## 2 The Emergence of the Modern Architect

During the nineteenth and early twentieth centuries, the role of the architect changed dramatically, along with the rise of the general contracting, engineering and legal professions. Whereas before, the architect was in charge of the building operation itself, the architect gradually became more distant from the building site at the same time that buildings were becoming more complex. But the architect still tried to maintain total control over the building. This changing role was emblematic of the change of the entire building culture, which was becoming more fragmented and specialized, without a guiding philosophy of style or value.

Isaiah Rogers was an architect who practiced in New York and Boston during the nineteenth century. His journal, now archived at the Avery Architectural Library at Columbia University, provides a vivid window into the architectural practice of his time. These entries are from 1838, near the beginning of Rogers' career. (Rogers, 1838)

January 4. Committee directed me to go to Quincy to examine the state of the quarry. Finished plastering large room. Made plan of two houses for Red Hook Company.

February 12. At the church putting up the furring of the dome ceiling. Declined making plans of Sugar House. Mr. Woolsey not willing to pay 2 1/2 per cent cash for plans and overseeing. Paid penny post for letter, \$3.06 up to this date. Went to Mr. Buckingham's lecture on Egypt. Very good.

February 23. Completed the estimate of cost of Exchange. Went to an auction of books in the evening. Bought a set of Newton's Vitruvius. Large copy for 6 3/4 cents per volume.

March 30. Made plan for marble work in Exchange Room. Accepted the appointment of director of New Jersey Stone Company. Compensation 10 shares of stock of the company. Completed the blacksmith shop.

April 4. Commenced vaulting of back stairs on Exchange Place. Prepared setting center for arch corner of Wall and Hanover Streets. Fine weather for work. Gave Mr. Barry (?) plan of marble for doors in Exchange Room. Bought a cow to be delivered on Thursday. Paid \$50.00. Setting stone corner of W[all] and William Streets. Bevels not right.

April 5. Work progressing well at Exchange. Requested to give opinion of granite of Edgecomb quarry. Cow brought home. Made plan of cottage for Long Island. Made plan of stores, etc. at corner of Grand and Center Street.

April 6. Center of room corner of Hanover and Wall Street set. Setting ashlar on Wall Street. Measured the front on Wall Street. Found 4 inches west of the center more than than on plan. Setting door sills and jambs at the church. Weather fine for April.

April 18. Arrived at Boston 10 o'clock. Called on the mayor. Gave him a plan of City Hall. he appeared to like it much...

October 14. At the Exchange. Dull weather—cloudy all day. The committee made contract with Mr. Bryant for cornice and bricking of dome. Finished sketch of plan of a theater to land corner of Broadway and Chambers Street and Read Streets. Bought a cooking stove.

December 2. At the Exchange made arrangement to place the column for lashing. Got it placed right over the base. In evening worked on plans of hotel for Washington. broke one of the capstans by putting the whole weight on it. Paid for dinner 44 cents.

December 8. At home all day. Read book on geology and formation of the earth.

This journal describes the activities of an individual deeply involved with buildings in which there was an apparently seamless connection between activities that we now consider to be quite separate. Rogers designed buildings, he directly supervised construction, he worked out problems on the construction site, he selected materials. This was typical business at the time. It also points to a literate and educated individual who seems to be as comfortable at an academic lecture as he was working with stone.

By the end of the nineteenth century, things were quite different. The main difference was the emergence of the large architectural firm and the large general contracting firm, operating in tandem but with a legal apparatus, namely the general contract, that kept quite separate the activities that to Isaiah Rogers were part of a seamless web.

The professional transformations of the nineteenth century were fundamental in terms of process. They attempted to concentrate control in the hands of the architect; they led to the growth of other institutions such as general contracting and regulatory agencies; they eliminated the craftsman as the primary repository of knowledge about building. They established the activity of design as an intellectual activity that may be quite divorced from the making of things themselves. We tend to see the nineteenth century in terms of a myriad of architectural styles, but the professional and procedural transformations were more fundamental.

It is the concentration of knowledge and therefore of power over the built environment that is perhaps most critical. In Renaissance Florence for example, an architectural golden age, there was the power of the Medici. But at the same time, the power to build and the knowledge of how to build were widespread. Indeed, the architect was not at the top of the hierarchy of the building operation, as he attempted to be in the nineteenth century. During the Renaissance, the client was in charge, and had the knowledge to be in that position. Under the client was the *soprastante*, a kind of combined general contractor and clerk of the works. Somewhere lower down was the architect – important but clearly taking his place in the complexity of the overall building operation. (Goldthwaite, 1980)

In the several hundred years in between the Renaissance and the nineteenth century, control and knowledge became concentrated rather than distributed at the same time that building types became more varied and less predictable. The concentration of power and control in professionals and management had its counterpart, at the level of the building worker, in what Marx saw as the "alienation of labor" and what historians of building and labor refer to as "deskilling."

## 3 Architecture and Engineering

A brief comparison of architects and engineers may help to shed light on the processes that architects employ, and how they have changed. To a large extent, this discussion deals with normative practice, and not the practice of architects such as Frank Lloyd Wright or engineers such as John Augustus Roebling, who deliberately bucked normative rules. But even such heroic figures could not completely escape them.

It is the difference in the nature of the *product* that is often seen to define the difference between the architect and the engineer. Architects design buildings;