

# Julia Morgan as Engineer

by Taylor Coffman

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AT THE OUTSET for me at Hearst Castle, starting in 1972, I used to hear one of the senior guides tell the public—with great pride and emphasis—“Julia Morgan did ALL her own engineering.” This meant that Morgan (1872-1957) was more than a mere architect. So adept and versatile was she that technical or even scientific matters that crossed her desk were easily tackled, by the woman herself. We guides visualized all sorts of episodes: Miss Morgan designing roads, a water supply, a sewage system, a hydro-electric plant, an airstrip, and still more for the lordly W. R. Hearst, many of them things well outside an architect’s usual bounds.

Was she really that ingenious, that much of a multi-tasker? We had no reason in a year like 1972 to think she wasn’t.

By the mid-seventies our outlook began changing. Richard Longstreth, a new Morgan expert in the San Francisco Bay Area, put things differently. He said that even though Morgan enrolled in the College of Engineering at UC Berkeley in the 1890s, her technical training was limited. Design and drafting and planning were one thing. Their nuts-and-bolts underpinnings were quite another. Despite its “Engineering” name, the curriculum Julia was exposed to in her youth was more akin to “pre-architecture,” said Longstreth, a coinage inspired by the terms pre-med and pre-law. It was upon going to Paris after her initial Berkeley days—to study at the famous École des Beaux-Arts (in French, no less)—that Miss Morgan became a bona fide architect. She never regarded herself as an engineer, per se. Nor

did she ever call herself one.

But solid engineering was obviously central to what she did in her nearly 50 years as a prolific designer for Hearst and many other clients. So was Old World craftsmanship. Thus did she recruit and work with people who had these talents, these traits and skills that complemented her abilities. Walter Leroy Huber was one such engineer. So was another man named Walter—her close friend Walter Steilberg, who later made light of the College of Engineering in its formative period, describing its program as “pretty elementary.” In any event, it was to professionals of the Huber and Steilberg caliber that Morgan assigned her engineering needs, whether for a stupendous project like Hearst Castle or for a humbler one like the Monday Club, right here in San Luis Obispo on Monterey Street. She also had an engineer named Jim LeFeaver on her office staff in San Francisco.

A survey of today’s archival riches is revealing. In Cal Poly’s Kennedy Library, Special Collections, its Julia Morgan holdings are replete with correspondence and similar items. But not much exists by way of engineering “calculations.” Meanwhile, the Walter Huber files, also at Cal Poly, contain many examples of what look like Egyptian hieroglyphics: mathematical notes and scribbles that no one but a well-trained civil engineer could make—or decipher. The George Loorz Papers at the History Center, in downtown San Luis, contain similar cryptography. That’s because Loorz was a true civil engineer, making him an ideal supporting actor at San Simeon to Morgan’s role as the master architect.

Ironically, George Loorz, roughly 25 years Morgan’s junior, attended the same College of Engineering at Berkeley. By the time he did, it was the early 1920s. Things had changed greatly since the 1890s. Had Morgan gone through the more advanced training that Loorz underwent, her career may have taken a different turn. As it

was, her preference for and her lasting focus on design and planning—with her engineering needs being entrusted to men like Huber, Steilberg, Loorz, and LeFeaver—suited Morgan perfectly.

This isn't to say, though, that she knew nothing about engineering. Far from it. In 1928, when Hearst wrote to her about the work being done for him and Marion Davies in Santa Monica, where the big Beach House job was going full bore (concurrent with San Simeon), he spoke of the first designer he'd retained, a young man whose efforts were now giving way to Morgan's better methods. The man was "not a very experienced architect," Mr. Hearst said of him, and he was "nothing of an engineer." Morgan would have known exactly what Hearst meant. In turn, she called upon Walter Huber and also Walter Steilberg to help remedy things in problematic Santa Monica. George Loorz was also on that job, before he signed on at San Simeon. For her to have coordinated things as she did, she had to understand the challenges well enough herself. She surely did, thanks in part to what she'd learned back in the 1890s at the old College of Engineering.

Karen McNeill, today's leading specialist on Julia Morgan, is quick to say that those beginnings for Morgan shouldn't be minimized; they shouldn't be trivialized or dismissed. They counted for much, believes Dr. McNeill, even though the Berkeley approach had a ways to go in becoming the distinguished, cutting-edge curriculum that Loorz and others would gain so much from. As for Morgan's training in Paris, young Julia studied under "some of the most modern practitioners of structural systems like reinforced concrete," says Dr. McNeill, who also points out that "the construction course was notoriously difficult and thorough."

There's a historical balance to be struck here. The naïve claims of years ago need to be played against the later, more frowning thoughts that Morgan had no engineering background at all. As with so many things in life, the truth lies more toward the middle. It remains for

Karen McNeill to clarify these details in her forthcoming book about Julia Morgan.

I much look forward to that book—to getting Morgan’s career in fuller perspective than we’ve ever had it before. And if it turns out that this gifted architect designed bridges or culverts or other things of a more workaday sort than a hilltop pleasure dome, I’ll be quick to accept them as instances of her true genius, of the range and diversity that were indeed her hallmarks.

Taylor Coffman worked at Hearst Castle from 1972 to 1983; he’s the author of several books and articles stemming from that timeless subject. His current projects include *Hearst and St. Louis*, inspired by the former Hearst items in the Saint Louis Art Museum, one of the Midwest’s finest repositories. He’s also working on a regional California book called *Malibu 90265*. Your comments or questions are welcome at [taylorcoffman@aol.com](mailto:taylorcoffman@aol.com); see also the author’s online book about the Santa Monica Beach House, posted at [www.coffmanbooks.com](http://www.coffmanbooks.com).