Foster claims he spent the next week coming up with the answer: 5,328 tons. This exercise clearly influenced Foster's thinking, and the documentary includes footage of a 1980 client presentation in which he compares a mockup of a lightweight polycarbonate sandwich panel only a few inches thick to a 3-foot-thick brick wall, a 9-inch concrete wall with an air cavity, and a multilayered brick wall, concluding that the minimal sandwich panel performs equally as well as the other wall types. Foster asserts in the film: “Technology is the art of making things and high technology is performance.”

Regrettably, the documentary largely overlooks this question of performance, so central to Foster's formation as an architect, focusing instead on form and using sumptuous aerial footage and a dramatic score by Joan Valent to convey the majesty of Foster's architecture. Deyan Sudjic, the author and narrator of the documentary, has written a plauditory ode to Foster the artist, thereby missing the opportunity to evaluate his practice under the terms it originally established for itself. Aviation becomes a major theme of the film, as Foster recalls his boyhood fascination with planes and is shown flying his own, captivated by the commanding view over the landscape. Sudjic compares the forms of Foster's Sainsbury Centre and Hong Kong Shanghai Bank to a glider and a jumbo jet, respectively; while the Sainsbury Centre is a “calm and floating” construction, the exposed structure and diagonal bracing of the HSBC make it a weighty building “soaring towards the sky.” This was of course a persistent trope of twentieth-century architecture, bringing to mind Le Corbusier's preoccupation with planes and automobiles during the 1920s, and his flight over South America with Saint-Exupéry.

One trait shared by Foster and Buckminster Fuller is an obsessive self-archiving and control over the representation of one's personal history, and this certainly comes across in the documentary as Foster recalls his upbringing on the wrong side of the tracks in a working-class Manchester neighborhood, and subsequent striving for success. While much attention is paid to Foster's personal history and sources of inspiration, surprisingly little is said about the production process within the Foster + Partners office, a formidable operation whose vast output on a global scale relies upon large teams of architects and specialists. Footage of praise proffered by various artists including Richard Serra, Anish Kapoor, Anthony Caro, and even pop singer Bono demonstrates Foster's celebrity status, although viewers might have discovered more from figures better able to provide a critical analysis of the performative capacity of his architecture.

Certainly, that understanding of high technology in terms of performance drove Foster's practice in its early years. Unable to attain commissions on more conventional architecture projects, Foster Associates looked to industrial building for work. For the Fred Olsen Amenity Centre at the Millwall dock, Foster's first serious building commission after splitting with Richard Rogers and the Team 4 office, his practice offered pricing similar to the builders and package dealers competing for the job, but persuaded the client by offering greater efficiency through the use of prefabricated elements and planning for more flexible space. The building made no major distinction between executives and dockworkers, or between office and factory, and became a precedent for future projects like the Willis Faber Dumas headquarters, which continued the effort to redefine workspace. Research on artificial lighting and environmental controls systems formed a major part of the practice's design work. Image was not irrelevant to the projects, however, and when the Fred Olsen building's sleek mirrored glass façade, jointed with neoprene gaskets, was published in the pages of the Architectural Review and the Architects' Journal in 1970, it offered a new model for the future of architecture.

There were those who disparaged the pretense of high performance as a guise for...
aesthetic exercises in Foster's work. The projects stood in contradistinction to a set of principles gaining force in the 1970s: long life, loose fit, and low energy. Designed as temporary office space for IBM, Foster Associates’ 1971 building in Cosham, Portsmouth featured a spare façade detail in which 12-foot-high panels of glass were hung from inch-wide aluminum glazing bars. Free of insulation, gaskets, or sealing strips, the visually striking detail drew criticism for its impractical reliance on continuous air conditioning to obviate the risk of condensation on the metal. Reyner Banham, champion of Foster and all things high tech, defended the project. Rather than necessitating increased energy consumption, Banham argued, the detail capitalized upon the already high levels of air conditioning required to run the large computers the building held in order to economize on structure. Banham supported the closed and controlled environment of IBM over more low-tech, manipulable, and therefore inaccurate and inefficient systems.

Yet Banham’s fascination with the technologies of environmental controls as vital systems for architecture’s future development ultimately related more to concerns of image than it did to scientific effectuality. The problem of representation versus perception was a project like Foster’s Renault Distribution Centre. Banham supported the closed and controlled environment of IBM over more low-tech, manipulable, and therefore inaccurate and inefficient systems. The visual design of the project from being merely perfunctorial to Fuller’s famous 1960 Manhattan dome. The city’s use of recycled materials, its driverless electric vehicle transportation system, and its $15-billion center for renewable technologies are presented as revolutionary approaches to reducing energy consumption on a large scale. Foster insists upon the exigency of the project: “The tragedy is that given the urgency of the situation, given what is at stake, which is literally our survival as a species, the thing that I find inexplicable, is that there is only one Masdar.”

Efforts to reimagine environmental systems at the scale of the city grapple with ever-increasing complexity in terms of energy sources and patterns of consumption, but also systems of labor and capital. This is an especially thorny issue in Masdar, which is funded by oil money, a contradiction that the film disregards. Moreover, this totalizing approach to the design of urban space and life presents its own quandaries. In his 1972 book Design, Nature, Revolution, Tomás Maldonado described Fuller’s dome over Manhattan as an example of “suboptimization,” or the improvement of a part of a system to the detriment of the whole. While the project was technically feasible, the air-conditioned and hermetically sealed environment was not guaranteed to positively impact the health and wellbeing of its inhabitants, and was therefore for Maldonado an “ecological aberration.” His point was that the abstraction of environmental management using technical systems did not ensure ecological harmony; the social sphere must be considered together with the natural. It is a pity that How Much Does Your Building Weigh, Mr. Foster? never exploits the potential of the documentary format, removed from the profession of architecture and the inner workings of a practice, to expand upon the social implications of systematized production and optimized performance in Foster’s work.

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Notes
1. Influenced by postwar developments in systems theory and cybernetics, the system in architecture was variously interpreted. Figures such as Constantinos Doxiades, Moshe Safdie, and others studied systems of human occupation and settlement in relation to questions of planning. Other interpretations dealt more with patterns of organization and processes of production.
2. Sudjic is also director of the Design Museum in London, and has written a number of books on the so-called High Tech architects, including Richard Rogers, Foster + Partners, James Stirling, and Renzo Piano.
3. On this 1929 trip, Le Corbusier made several flights with aviators Antoine de Saint-Exupéry and Jean Mermoz to study the terrain and cities from the air. He produced sketches of new urban plans for Montevideo and São Paulo, both from an aerial perspective and using massive motorways to cut through and redefine the urban fabric. These sketches are held at the Museum of Modern Art.
4. In a 1975 interview Foster was asked whether he was aiming for jewel-like perfection in his buildings, to which he replied that aspects like artificial lighting, environmental controls, and flexible space are “invisible,” but still require extensive research. “Questionnaire to Norman Foster,” A+U (special issue on Foster Associates) 57 (Sept. 1975), 50.
7. Ibid., 23–24. Banham responds to Pevsner’s claim that “Lincoln Cathedral is architecture and a bicycle shed is not,” at the same time as he dismisses the opposing point of view, in which all “decent buildings” may be reasonably termed architecture. The problem, according to Banham, is that it is as equally pernicious to propose, as Pevsner did, that Lincoln Cathedral was created with “aesthetic pretensions” while bicycle sheds were not, as it is to use this kind of non-architectural form of building to show how retrograde architecture actually is, a trope common to modernists from Adolf Loos to Cedric Price. The result has been to include grain elevators, airplanes, and lunar building, etc. within the category of architecture.
9. Ibid., 46–48. Maldonado adds: “At times we suspect that the speculations on the future of the human environment are meant to mask a certain amount of technocratic evasiveness. It would seem that these speculations are being used to avoid the more difficult and urgent task of obtaining here and now a new type of mesocosm, of the kind proposed by Patrick Geddes, in which there will take place an ‘optimization’ not only of environment but also, and above all, of man as an individual and social being” (40–41).