Chapter 9 The Spine, the New HQ for the Royal College of Physicians, Liverpool, UK: A Biophilic Case Study

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ABSTRACT

This chapter catalogues the working experiences of the architects AHR and their design team and their clients, the Royal College of Physicians, for the design and construction of The Spine, their new Northern HQ, in Liverpool, UK. This iconic building opened in early 2021 and optimistically reflects the ethos and values of the college, and it is set to become one of the healthiest buildings in the world. It will describe and explain the biophilic and salutogenic design construction processes taken by the design team, from commissioning to completion. The main objective for the college when commissioning AHR architects to design their new building was to significantly expand their facilities and to reflect their standing in the world of medicine. So, the AHR design team endeavored to help them attain their goal of a WELL Platinum and the Building Research Establishments Environmental Assessment Methods (BREEAM) Outstanding certification.

INTRODUCTION

The Spine building is the new northern home for the UK's Royal College of Physicians [RCP]. It is located in the heart of the Knowledge Quarter, Liverpool UK, and with RCP as the anchor tenant, the building has enabled the development to attract further leaders in science, health, technology, culture, and education. So, that over the next decade, it will help to establish Liverpool as one of the world's leading

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healthcare innovation districts. Completed in early 2021, this iconic building optimistically reflects the ethos and values of the College and will become one of the healthiest buildings in the world. This case study describes and explains the biophilic design and construction process, taken by the architects and design team from commissioning to completion.

BIOPHILIA AND BACKGROUND TO THE PROJECT

The term biophilia was first used by German-born psychoanalyst Eric Fromm in the 1960s. Then American sociobiologist Edward O. Wilson, widely acknowledged as the father of Biophilia, defined biophilia in his hypothesis (Wilson, 1984) as, "A love of life and the living world; the affinity of human beings for other life forms", so our innate desire to be close to nature. Over the ensuing decades and after numerous collaborations (Kellert et al. 2008), the principles of biophilic design emerged, evolved and were eventually condensed into the "14 Patterns of Biophilic Design" (Browning et al. 2014). Which the authors referred to regularly, throughout this project.

So why do we need Biophilic Design Strategies now?

Each year in the UK, around 40,000 deaths are attributable to exposure to outdoor air pollution which plays a role in many of the major health challenges of our day. It has been linked to cancer, asthma, stroke and heart disease, diabetes, obesity, and changes linked to dementia. The health problems resulting from exposure to air pollution have a high cost to people who suffer from illness and premature death, to our health services, and to business. In the UK, these costs add up to more than £20 billion every year. (Royal College of Physicians, 2016)

In the broader context beyond the College, a 2017 report from United Nations estimates that by 2030 more than 60% of the world's population of 8.5 billion will live in cities, and by 2050 this will rise to 70% and 9.7 billion (United Nations, 2017). The task of surviving seems almost insurmountable, as airborne contamination amongst other things, continues to rise and threaten civilization. Therefore, it seems obvious that in future our buildings will have to support our health and well-being.

The College is currently located in a headquarters building overlooking Regents Park, London completed in 1963 to a modernist design by architect Sir Denys Lasdun (see Figure 1). In 1998 this was recognized by UK conservationists as being of historical architectural importance and was therefore listed as Grade 1 (Historic England (n.d.)), i.e. a building of 'exceptional interest' and remains one of the finest examples of post-war "Brutalism" in the UK. The building was commissioned by a forwardlooking College who felt that their headquarters should reflect the values of the College members, in being innovative in their respective fields. Lasduns' London headquarters building is designed around the concept of the 'body' and is surrounded by a medicinal garden that contains thousands of plants and herbs that have been used in medicine throughout history to help people recover from illness.

The UK's Royal College of Physicians was established by King Henry VIII in 1518 as the first recognized body in Great Britain to regulate medical practice. The College for many years was considered as an elite institution with only up to 8 people each year invited to take the examination and potentially become a member. This ritual involved scrutiny by the RCP committee in the Sensors Room, a space that has followed RCP to each of its homes. (Moore, 2014) 21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/the-spine-the-new-hq-for-the-royal-college-ofphysicians-liverpool-uk/293317

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