

E/D/I/T/O/R/I/A/L

主 编 寄 语



2005年卡特里娜飓风袭击了美国的新奥尔良，由美国工程兵修建的坚固的防洪堤被摧毁。长期以来自恃拥有坚固防洪工事而不断扩张的城市，那里的居民们早已忘掉自己是在密西西比河的水位高程以下异常脆弱地生活着。结果，终于在2005年8月24日这天，破堤而入的洪水淹没了85%的城市街区，至少有1 833人丧生。大部分受灾地区，至今仍然一片废墟。

The huge levee built by US Army Corp protecting New Orleans, USA was destroyed by Hurricane Katrina in 2005. Living in a city protected by solid flood control construction, many urban residents had forgotten their vulnerability of living under the water level of Mississippi River. Unexpectedly, the levee broke and inundated 85% of the urban street grid, taking at least 1,833 lives. Most of the stricken areas are in ruins.

俞孔坚摄于2009年10月12日。
Taken by Kongjian Yu, October 12th, 2009.

/ 灾难景观：美丽与恐怖

主编 / 俞孔坚

惊悉云南鲁甸地震，已致617人死亡（截至发稿时）。当今的地球，灾难频繁，且不说10年前东南亚的海啸，顷刻间，将美丽的天堂海滩变为恐怖的废墟，吞噬近30万的游客和居民；2005年发生在美国新奥尔良的卡特里娜飓风导致1 833人死亡，造成1 000多亿美元的经济损失；2008年的中国四川汶川地震，让近7万人永远不见天日；2012年的桑迪飓风，卷走286条人命，并造成680亿美元的经济损失……而发生在身边的和当下的，诸如2012年，77人丧生于北京街头和郊区的洪流中，河南某地的干旱导致大量人畜饮水困难，中国南方某市遭受雨涝等等灾害，就更不胜枚举了。昔日天堂般美丽的山岳与河流、海滩和森林、原野和农田、街道与广场，可以瞬间变成恐怖的景观。于是，我们便埋怨自然的无情，抱怨全球气候变化，归咎于百年一遇的洪水……

而事实上，这些看似自然带给人类的天灾，在很大程度上都是人祸。在这里，我们有必要区分“危险”（Hazard）、“风险程度”（Risk）、“脆弱性”（Vulnerability），以及“灾难”（Disaster）这几个概念。自然总是潜藏着危险的，段义孚有一部名为《无边的恐惧》的著作，其对空间的危险性与人的感知和文化进行了探讨。可以说，恐怖的景观伴随并成就了人类的进化和发展：森林、沼泽、海洋、河流、草原、旷野、山崖、水塘，无不潜伏着危及生命的危险，人类的生理构建和文化智慧正是在应对这些危机四伏的景观过程中得到了进化和发展，学会了如何在攫取景观所提供的机会的同时又能回避其风险，发展了与风险相适应的技术与艺术，包括工程方面和社会组织方面。人类获得了巨大的成功而成为万物之灵。于是，危险与恐怖的景观在我们的眼里便有了“崇高美”的特征。根据埃蒙德·柏克对于“崇高美”的定义，景观越危险，其可怖性或风险程度越高，其崇高性就越显著，即越壮美。所以，充满危险的景观，如陡峭的山崖、澎湃的江河湖海、茫茫的沼泽湿地，甚至幽谷丛林，对人类来说虽然危机四伏，却是美的、充满诗意和令人向往的。至于这种美的景观为何瞬间成为一种残酷的灾难场景，并吞噬人类生命和财产，那完全是因为当事人没能调动祖先们的集体经验所赋予个体的生物本能，也没能调动人类社会

的历史经验所赋予的文化智慧来适应危机四伏的景观。或利令智昏，或一叶障目，导致当事人和社会忽视潜在的危险或在危险面前异常脆弱。

拿中国的洪水来说，根据北京大学科研人员的研究，正常情况下，即使没有任何防洪设施，洪水能够淹没的区域仅占国土面积的0.8%；极端情况下，也只有6.2%国土面积会被淹没。如果选址合理，尊重洪水并给以相应的安全空间，洪水便不再是灾害，而是美景了——例如每年农历八月十八的钱塘江大潮一样——其会像非洲草原上的雄狮一般，美不胜收。遗憾的是，我们对自然力太不尊重，就如同没有给野性的雄狮以安全距离一样。

同样，应对地震、泥石流、干旱和水涝等自然危险，古人在居住地的选址、基础设施的修筑、造田和灌溉以及出行规律等方面，为我们积累了一系列的经验和智慧，包括规划设计、工程技术，以及应对灾难的社会组织等方面的智慧。工业革命在带给我们抵抗自然灾害风险的强大技术的同时，也令我们养成了藐视自然力的傲慢，使我们不但忘掉了远古以来适应自然力和降低灾害风险的智慧，也使我们的社会和栖居的空间由于过分依赖灰色基础设施而显得异常脆弱：诸如将一个流域的防洪安全寄托于一个水泥大坝，将有数以万万计人口的区域和城市的用水安全寄托给一条脆弱的人工引水渠……惟其如此，壮美的人类工程景观，如举世无双的拦江大坝、世界最大的跨流域调水工程、千年一遇的刚性防洪堤和防潮堤等等，如同壮美的自然景观，最终都将因为其傲慢与脆弱，而成为灾难性的景观。



/ Disaster Landscapes: Balancing Beauty and Fear

Chief Editor / Kongjian Yu

It is shocking that the recent Ludian earthquake in Yunnan province caused a death toll of 617 persons as of press time. Every year it seems the earth is suffering from more frequent, and more damaging, natural catastrophes. From the Tsunami in southeastern Asia that rendered tranquil beach heavens into horrifying landscapes of debris, and within hours devoured the lives of 300,000 tourists and residents ten years ago. To Hurricane Katrina in New Orleans, USA that took 1,833 lives and caused more than 100 billion US dollars of damages in 2005. The earthquake that buried near 70,000 lives in Wenchuan, Sichuan province, China in 2008. The 286 people who died and the 68 billion lost by Hurricane Sandy in 2012.... Moreover, tragic events happen around us everyday. In 2012, 77 people drowned in the street and suburban rivers of Beijing. Drought causes drinking water and irrigation shortages in the local Henan province. Flooding frequently victimizes the southern Chinese cities. Our ethereal landscapes, mountains and rivers, beaches and forests, prairies and farmlands, streets and plazas, can turn into horrifying landscapes of damage, debris, and death in a flash. In response, we blame nature for its relentlessness, complain about climate change, and impute the flood that happens once a hundred years.

In our current over designed world we can understand most natural disasters as man-made calamities. Here we must break down several concepts: Hazard, Risk, Vulnerability, and Disaster. A degree of jeopardy is always embedded in nature. *Landscape of Fear*, a masterpiece of Yi-fu Tuan, discusses the perils of space, the sensation and culture of human beings. The landscape of fear accompanies and facilitates the evolution and development of human society. In our relationship with the forests, swamps, the ocean, rivers, prairies, wildness, mountains and ponds there is always a hidden risk, an endangerment of human life. Societal physical structure and cultural wisdom evolves and develops in response to the process of experiencing and dealing with situations of hidden risk. We learned how to take advantages of opportunities and avoid risks from the landscape. We develop technology and artistry, engineering and social organization, to commensurate risk. Human beings have achieved so much in the process of becoming the dominant living creature. As a consequence, in our eyes, the perilous and horrifying aspects of landscape also contain a sublime feature. According to the definition of sublime by Edmund Burke, sublimity is proportionate to the level of scariness and

dangerousness: the more dangerous the landscape, the more magnificent. Therefore, even though perilous, landscapes such as the steep cliff, the surging ocean and rivers, the vast wetland, even the mysterious beauty of forests are poetic and desirable. So why can such breathtaking landscapes turn disastrous in a moment and devour human lives and properties? Why do we continue to fail to practice instincts inherited from our ancestors’ collective experiences and cultural wisdom to adjust our relationship to these perilous landscapes? Either voracity or parochial views make the victim and society ignore potential dangers and vulnerability in front of the landscape.

Taking the example of flood in China. According to research by Peking University, normally flooding only inundates 0.8% of the national territorial area even in the absence of anti-flood structures. In extreme weather events, the inundation area increases to 6.2% of the national territorial area. Therefore, if property was properly sited and land reserves established, the flood will no longer be an annual disaster, but a view and designed to be experience and celebrated like the grand tide of Tsientang River every August 18th (Luna calendar). This annual event of unspeakable beauty resembles that of lion raring in African wilderness. Sadly, our general lack of respect for natural forces leaves no safe distance between the raring wild lion and us.

Over the course of history, across generations, our ancestors have accumulated a system of knowledge based in past experiences and wisdom regarding the selection of housing sites, construction of infrastructure, farming and irrigation practices, and general rules of planning, engineering and technology, as well as emergency social organizations. The industrial revolution brought us powerful technologies to combat disasters, as well as arrogance to despise natural forces. Not only have we forgotten the wisdom to respect natural forces and therefore lower risks by intrinsically following the patterns of natures, but also our social and residential spaces have become extremely vulnerable due to an over dependence on grey infrastructure. For example, flood security relies on concrete dams, urban water security depends on fragile man-made channels. Eventually, just like other spaces of natural grandeur, the magnificent artificially engineered landscape, the world’s large dams, China’s cross-regional water diversion projects, and levees that can resist flood happening once in a thousand years, will shatter from arrogance and vulnerability (Translated by Connie CHEN and Sara JACOBS).

