# ARCHITECTURE AND TECHNOLOGY AS A MANIFESTATION OF THE ZEITGEIST

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Architects occupy a particular position between the domain of building technology and the philosophical, aesthetical, sociological, and cultural speculations on living within a given techno-industrial context. Most often, they engage in the latter. As identified by Pierre Francastel, "The mechanical applications of technology (in architecture) gave rise to far fewer mechanical problems than did the social integration of the new possibilities it presented to the outside world" [1]. Architects' relation to technology as a term does not encapsulate technology as a means to an end. Rather, architects grapple with technology as a manifestation of the zeitgeist, seeking to define their own rules of living within the context of a particular technological innovation. Sometimes, those manifestations ignore or even override the actual building technologies of the time.

The Einstein Tower by Erich Mendelson is an example of a building that is concerned with the zeitgeist of technology but not with the actual construction approach. The building is an explicit reference to a particular scientific achievement – the Theory of Relativity. Despite Mendelson's attempts to understand physicists and translate the ideas of relativity into drawing dynamic shapes, little of this analogy translates to the actual technology of construction. The stucco brick that formed most of the surface's curvature conceals a regular steel frame construction fairly common at the time. The detailed design of laboratories (the only true overlap with the practice of the scientist) was hastily passed to two professional engineers late during the project development [2]. Working primarily on the façade, Mendelson grounded his deign in a series of metaphors that do not engage directly with the technological concept but rather speculate on the social and psychological experience of living with the new discovery. His formal representation methods follow fellow expressionist artists and designers like Wassily Kandinsky.

If Erich Mendelson and fellow expressionists are not mere outliers, how does novel technology enter the built environment? Examining the introduction of iron frame into the works of architecture, it is evident that this transition is often led by engineers. The first major structures utilizing novel construction types – the Fourth Bridge (Fowler, Baker), the Eiffel Tower (Eiffel), and the Chrystal Palace (Paxton) – are majorly associated with people from outside the field. The buildings authored by architects at the time demonstrate a certain reluctance and only a slight interest in the possibilities of new materials. Bibliothèque Sainte Geneviève by Henri Labrouste is relatively innovative because of its early adoption of steel columns. Yet it also demonstrates the architect's disinterest in radically changing the façade, the arched ceiling, and the column decorations. He intentionally appeals to a combination of 'arts', 'tradition', and 'functionalism' rather than the Industrial revolution [3]. Bibliothèque Sainte Geneviève contrasts the Einstein Tower as a project where novel building technology is applied but is not actively referenced by the architect.

Even in the case of the most acclaimed architectural revolutionaries like Le Corbusier, the active reference to novel technologies is primarily embodied through depicting the novel modes of lifestyle. Inspired by mass manufacturing of Ford cars, Corbusier pioneered his own 'noble austerity' that not only simplified and regularized the floorplan, but

also dictated the proper taste fit to the moment: monochrome paintings, barren walls, horizontal windows, rectangular forms, a ship-like rooftop – all meant to celebrate and represent the new moment of technology, "installed without discussion as if they have a unique ability to exemplify the complex arguments they punctuate" [4]. As Reyner Banham writes, "In picking on the Phileban solids and mathematics, the creators of the international style took a convenient short-cut to creating an ad hoc language of symbolic forms, but it was a language that could only communicate under the special conditions of the Twenties" [5]. In this regard, Corbusier's approach is similar to the one of ornamentalists like Owen Jones who sourced their inspiration from science and nature yet worked primarily towards translating the work of technology into the abstract, geometric logic, an ornament to fit the spirit of the time.

Regardless of the state of building innovation, architects are primarily concerned not with the novel methods delivered by technological evolution, but rather with contextualizing new living realities brought about by technological change. In the spirit of Heidegger, technology is not a means to an end but a "way of revealing" the built reality and its context [6].

#### List of sources used

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## АНТРОПОЛОГИЧЕСКИЕ ПАРАДИГМЫ НАУЧНОЙ ФАНТАСТИКИ

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Фантастика, как известно, специфический метод художественного отображения жизни, использующий художественную форму-образ (объект, ситуацию, мир), в котором элементы реальности сочетаются несвойственным ей в принципе способом, — невероятно, «чудесно», сверхъестественно» [1, с. 887]. Элементы фантастики присутствовали в литературных произведениях, начиная с фольклора и эпоса. Они получили существенное развитие в античности, Средние века, в Эпоху Возрождения, в Новое время. Однако фантастика стала современной только благодаря опоре на науку. Так сформировалась своеобразная научно-фантастическая и литературнохудожественная футуристическая картина мира.

Проблеме человека, его личностным качествам, способностям и возможностям в научно-фантастических произведениях всегда уделялось особое внимание. В работах данного жанра было и есть множество возможных вариантов.