变得无趣、失去自由并充满风险。

关键词

智能工具；景观设计；价值；创造力

① 来自唐纳德·J·特朗普于2019年3月12日发布的Twitter内容。

2019年3月10日，埃塞俄比亚航空公司的一架波音737MAX系列客机在起飞6分钟后坠毁，机上157人全部遇难。而就在此前不久的2018年10月29日，印度尼西亚狮子航空公司的一架同机型飞机以相似方式坠毁，导致机上189人全部丧生。事故调查组怀疑这两起坠机事故均源于该机型飞机中机动特性增强系统（MCAS）的失控。^[1]美国总统唐纳德·J·特朗普在责令波音737MAX飞机停飞时，一连发布两条推特抱怨道：“飞机现在变得越来越复杂，飞行员已经无法控制它们，也许只有麻省理工学院的计算机科学家才知道该怎么操作……飞机的复杂性会导致危险发生。频繁的更新换代使得飞机越来越昂贵，但在性能上却鲜有提升……我只想要一架能够被专业飞行员迅速掌控的飞机！”^①

我无法评价飞机的智能化水平与安全性是否负相关，但谈及将智能工具应用于我们的日常生活和工作（包括景观设计），我有以下几点认识可以作为常识提出：第一，人工智能是人类大脑和智力的延伸，它的作用是为人类服务并帮助人类解决问题，而非带来智力上的负担。人类没有必要让智能机器替代完成所有的体力和脑力劳动，诸如吃饭、品茶和写诗，因为那是人类存在的乐趣和价值。同样，对于建筑和景观设计工作而言，除了数据收集处理、繁琐的计算，以及重复的劳动之外，还有思考的乐趣和美的创造，后两者绝对不应该交给智能工具去完成，否则，人类的存在就失去了意义。第二，失去人类控制的或过于复杂而难以被人操作的智能工具会给人类的生活和工作带来负担，甚至危及生命安全，正如飞行员无法控制的高智能飞机可能会使乘客命悬一线。所以，在创造出绝对可靠的智能工具之前，人类绝不能放弃对于工具的主动控制权。

除此以外，我对于将智能工具应用于人类活动，特别是景观设计领域，仍然充满热情。事实上，就在我坐下来写这篇短文之前，我手机上的智能徒步应用软件已经详细记录了今天我与学生一起考察安徽省黄山市西溪南村每条街巷的轨迹，配合链接在一起的数字照片，我可以准确记录每一座建筑物和每一处景观的信息。同时，学生们已经利用无人机和激光测量工具实测了他们即将进行设计的几处场地，并连夜完成了数据的数字化以及可视化表达。现在他们已经可以上网查询第二天将要考察的丰乐河流域的水利历史和人文故事。而在我的学生时代，要完成场地实测和制图，需要冒着生命危险翻墙上房进行测量，再用方格纸连续画上几天几夜；而要查阅丰乐河这样的地方资料，恐怕需要跑几天图书馆，翻阅古籍档案才能有所收获。如此种种，智能工具无疑让我们在获取更准确的数据的同时，有更多时间去做那些更具创造力和更加有趣的工作，从而实现作为设计师的价值。

智能工具在本质上与石斧一样，是人类创造和使用的工具。而试图让智能工具来替代所有人类创造行为的设想，本质上是对人类价值的否定，其将使人类生活变得无趣、失去自由并充满风险——这便是智能工具最危险的陷阱。

本文引用格式 / Please cite this article as:

Yu, K. J. (2019). To Be Alarmed by the Trap of Intelligence Tools. Landscape Architecture Frontiers, 7(2), 4-7.
<https://doi.org/10.15302/J-LAF-20190201>

TO BE ALARMED BY THE TRAP OF INTELLIGENCE TOOLS

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ABSTRACT

Boeing aircraft crashes aroused the author’s thoughts on intelligence tools. He believes that they should be used to help humans solve problems, rather than put a burden on human life and work. From his own experience of measuring sites, drawing maps, and collecting information, the author is optimistic about the use of intelligence tools in human activities, especially in the field of landscape architecture — intelligence tools have undoubtedly freed designers’ hands for more creative work while acquiring more accurate data, helping humans realize the value of being designers. The author appeals the public to be alarmed by the trap of intelligence tools, and humans’ creative behaviors should not be replaced with such tools. Only in this way can we avoid being lost in the age of artificial intelligence.

KEY WORDS

Intelligence Tools; Landscape Architecture; Value; Creativity

① From Donald J. Trump’s tweets on March 12, 2019.

On March 10, 2019, an Ethiopian Airlines’ Boeing 737 MAX aircraft crashed six minutes after take-off, killing all 157 people on board. On October 29, 2018, a Lion Air plane of the same model crashed in a similar way, killing all 189 people on board. Investigation teams for both suspected that a loss of control by the Maneuver Characteristics Augmentation System (MCAS) on the 737 MAX aircrafts caused these crashes.^[1] In announcing the decision to ground all Boeing 737 MAX aircrafts in the United States, President Donald J. Trump tweeted: “Airplanes are becoming far too complex to fly. Pilots are no longer needed, but rather computer scientists from MIT... and the complexity creates danger. All of this for great cost yet very little gain... I want great flying professionals that are allowed to easily and quickly take control of a plane!”^②

I am not able to judge whether a negative correlation exists between machine intelligence and aircraft safety. However, when it comes to applying new tools to daily life and work, including landscape architecture, I do have several thoughts. First, artificial intelligence is an extension of human intelligence. It should be used to help us solve problems rather than to bring intellectual burdens. There is no need for humans to ask intelligent machines to help on all physical and mental work, such as eating, tea-tasting, and poetry writing, which are the fun and add value to mankind. Similarly, architecture and landscape design work consisting of not only repetitive work such as data collection and calculations, but also thinking and beauty creating, should never be handed over to the intelligence tools. Otherwise, what meaning would have been left for the existence of mankind? Second, when the intelligence tools are out of control or too complex and difficult to use, they can potentially put a burden on human life and work, or even threaten human lives. A perfect example was the aircraft with high intelligence that pilots could not control, eventually putting passengers’ lives in danger. Therefore, humans should not give up active control over the tools before reliable intelligence tools are created.

I am passionate about the use of intelligence tools in human activities, especially in the field of landscape architecture. Before sitting down to write this essay, I noticed that my smartphone had tracked the details of my walk through the alleys of Xixinan Village in Huangshan City, Anhui Province. Matched with the digital photos, I am able to accurately record the information of each building and landscape. At the same time, my students have been using drones and laser tools to measure several sites they are going to design, and have completed the digitization and visualization of the data overnight. Now they are preparing for a site visit to the Fengle River Basin by accessing digital data on the hydrologic history and stories. When I was a student, I had to climb roofs for site measurements, and then spent days and nights drawing on grid paper to complete maps. For information on local places, I could easily spend a few days looking for ancient books in the library. In short, intelligence tools have undoubtedly freed our hands for more creative and interesting work while acquiring more accurate data, helping us realize the value of being designers.

Intelligence tools are no different from ancient stone axes, both of which are tools created and used by humans. Efforts to replace our creative behaviors with such tools are essentially denying human values, leading to boring lives and risks with a loss of freedom — this is the trap of intelligence tools.

REFERENCE

[1] Pasztor, A., & Tangel, A. (2019, March 29). Investigators Believe Boeing 737 MAX Stall-Prevention Feature Activated in Ethiopian Crash. The Wall Street Journal. Retrieved from <https://www.wsj.com/articles/investigators-believe-737-max-stall-prevention-feature-activated-in-ethiopian-crash-11553836204>