

# FIRST SKYSCRAPERS

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# SKYSCRAPER FIRSTS

*Considerations of Critical Buildings and Technologies in Skyscraper History*

Editors: Lee Gray, Antony Wood & Daniel Safarik



SOCIETY OF  
ARCHITECTURAL  
HISTORIANS

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Chapter 1

***INTRODUCTION***

# The (Perceived) Problem with Historical “Firsts”

**LEE GRAY**

*University of North Carolina  
at Charlotte*

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All historians who specialize in the history of a specific topic or subject are often asked a version of the same question: when (and/or where) was the first occurrence of their topic? These questions embrace all historical subjects, from popular culture to architecture. An example of a common popular cultural history question is: “When and where was the first baseball game played?” This appears to be a simple question with a simple answer, and a quick Internet search reveals an answer in seconds: “The first official game to be played under modern rules happened on 19 June 1846.” Of course, a careful reading of this answer reveals that, perhaps not surprisingly, the response has as an important qualifying phrase—“played under modern rules.” This, of course, implies there were earlier games played and that, while the received answer apparently identifies a “first,” it may not have been the answer the questioner was seeking. The response they might have sought is as follows: “The first known mention of the sport came in 1791, when the city of Pittsfield, Massachusetts banned the game from being played within 73 meters of the town meeting house.” And if, in fact, modern baseball was the questioner’s primary concern, there remains at least one other possibility for a different “first.” In 1846, all baseball teams were composed entirely of amateur players; the first *professional* baseball game did not take place until 1869. Thus, if the query specifically concerned *modern professional* baseball, the answer to the “first” question is different.<sup>1</sup>

This example, far removed from the realm of architectural history, serves as a useful illustration of the first critical factor in identifying a “first.” This might be described as definitional. The subject under investigation must be clearly defined before the search for a “first” may begin. However, this simple act—defining the topic or subject under investigation—often constitutes a significant scholarly challenge. A meaningful definition is comprised of a set of clearly articulated criteria that allows the user to know when they have found what they are looking for. Writing and conceptualizing a definition involves the identification of a set of relevant criteria, a critical assessment of the criteria, and the creation of a useful definition. Each step in this process is subject to questioning and, in all cases, reflects the biases of the scholar engaged in the

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<sup>1</sup> The author recognizes that an alternative date, 23 September 1845, has also been suggested as the date of the first baseball game. The nature of this debate had an intriguing parallel in architectural history in that the debate is also place-based: New York City (1845) versus New Jersey (1846).

Chapter 2

***SKYSCRAPER FIRSTS***

# Skyscraper Firsts

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The short essays that follow touch on a number of important technological firsts in the early development of the skyscraper. They are also designed to prompt new research into their various topics. A survey of the subjects addressed in these essays will reveal significant “holes” in this effort. The history of tall building technology has traditionally focused on structural systems. While recent developments have included important forays into the history of cladding systems and glazing, almost no historical research has been pursued on mechanical, electrical and plumbing (MEP) systems. In fact, vertical transportation systems have been the only internal building technology to receive serious scholarly attention. Thus, while these essays and the overall contents of this volume are a good start, there remains much research to be done in the future.

## The First Economic Need for Tall Buildings

*Jason Barr* Rutgers University

### Introduction

Assembling 20 experts in a room and asking them, “which building was the first skyscraper?” is liable to net 20 different answers. A structural engineer might point to the first building to use steel framing. An architect might argue for the first building that was not only tall, but also accentuated its height through façade design. A student of elevator history might look to the first building with a passenger elevator. Another scholar might offer an ancient, towering masonry structure, such as a pyramid or cathedral. It’s worth pointing out that the debate about one ancient structure or another being the “first skyscraper” is implicitly being carried out in the context of the existence of modern skyscrapers. If humanity had not invented the skyscraper, no one would be arguing that the first skyscrapers were really pyramids or cathedrals.

But much of the debate about the “first skyscraper” misses an important point. Namely, the skyscraper is a solution to an economic problem. And it was only in the last quarter of the 19th century when the problem—the widespread economic need for tall buildings—was matched with a solution—the technological and architectural capabilities to construct them. The arguments about the “first” tend to focus on engineering elements, architectural designs, or their relative heights. But the dialogue has long ignored the demand side that initiated the construction of tall buildings. Without the economic need, there would have been no firsts about which to argue.

## Chapter 3

# ***FIRST SKYSCRAPERS***

# The “First Skyscraper” in the History Of Modern Architecture

**GAIL FENSKE**

Roger Williams University

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## Introduction

The question of how to identify the “first skyscraper” is, within the history of modern architecture, as old as the building type itself. From the writings of the noted architectural critic Montgomery Schuyler, dating from 1894, to the architectural historian Rosemarie Haag Bletter’s assessment of the question in her “Invention of the Skyscraper” of 1987, to the present volume, the discussion around the “first skyscraper” has continued to fascinate. Such differing perceptions of the skyscraper’s origins are tied to contemporary architectural criticism, which in turn reflects the shaping of contemporary skylines, whether during the 1870s or the 2010s. The title of this book and related symposium, *First Skyscrapers | Skyscraper Firsts*, acknowledges the current view of the question’s complexity and plurality. It also shows that the debate has continued to capture the interest of urban observers down to the present day.

When faced with the question of “first skyscraper,” certain architects and critics have asserted: is such a question in fact worth asking? Cass Gilbert (1931), the architect of the Woolworth Building in New York City (1910–13) argued that the matter was of little more importance than “whether the hen or the egg came first”. Later, the historian Thomas A. P. Van Leeuwen (1987) pointed to the “naïve optimism” of the quest for the first skyscraper, equating it with the 18th-century effort to find the origins of all subsequent architecture in the primitive hut. Rosemarie Haag Bletter (1987) noted that the identification of the first skyscraper “ought to be questioned as a worthwhile enterprise,” given that it is a thankless task, just as is “the search for the first ‘Greek temple.’” Even if historians “could agree on one and the same building today, an earlier example may be discovered tomorrow”.

From the start, debates over the “first skyscraper” have paralleled a still more intensive discussion over the very definition of “skyscraper.” Critics, architects, and scholars have asked, first and foremost, whether a skyscraper’s sheer height, especially by comparison to the contemporary urban surroundings, should function as the key factor in its definition. Secondly, they have focused on the question of whether the modern skeleton frame system of construction should assume an equally important, if not primary characterizing role. At times, height has taken the greatest importance, with the result that New York City has been judged as the site of the skyscraper’s origin. Conversely,