Alice Wang

王凝慧

Not Naming the Thing Frees It

By Christina Catherine Martinez

不为某物命名是一种解放

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In the 1970s, the Denali National Forest put a moratorium on naming individual mountains. Since 1917, its tallest peak had been named, by order of the federal government, after the 25th US President William McKinley. For nearly fifty years the Alaska legislature clashed with the federal government over the name. Finally, in 2015, 44th US President Barack Obama reversed the decision, returning the peak to its original moniker, a Koyukon word meaning "the high one," and more of a descriptor than a title. This story came up during one of my last studio visits with Alice in California after I, having discussed much of her practice, noted that there are no titles for her exhibitions nor the individual works within them. For Alice, this declination is less an act of evasion than of generosity. Note that nothing about the topology, the geography, or the beauty of the mountain itself was affected by the ongoing bureaucratic struggle over its title. Also note that the politics of nomenclature can often be a distraction from the material at hand.

1970年代,迪纳利国家森林(Denali National Forest) 停止了对单个山峰的命名。自1917年起,在 联邦政府的命令下,它的最高峰一直以第25任美国 总统威廉·麦金利(William McKinley)的名字命 名。在近五十年的时间里,阿拉斯加州的立法机关 与联邦政府就这一山峰的命名产生分歧。最终,在 2015年,第44任美国总统巴拉克·奥巴马(Barack Obama)推翻了这一决定,将山峰恢复到最初的名 -个科尤坎(Koyukon)词语,意思是"高的 那个",这更像是一个描述而不是一个名字。 这个故事的契机是上一次我拜访王凝慧位于加州的 工作室时,在就她的创作谈论许久后,我注意到她 的展览和作品都没有标题。对她来说,不命名与其 说是一种回避,不如说是一种慷慨。毕竟山峰本身 的地形地貌和美感与围绕其名字展开的官僚拉锯战 毫无干系。并且,关于命名的权力斗争往往会成为 对于被命名者的干扰。

"Not naming the thing frees it," she told me.

The "thing" in Alice's practice is always shifting. The first work of hers I ever encountered was a giant plinth made of beeswax, plugged near the top by a hole lined in thick silver—a Dyson air fan, I would later learn—like a giant ear gauge in a larger-thanlife lobe. Among the many other wild and helpless associations my mind raced to project onto the simple fact of its presence were: a thimble dropped into a vat of cream, something hard stuck inside something less so. It had the chic aesthetic of what art historian Michael Fried dubbed "literalism," a genre of uberminimal sculpture that is meant to make an object's materiality seem self-evident, even inevitable, by dint of having no ostensible form. These objects are scattered all over the 20th century, and their formlessness tended to take on the forms of geometry. The tricky thing, the slippery concept that literalist objects can't seem to find solid footing on, is the idea that material itself is somehow separate from both the world of nature and the world of culture this split is a very Western idea. It's no surprise that minimalist sculpture is, too. Nor is the fact that Fried wrestled with these ideas in his writing in the decade just before the good people decided to rescue their mountain from its own name. What writers often do to sculpture is attempt to wrangle a synesthetic experience into a literary one.

The objects scattered across this and all of Alice's exhibitions consist of materials that she works with in order to free them from the kinds of meaning that get imposed during the artistic process. Her approach instead is heavily influenced by scientific processes that allow the complexities of the material to assert themselves. Beeswax, for example, consists of almost 300 compounds, including long-chain alkanes, acids, esters, polymers, and hydrocarbons. It emits a current that bees seem to pick up on, which the Dyson fan worked to circulate. Several bees made convivial loops around the sculpture, creating a mini ecosystem. The thing wasn't insisting on its materiality so much as questioning it. It's a question that animates much of Alice Wang's practice: where does a sculpture end?

Her work usually beings with travel, often to locales that lay bare the scale of the Earth and our frail bodies in proximity to it. Alaska's Denali National Park, the Tibetan Plateau, the Arctic Circle ... each site constitutes some extremity of the Earth: its age, its height, its depth, its temperatures. Alice and I first met in the Joshua Tree Desert, a place she returns to often as a site of experimentation and collaboration. The video documentation of these travels gets folded into the constellation of her practice. The films never deign to narrate or explain, but leverage the alchemy of editing to create new energies from juxtaposed footage of visits to sites like SpaceX in California, Biosphere 2 in Arizona, and Tianyan (also known as the Five-hundred meter Aperture Spherical Telescope) in Guizhou. All of them extreme

experiments in pushing the limits of human mastery over the Earth, and beyond. The films add another dimension to the questions posed by her sculptures. She also experiments with silver gelatin prints, using old-fashioned analog photographic processes to create images that evoke talismans from the future.

"Sculpture de-centers film and film de-centers sculpture," she told me.

The paradox of her work is that it does something both older than classicism and newer than minimalism. Ancient and organic materials are simultaneously hemmed in by high-concept geometries while also spilling over into new contexts. The physical limits of her work often exceed the visible limits. I sensed this upon meeting another one of her sculptures, a collection of fossil-like slabs of clay arranged on the floor resembling mud-cracked earth and topped with sleek vessels holding tiny plants while humming water vapor out into the ether. There is an experimental nature to her films that incorporates the aesthetics of scientific documentation while eschewing the restraints of storytelling. The ongoing episodic film series *Pyramids and* Parabolas, begun in 2017 combines firsthand footage of Mayan pyramids and radio antennas (the titular parabolas) from The Very Large Array, a radio astronomy observatory in New Mexico, with scenes lifted from the 1997 feature film Contact. The film doesn't tell a story so much as collapse storytelling with ancient myth and scientific progress, cheekily suggesting that geometry itself, that oldest branch of mathematics and minimalism's favorite source of forms, is another mere human invention, an attempt to escape the material limits of our planet—an object we might also think of as a sculpture, its limits fair game for questioning. This additive nature of her sculptural practice is diametrically opposed to the classical impetus to violently tame materials into representational shapes.

Never slavishly bound to a studio, Alice Wang takes freely from the adventurous and exploratory disciplines of various sciences and ancient practices. The results are at once indexical and mysterious. The artistry lies in her straightforward use of scientific terms, language's most base units of reference without meaning, to avoid naming the things that constitute what we call Earth.

Our last studio visit in the desert coincided with one of the closing Geminid meteor showers of 2020. The Tianyan Telescope had just opened to international scientists in January, but Alice had already visited the massive geodesic bowl, among other far-flung sites of inquiry into the mysteries of outer space, and was working on building her own radio telescope out on the mud-cracked plains of the Joshua Tree Desert.

"What are you going to do with the telescope?" I asked.

"Listen to the sounds of the Sun and Jupiter" she told me.

"不为某物命名是一种解放," 她告诉我。

王凝慧创作中的那个"物"总是在变化。我看到的她的 第一件作品是一个由蜂蜡制成的巨型柱状物,顶部有一 个用厚厚的银衬砌的洞——我后来得知这是戴森空气风 扇,就像一个巨大耳垂上的耳扩。我的意识迫不及待 地向这件作品投射了无数疯狂而无用的遐想,其中之 一便是:一个掉落在奶油桶里的顶针,一个坚硬的物体 困在柔软的物质里。它具有艺术史学家迈克尔·弗里德 (Michael Fried) 所称的实在主义(literalism)的优 雅美感——一种高度极简的雕塑类型,因不具备表面上 的形式 (form) 而使物体的物质性显得不证自明, 甚至 不可回避。这样的物体在二十世纪随处可见,它们的" 无形式"往往体现为几何形状。棘手的是,出于某些原 因,物质本身与自然世界和文化世界皆是分离的─ 种分离是非常西方的观念。在这种观念中,实在主义物 体似乎无法找到坚实的根基。自然, 极简主义雕塑亦是 如此。所以、在好心人决定把他们的山峰从它自己的命 名中解救出来之前的十年里,弗里德在其写作中曾奋力 应对这种观念也就不足为奇了。作家们在就雕塑进行写 作时,通常所做的是试图将一种通感体验论证为一种文 学体验。

在王凝慧的本次及所有展览中,她都将物质从那些艺术创造过程中容易强加于物质之上的意义里解放出来。相反,她的创作方式受到科学过程的强烈影响,让物质的复杂性自我表达和主张。例如,蜂蜡由近300种化合物组成,其中包括长链烷烃、酸、酯、聚合物和碳氢化合物。它会释放某种吸引蜜蜂的波,戴森风扇则将这种波在空气中传播。几只蜜蜂围绕雕塑欢快地盘旋飞舞,形成一个小型生态系统。在这个例子里,此"物"并未坚持它的物质性,而是对其提出疑问。这个疑问很大程度上推动着王凝慧的创作:雕塑的终点在哪里?

她的创作通常始于旅行,且目的地往往具有某种特点——在这些地点,地球的尺度大小显露得格外清晰,相形之下我们肉身的脆弱也表露无遗。阿拉斯加的迪纳利国家公园、青藏高原、北极圈……每个地点都构成了地球的某种极端性:它的年龄、深度和温度等。我和王凝慧第一次见面是在约书亚树(Joshua Tree)的沙漠,这里是她进行实验和合作项目的场所。旅行的视频记录也囊括进了作品之中。这些影片从不屈就于叙述或阐释,而是巧妙地利用剪辑的"炼金术",将她在加州的SpaceX太空探索技术公司、亚利桑那州的生物圈二号(Biosphere 2)、贵州的"天眼"(500米口径球面

射电望远镜)等地拍摄的片段并置,从中凝练出新的能量。这些极限实验都进一步推进了人类对地球和宇宙探索的边界。影片也为王凝慧的雕塑所提出的疑问增添了新的维度。同时,她所创作的明胶银盐相片使用古老的底片处理手法,呈现的影像宛如来自未来的护身符。

她告诉我:"雕塑和影片消除彼此的中心地位。"

她的作品中存在的悖论是,它比古典主义更古老,比极 简主义更新颖。古老和有机的材料被高概念几何同时囊 括其中,然而又各自挣脱溢出,流入新的语境。作品的 尺度时常超出肉眼可见的边界,我在她的另一件作品中 感受到了这一点——散落一地的如化石般的陶土厚片状 似龟裂的大地,上面摆放的圆润的容器盛着小小的植 物、并向空气中喷发着水雾。王凝慧的影片具有实验性 的特质,富有科学档案记录的美学,同时又避免了叙事 的局限性。自2017年起持续创作的系列影片《角锥体与 抛物线》包含玛雅金字塔和新墨西哥州的射电天文观测 站甚大天线阵(Very Large Array)的无线电天线(即 标题中的抛物线)的第一手视频资料,以及1997年的剧 情电影《超时空接触》(Contact)中的片段。《角锥 体与抛物线》并未讲述一个故事, 而是用古老神话和科 学过程来击溃叙事,大胆地暗示几何——这个历史最为 悠久的数学分支、极简主义最为青睐的形式来源,不过 是又一个人类发明,是对于逃离我们所身处之星球的物 质边界的一次尝试。地球本身也可被看作是一个雕塑 其边界可供玩味和质疑。传统的雕塑往往试图将材料粗 暴地驯服为具象的形态,而王凝慧雕塑创作的聚合的特 性则与之截然相反。

她从不将自己束缚在工作室中,而是在各种科学和古老的 实践过程中冒险和探索,所得的结果即明了又神秘。灵妙 的是她对科学术语(语言中最基层的无意义指涉)的直接 使用,这避免了(再次)命名那些构成地球的物质。

我上一次探访她在沙漠中的工作室恰逢2020年的一次 双子座流星雨。当年1月"天眼"射电望远镜开始对国际 范围的科学家开放,但她早在此前就已经造访过这个巨 大的测地线球体,以及许多其他蕴藏着宇宙奥秘的遥远 的地方。彼时她正在约书亚树龟裂的大地上搭建自己的 射电望远镜。

"你打算用望远镜做什么?"我问。

"听太阳和木星的声音。" 她说。

A Kinetic Sculptural Cosmology

By Billy Tang

The etymological origins of sculpture connect its meaning to the action of carving or engraving, suggesting an accrual of form through the paradoxical action of a negation. This contradictory nature exists in the interplay between positive and negative space, visible and invisible transferals of energy, variations between material states, and displacement of boundaries between mind and body, subject and object, cultural and material, as a framework for experiencing a form and how it operates within a space.

This is intertwined with how these dynamics are interrogated and understood, which help determine how a sculpture performs in a space. This is often defined by the artist's ability to balance a triangulation of physical attributes related to gravity, the heft of a given material, and the duration of the sculpture's ability to withhold from entropy or collapse. There is a choreographed quality to the artist's ability to intuit causal relationships and material tendencies that become activated by a sculpture. The capacity of different objects and materials to behave in certain ways can be altered through a sleight of hand. Hence, artists seemingly possess the ability to defy certain physical laws. The lightness or heaviness of the elemental materials used for a sculpture can be manipulated to belie its scale, and may involve folding and bending an abstract form between different dimensions.

雕塑的词源将其含义与雕刻或镌刻的动作联系在一起,暗示着形式(form)乃是通过一种否定的行为而逐渐形成。这种矛盾的特质存在于正负空间的相互作用、可见与不可见的能量转化、物质状态的变化以及精神与肉身、主体与客体、文化与物质之间界限的消解。这成为了体验一种形式以及它如何在空间中运作的框架。

撰文:曾明俊

与其交织的是上述种种相互作用如何被审视和理解, 这有助于决定一个雕塑在空间中如何表现。定义它的 常常是艺术家是否有能力去平衡与重力、给定材料的 重量、雕塑能够抵抗熵和衰败的时长这三者相关的物 理属性之间的三角关系。艺术家凭直觉感知一个雕塑 所能触发的因果关系和物质倾向性的能力富有一种编 舞般设计精巧的特质,仅凭娴熟的手法便可改变各种 物体和材料的表现。因此,艺术家似乎拥有藐视某些 物理定律的能力。雕塑所使用的材质的轻重可以被巧 妙操纵而与其大小形成反差,也或许涉及将抽象的形 式在不同维度之间折叠和扭曲。

为了在甚少被质疑和反思的层面上进一步研究这个拓扑空间,王凝慧探寻我们经验的极限,进而在如何将体积、质量和大小转变为雕塑这一方面推进新的可能性。正是在这种超越人类中心论视角的、以行星为界的理解下,王凝慧认知到随着我们围绕太阳转动,"地球正朝着太阳垂直落下却正好错过它"。对这一事实的着迷驱动着她的创作。

Looking to investigate this topological space further, at a level we seldom question or reflect on, Alice Wang pursues the limits of our experience in order to push forward new possibilities of how to utilize and convert volume, mass, and scale into a sculpture. Beyond an anthropocentric orientation, it is within this planetary-bound understanding where Wang is driven by the fascination and awareness that "the Earth is celestial body plummeting towards the Sun but missing" as we orbit it.

The writer Liu Cixin was likely contemplating a similar question of being as he wove together an advanced alien world shaped and caught between the unique orbital mechanics of three stars moving around each other in space. Amidst this dynamic, an unstable trajectory takes a planet to perilous distances for life from the chaotic suns, causing devasting destruction through either an inferno or a deep freeze, with temporary respites – glimmers of growth and creativity.

Oscillating between stable and chaotic eras, the alien civilization gradually evolved into an advanced culture that borders on survivalism and extremism, their bodies having evolved to compress into a hibernating form to ride out adversity and rehydrate to become reanimated to thrive during the respites.

This circumstantial difference between a stable and destructive trajectory has fascinated Wang, leading her to farflung geographical points around the world to test the veracity of tools and ways of understanding and experiencing the complex topology that exists on our planet and its potential dimensions unknown to us. Pyramids and Parabolas is a moving-image series that infinitely expands and continually builds its own momentum and logic between the films. In Pyramids and Parabolas II, the artist travels from a mountain landscape somewhere in China to a desert where she improvises an observation listening post, to the Arctic Circle where she chases the white light on the horizon as she rides a snowmobile in the snowy void—the closest place possible to perceive the edge of the world. A small part of this adventurism can be explained through Wang's interest in the memoirs of former astronauts. People who work as 'thinking bodies', which for Wang embody a kind of material and perceptual research, whose cognitive and physical adaptions have been shaped by lived experiences representing the closest we have to feelings gained from conditions beyond an Earthcentric viewpoint and into a cosmological dimension—from the impact of circadian rhythms, biological cycles that govern our mental awareness and physiology, to the contrasting extremes of zero-gravity piloting or sleeping in weightlessness in different atmospheres. Her sculptures and films function as a prism for situations that transcend the terrestrial constraints that govern our understanding of the wider universe.

It is interesting to imagine that during the transformation of a material form in our universe, matter never entirely disappears in the process, but simply shifts from one state into another. Likewise, this dynamic is mirrored in the act of making a sculpture, where an act of removal, to sculpt, to carve, or mold, as well as an act of removal, conversely also becomes simultaneously an accumulative process allowing for a form to attain its definition and clarity of shape. Beyond the substrata of fixed categories separating visual language, variations in shape and size, and other intrinsic qualities, what distinguishes sculpture from other mediums today is the question of how to engage scale and form in relation to this wider flow of energy and material. With different inflections and turns in relation to the

mechanics of this wider topological movement, the materials used in sculpture have the potential to become activated as thermal, kinetic, ecological, geological, or alchemic processes.

Wang has been seeking locations on Earth with conditions comparable to the inhospitable environments on Mars or the Moon or in space, leading her to remote regions of the Arctic, Mesoamerica, Tibet, and the American Southwest. More so than speculative science fiction, the astronaut as a thinking body foregrounds an important process for Wang. Through immersing herself in extraterrestrial-like conditions on Earth, her aim is to embody and ultimately to translate through her sculptures the endless complexity of patterns beyond what we know—to tap into a limitless fascination with creativity and irreducibly openended potentiality.

Since 2013, Wang's sculptures have typically been left untitled, re-routing the viewer, circumventing the overdetermination of semantic associations typically triggered by a title, and instead, so they have to reverse engineer the artwork's meaning through the listed materials in the artwork's caption. This gesture was inspired by an ongoing struggle between the US federal government and the local legislature over the naming of mountains in the Denali National Forest, where, in the 1970s, a moratorium existed over the naming of landmarks in this remote wilderness. What is significant here is how the space of wilderness exists as an autonomous field of possibilities, possessing its own energy, patterns of life, and state of being, totally indifferent to the banality of human intervention in regard to its name. This echoes the evolution of a Chinese garden, another topology of growth that is arguably also built to be indifferent to the tumultuous history of human conflicts. Many such gardens built through the ages were created as a microcosm to contemplate and enjoy an enclosed flow of time and space where growth and design dovetail or mirror the formation of the other. The Chinese garden embodies an idealized space of undifferentiated potential, crucially indifferent to the vagaries of the unstable rise and fall of dynasties governing the human world outside, and guiding the minds of fretful and inquisitive scholars through another path of thinking and being.

What if we try to imagine this dynamic of generative relationships at a planetary level, where sculptures are a correlation of causality from laws operating at a scale beyond what we can see or touch immediately? Taking this perspective to the planetary scale of a hyper-object, an idea of an entity existing beyond our ability to cognitively register in its entirety, this idea of an invisible topological tapestry of kinetic energy and inter-connected patterns also points the way to how many of Wang's works function in relationship to the viewer. Force fields established using heat, wind, refracted light, fractal geometry, and isometric elements are activated by Wang through her sculptures and installations. They push and propel us to engage in another way, dissolving distinctions between subject and object, artificial and natural forces, geological and cosmological rhythms—folding, bending, directing, or refracting the inner and outer mechanics of our planet and the space beyond. Wang's forms are interfaces to understand, activate signals, wield new structures, and provoke thinking into the correlation of scales from micro to macro, representing the mechanics of the Earth, its planetary fluctuations and movement, and its limitless relationship to the cosmos.

当作家刘慈欣在编织一个由三颗互相围绕的恒星之间的独特轨道力学塑造而成的先进的外星世界时,他很可能也在思考类似的存在问题。在这种动态关系中,不稳定的运行轨迹使行星和多个混沌的恒星之间的距离对生命体来说过于危险,导致无边火海或深度冻结的毁灭性破坏,伴随着暂时的平缓期——生长和创造力的微光。外星文明在恒纪元与乱纪元的不断更迭中逐渐进化成一种近乎于生存主义和极端主义的先进文化,他们的身体能够压缩成一种冬眠形态以度过逆境,并在平缓期补充水分,重获生机。

稳定和破坏性轨迹造成的环境差异使王凝慧着迷,指引 她前往遥远的世界各地,测试用于理解和体验地球及其 潜在未知维度的复杂拓扑之工具和方法的准确性。《角锥 体与抛物线》是一系列移动影像,该系列无限地延展, 随着一部部影片的完成,不断构建自己的势能和逻辑。 在《角锥体与抛物线Ⅱ》中、艺术家从中国某处的山野 穿行至一片沙漠,在那里她现场搭建了用于观察听测的 装置;再到北极圈,她在白雪皑皑的空地上骑着雪地摩 托追逐地平线上的白光——这是能最近距离地感知世界 边界的地方。这种冒险精神的一小部分来源于王凝慧对 前宇航员的回忆录的兴趣。他们是作为"思维体"运作的 人。对王凝慧来说,这意味着一种物质和感知的调查研 究。他们所经历的是人类目前所能体验到的最接近超越 地球中心视角的宇宙维度的感受,这些体验塑造了宇航 员的认知和身体——从昼夜节律的影响和掌管我们精神 意识和生理机能的生物周期,到在不同气压中进行零重 力驾驶或失重睡眠的极端对比。她的雕塑和影片仿佛一 块棱镜,突破了那些影响我们对更广阔宇宙的理解的地 形限制。

在我们的宇宙中,物质形态的转变过程里物质从未完全消失,而仅仅是从一种状态转变为另一种状态。想象这一过程是一件有趣的事。同样,这种动态关系也反映在雕塑的创作中。去除的行为——塑形、雕刻、铸模,反而同时演化为形式和形状逐渐清晰明确的积聚过程。除了将视觉语言、形状和尺寸以及其他本质属性区别开来的基础固定分类之外,今时今日,雕塑与其他媒介的区别在于如何将尺度(scale)和形式(form)与更广泛的能量和物质流动相关联。随着与更大范围的拓扑运动的机制相关的各种转折和变化,雕塑中所使用的材料拥有了被激活为热能、动力、生态、地质或炼金术过程的潜在可能。

王凝慧一直在寻找地球上类似火星、月球或太空的不宜居坏境,为此她亲身去到北极、中美洲、西藏和美国西南部。与推测性科幻小说相比,宇航员作为一个思考体对王凝慧的创作过程来说至关重要。通过让自己沉浸在类似地球之外的环境中,她潜入对创造力和不可简化的开放性可能的无限迷恋之中,试图借助雕塑对我们认知范围之外的无尽而复杂的规律和模式进行具体表现和转译。

王凝慧自2013年以来的雕塑多数没有标题,巧妙地规避了标题常常引起的语义关联的过度确定,重新引导观众从作品说明中所罗列的材料出发,去还原作品的含义。这一决定的灵感来源于美国联邦政府和地方立法机关之间就迪纳利国家森林(Denali National Forest)山脉的

命名进行的持续斗争。对于这偏远荒野中地标的命名在 1970年代被暂停。这里的重点在于,这片荒野作为一个 充满可能性的自主领域而存在,拥有自己的能量、生命 规律和生存状态,完全无视人类对于其命名的庸人自扰 式的干预。这与中国园林的演变遥相呼应,那是另一种 生长的拓扑,可以说园林建造的初衷便是对历来人类冲 突的纷纷扰扰漠不关心。历代的许多园林都是作为一个 缩影而修建,用于沉思和享受与世隔绝的时间和空间流 动,其内的生长和设计互相吻合和映射。中国园林体现 了一个无差别潜在可能的理想化空间,对园外人世间风 云诡谲的朝代兴衰无动于衷,将焦躁蠢动的文人之精神 引入另一条思考和存在的道路。

假设我们试图在行星层面去想象这种生成关系,雕塑则是在一个超出肉眼可见、触手可及的尺度中运作的规则定律的因果关联,那又将如何呢?从这个视角来看一个超物体的行星尺度,这种超出人类所能完全认知和百里的存在的概念,这种动能和互相联通的模式规律的无形拓扑式组合的概念,亦指明了王凝慧的许多作品与观点的关系。使用热、风、折射光、分形几何和等角元素的为场,通过王凝慧的雕塑和装置得到激活。与主义的发表,也有别或折射着地球和地球之外空间的内外机制。王凝慧的形式提供了一个界面,用于理解和激活信号、运用新结构,激发对于从微观到宏观尺度关系。考,也再现了地球的机理、行星的波动和运动,以及它与宇宙的无限关系。

AN
ATLAS
OF
OUTER
SPACE

PRENDRE LA MESURE DU MONDE — SIZING UP THE WORLD

by ANNA MILONE

"Prendre la mesure" is a French idiomatic expression that means to measure something in a very literal way, but it also means to become aware of its size and condition. All the images collected by Alice Wang and gathered in this book express her desire to size up the world in its infinite context. She maps outer space to raise our awareness about the position of Earth, our world, within its black vastness. As she focuses on how our universe is always expanding, she reminds us of this feeling of infinity, tainted both with anxiety and fascination, as soon as we start thinking about our position in the universe—a vertigo effect, counterbalanced by the intrinsic poetic potential of the very idea of space.

For several years, Wang's mantra was:

"the Earth is plummeting towards the Sun but missing it." She developed an entire body of work with this sentence guiding her, having always in mind the ballet of attraction and repulsion of the Sun and the Earth as they determine the rhythm of our lives 24 hours a day, 365 days a year. This kind of heliotropism was completed by her growing interest in the stars as matter—not only as a representation of a romanticised symbolism. Melting meteoric metal into sculptures was one way for her to focus on this physical materiality. Coming from the idea that the dichotomy between idea and matter shouldn't be as systematic is her way of resisting a conceptual art process.

In recent years, she has reached into the abyss of our infinite universe, exploring the representation of space, and more specifically, of Earth in space. Her heliotropism has developed into a cosmotropism, an odd term used by Donald A. Wollheim, founder of the science-fiction club the Futurians, to describe the "outward urge" toward space exploration as a principle of human nature. This aspiration to reach out, always higher, always further, from the myth of the Tower of Babel to the premises of space exploration and the fantasy of new worlds, has been constant in all of mankind's history. Call it hubris? Maybe. Maybe not. In Wang's case, this cosmotropism is a metaphysical quest to remind us constantly that the Earth sits within a much larger context that we tend to forget.

Whenever she gives a talk (and at the beginning of this book), she starts with *Pale Blue Dot* (p. 12), a famous photograph of planet Earth taken on February 14, 1990 by the Voyager 1 space probe. On astronomer and author Carl Sagan's insistent request, NASA turned the probe's camera around and took pictures of the solar system from a record distance of more than 6 billion kilometers. These 60 pictures comprised the *Family Portrait* series and include a picture of Earth where the planet appears as a tiny pixel against the vastness of space and bands of sunlight. Sagan gave a description of this image in the book that gave it its name. He states:

Our posturings, our imagined self-importance, the delusion that we have some privileged position in the universe, are challenged by this point of pale light. Our planet... is a lonely speck in the great, enveloping cosmic dark.

Wang shares Sagan's feeling that this image, as innocent and hard to read as it can be, actually changes everything in our perception of the world. It leads us on a metaphysical path that allows us to reflect on our own existence and being. It is our first glimpse of infinity. Existing first and foremost as the result of scientific endeavour, these images make outer space real and elevate it from an object of pure fantasy. They help us realise that we are actually IN outer space.

Wang's An Atlas of Outer Space is an idiosyncratic undertaking of mapping the infinite, projecting her mind light years away. It becomes a way to bring faraway celestial objects into our earthling realm and onto the pages of a book. Just as the memoirs of astronauts she voraciously reads, this book builds a bridge to a (yet) unreachable space. With this collection of images, Wang can insert her own consciousness into the world in which we live in. She suggests infinity within the very defined space of a book, giving her and us the possibility to physically hold it in our hands.

This metaphysical quest doesn't make us forget that the outer space mapped here is one composed solely by images coming from NASA's image archive. She gathers images of planets, stars, asteroids, but not as a dehumanized environment. She also includes many representations of scientists at work either on Earth or in space. Thinking critically about these images in a historical context, they also represent the construction of national domination. The Space Race during the Cold War was another way for two ideologies to size each other up. This vast database of images produced by NASA, which is accessible to all, can also be interpreted as a means to propagate the image of the United States as a powerful space conqueror. One image in the Atlas is very representative of this: a huge human eye is looking at a very small miniature space ship (p. 42). This shift in scale represents again the omnipotence and will of mankind to control and dominate an unknown space.

Mapping outer space is reminiscent of the photographic surveys carried out in the American West. These photographs showed "virgin" territories, ready to be colonized, arousing the imagination and greed of pioneers and colonizers. The images didn't testify to an inhabited space that could not be appropriated as they thought fit. The representation that these images construct is questionable as they lay the

ground for (American) heroes to colonize this space. We already know that the space economy is booming, that property plans for far away galaxies are already drawn. How is this cosmic gold rush and the neo-colonization of these new futures considered in the framework of historical colonization?

These questions are directly raised in Afrofuturist and science fiction works such as in the writings of Octavia E. Butler. In *Parable of the Sower*, her main character Lauren Olamina describes space exploration as a possible escape from her apocalyptic reality:

"Space could be our future," I say. I believe that. As far as I'm concerned, space exploration and colonization are among the few things left over from the last century that can help us more than they hurt us. It's hard to get anyone to see that, though, when there's so much suffering going on just outside our walls.

Olamina develops Earthseed, a philosophy/ religion/value system that will prepare the ideological ground for this space colonization outside of the same rules and models that brought Earth to its end.

The Destiny of Earthseed is to take root among the stars.

These images are necessarily connected with the fantasy they stimulate in art and fiction. They build up a spatial imagery, creating their own space between reality and fiction, particularly when these documentary images almost look staged. The moon landing conspiracy theories are still believed by some, and the blurred line between documentary images and backdrops for super-productions is always growing. Fiction and reality meet just as fiction and science fiction. One of the images Wang gathered from the archives of NASA illustrates this perfectly: the Enterprise cast and crew from the TV series *Star Trek* is posing in front of the

NASA space shuttle that is named after their spaceship (p. 216). The picture of this historical day is another documentary image in the archive, treated exactly the same as any other.

This blend between reality and fiction, the constructed representation and how we can project ourselves in it are also visible in her Untitled (2018) series of collodion photographs. The research that gave rise to An Atlas of Outer Space, allows photographs to re-emerge and be given a new life, printed by Wang onto glass mirror sheets. These images, taken by high-tech NASA imaging technologies in outer space—such as the first image of the hot and gaseous planet Venus, the halo of Pluto, or the first ever image of Earth taken by a satellite—are fixed on reflective surfaces with a 19th century photographic technique. She recontextualizes these images with dated techniques, reframing them in a historical, romantic, and imaginary context, removing them from their documentary status. The reflections within an exhibition setting and of the viewer are superimposed onto the cosmic images already fixed on the surface of the mirror. We are looking at ourselves looking at Americans, looking at space, or looking at Earth from space.

This mise en abyme of gazes resonates with the work of Merleau-Ponty who describes in Phenomenology of Perception that part of our experience of the world is that objects see one another. This idea is necessary to understand a transcendental experience of our world, meaning going beyond our own experience of them. These pieces come to life while reflecting the other works around them within the exhibition. An Atlas of Outer Space reaches its entirety within the wholeness of the experience of her works that constitute a constellation. With the book, Wang offers a view of outer space. With her video Pyramids and Parabolas I (2019), she invites us to listen to space, while the sculptures within the exhibition open up a sensorial experience for the viewer. The mirrors' reflective quality are echoed by the liquid glass puddles scattered on the floor. They are like black holes where we may catch a glimpse of the infinity we come from. They originate from her memory of seeing mercury out of a thermometer: mercury merges again after being cut like a solid liquid. Wang was looking to reproduce that texture. She explores materiality with her sculptures that tend to testify to various physical phenomena though technology used for climate control (fans, humidifiers, heaters). After working with vapour (an unglazed ceramic piece filling the exhibition space with water vapour), air, and smell (a sculpture made out of beeswax blowing air in the viewer's face), she includes heat in the black-limb sculptures coming out of the wall—another means to create a direct physical connection with the viewer.

Mapping outer space to create this atlas is a complex, layered, and questionable endeavour. It oscillates between the sublime, the aestheticization of collected images, and representations of domination and power. It reflects the larger context of our own existence. As an artist's book, it can be considered as an allegory of Wang's work, shining light on her body of work from a different angle. Her artworks are not complete sentences, each of them, including the ones yet to come, are a piece of a bigger picture.

EYELID MOVIES

by Travis Diehl

Tonight, however, he could not entertain himself with psychedelic eyelid movies. Nothing came but warm darkness, punctuated by flashes as distant and vague as reports from another continent. —Greg Bear, Blood Music

Imagine a softly mutating history, a tightly coiled molecular code for BUSH or TREE, then stunt, starve, prune—affect the code into a miniaturized expression: the bonsai. But the bonsai couldn't care less about aesthetics. But the artist, whose conscious effort may or may not align with her intent as she runs her mind along the contours of history, affects & shapes, clips off strands of code, translates idea into form. The artist unpots & replants a bonsai in a courtyard & renders the tree an artwork.

But the artist's attention cycles inwards, too; her artwork suggests her own biography. Drawing, sculpture, photography, video, concept are the trailing forms of the events bracketing the place & time of this exhibition. But the history expressed here is contiguous with our own; her long, coiling & uncoiling thoughts are full of pockets & studs, receptions & transmissions. When the artist makes a video of a set shaped like a Maoist village or a lens factory in German Qingdao, this compressed footage is a translucent, vignetted clip of data from a shared code. The artist's China is our same China.

The artist makes a clear cubic balloon & channels a deflated memory of Minimalism. Meanwhile, contemporaneous with Judd & Bell & Haacke is Mao's Cultural Revolution. The artist frames her mother's memories of a far-off place & time in a video she titles *The fallacy of misplaced concrete-*

ness. Imagine history as a tightly coiled code: chains of events; or, sequential positions of matter & energy; or immanent repositions. & imagine that for us the code not only softly mutates but sometimes violently & willfully quakes into place. History, for us, like a skein of data passed through memory, is as mutable as it is material. The artist shoots a fractured & poetic travelogue about a time & place she has never visited & creates that time & place.

But art is an imprecise cypher of history; artworks depict the tension between facts & their expression. The artist sweeps across history, elaborating fictions with fictions, compressing information & abstracting ideas into images. Shakiness & low fidelity suggest the materiality of video; but imagine this translation as a record of loss. Directed at history, a video camera registers mostly the simple outline of an ontological search: the artist's attention.

As if to protest the inadequacy of vision, past present & future, the artist's expression of history takes increasingly alien forms. When the artist draws *The sound of the universe*, her synesthetic rendering abstracts a distorted scrap of science, itself an incomplete picture of an ultimate (universal) materiality, into an aesthetic protocol: a framed drawing in an exhibition. Elsewhere, the artist visualizes a device driver as something like an artist's graph of a black hole. She produces an abstract image out of data & the protocol prints itself.

But we are suspicious of the way abstraction masks as it summarizes; rulers abuse their subjects in the abstract; events across the ocean take the shape of parables & lose their urgency. But our memory does not respect such borders. Humming through our biology is a solipsistic yearning; yet we insist that facts underlie our memories. In our abstraction of history—or of the irreducible units of history—into a coiled & colliding sequence, aesthetics lies immanent with truth; the visual permeates the concrete; abstraction finds material form. As we journey deeper into our own psychedelic eyelid movies, the phosphene patterns in the dark express an underlying biological code, a genetic history, a chemical fact: evidence that something of our origins remains.

Imagine that we can program our own movies. Imagine abstraction as the residue of attention & of consciousness that does not simply transcribe but actively splices shared memory. Imagine art that expresses the underlying code in a form that returns to the code changed. Unlike a video, unlike the bonsai, humans learn; our data codes not for outcomes but for possibilities. A tree fills its container, while the artist abstracts the tree.

Travis Diehl lives in Los Angeles. His videos have been shown at Curtat Tunnel, Lausanne; Anthony Greaney, Boston; Human Resources, Los Angeles; and the Centre Pompidou, Paris. His writing appears in P&Co., Night Papers, X-Tra, Salon, and Artforum. He edits the artist-run arts journal Prism of Reality.