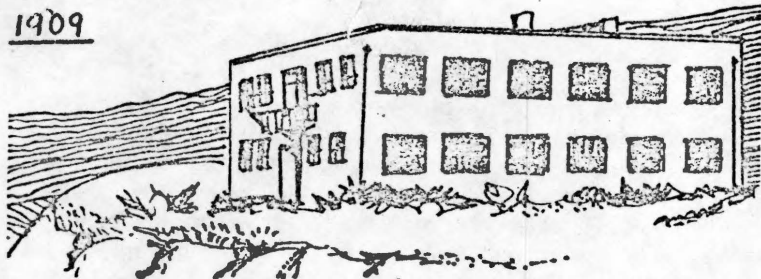
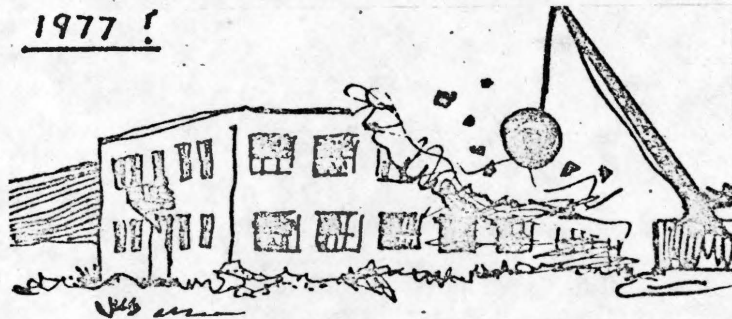


1909



1977 ?



A Note on the History of the G. H. Scripps Building

F. N. Spiess

Director, Marine Physics Laboratory
Scripps Institution of Oceanography

The original Scripps building is an unpretentious structure, well suited to its purpose and typifying the direct approach of the Institution to the problems of learning about the sea. Built in 1909, it was the first truly permanent structure in any of the shoreside marine biological stations in the western hemisphere. It is, moreover, the oldest such building in the world to provide the magic environment to carry its inhabitants through the transition into a major, multidisciplinary oceanographic research institution, holding its position at the forefront of this development for nearly seventy years. On the local scene it provides one of the earliest examples of the productive pattern of collaboration between business and professional leaders, scientists and architects which has launched San Diego, not only as a major oceanographic center but as a leader in other aspects of science and technology as well.

In the era in which the building was built, marine science was carried forward by scattered individuals in universities and at a number of small marine stations, mostly active in the summer. The bulk of these were in Europe but a few were in the Americas—all in the United States. In addition to Scripps, there were four others—the Marine Biological Laboratory (MBL) at Woods Hole, Mass.; the Beaufort Marine Station of Johns Hopkins University, Hopkins Marine Station of Stanford University, in Pacific Grove, Calif., and Friday Harbor Laboratory of the University of Washington.¹ These were, in 1910, housed in a variety of frame or brick buildings, ranging from Friday Harbor's converted cannery to the more substantial structures of MBL. Not long after the construction of the Gill-designed, reinforced concrete Scripps structure, MBL built (1913) what is now its oldest laboratory space, the Crane wing of the Lilly building; and Hopkins moved into the first similar building on its new site (Agassiz Laboratory, 1917). Friday Harbor's new site and facilities came still later, and the Beaufort laboratory, itself, has had only an intermittent existence. Thus, this simple, functional, durable building stands as the oldest one continuously used for marine science in the Americas.

At the time this structure was being planned, Professor C. A. Kofoid, a University of California faculty member and participant in the La Jolla laboratory, spent a sabbatical

year in Europe and, among other things, wrote a 360-page survey volume titled *Biological Stations of Europe*, published by the U.S. Bureau of Education² in 1910. In this he displays the results of his visits to over 90 such stations from Ireland and Norway to Spain and the Crimea. The major ones whose structures are still in existence today are the Marine Biological Association Laboratory in Plymouth (U.K.), the Musée Océanographique in Monaco and the Zoological Station at Naples. All of these late 1800's structures are magnificent in dimensions and facade compared with the Scripps building and yet none of them have grown much beyond their 1910 size and scope. Interestingly, of the entire European list, the only one which has emerged as a leading modern, multidisciplinary oceanographic institution is the Institute of Marine Research in Kiel, which at that time Kofoid characterized as "located in rented quarters ill-adapted to its work."

It may be that these 19th century forerunners of modern marine science institutions became old too soon in their magnificent quarters and were unable to move, as Scripps and Kiel were, into modern oceanography. In this context, then, the Scripps building must be recognized as the oldest in the world, by far, to have provided a home for this development. It was clearly a marine biological place at the start, but even the first director saw the need to bring other fields into the picture and by the 1930s, with a physical oceanographer as director, the full and balanced range of disciplines—biological, physical, chemical, and geological—were represented, all being housed at one time or another in this original structure.

The building remained the strong focal point of the Institution, containing the Director's office and the only classroom, until the early 1950s. In it was assembled a major part of the first comprehensive, and still most authoritative oceanographic textbook: *The Oceans*, by Sverdrup, Johnson and Fleming.³ First published in 1942, it synthesized and summarized in its 1,000 pages the world's understanding of the sea on the eve of the great oceanographic expansion that began during WW II. Again, in that applied era, the building's occupants played major roles. It was here, for example, that Sverdrup and Munk developed the basis for the surf-prediction methods

used in connection with the major landings in Africa and Europe.

Immediately following WWII there was growth, not only in ocean research, but in education. With the only established graduate oceanographic program in the U.S. at that time, the Scripps building classroom saw a sudden influx of students—some of these have remained here on our campus as leading research staff members, but many have gone elsewhere to expand oceanographic programs in other institutions and in Washington, D.C. Overall, including the pre-war period, this classroom has seen the education of at least nine oceanographic institution or department leaders: Revelle, who directed Scripps itself; Fleming, at University of Washington; Burt, at Oregon State; Leipper, at Texas A&M; Pritchard, at Johns Hopkins; Knauss, at Rhode Island; Wooster, at Miami University; Stewart at the NOAA Miami Laboratory; and Treadwell as Commander of the Naval Oceanographic Office.

The discipline of oceanography is at an awkward age—old enough to have a real history, but young enough that one feels a little ill-at-ease extolling the eminent, since they are still among us. It is easier to work with statistics, and these show that through this building there has been a far-above-average flow of leaders in our field. For example, it has been the working place for 11 who were, or became later, members of the National Academy of Sciences—an appreciable fraction of all the oceanographers to be so designated. In addition, various occupants have at one time or another received almost all of the major individual awards available to marine scientists.

This same building is well known in completely different circles as an architectural landmark. It was the first monolithic concrete building to be designed by, and built under the supervision of, Irving Gill. Most extensive discussions of his work, as well as accounts of the early days of La Jolla, include a photograph of this building, flanked by the water tower, also of his design, at the time when they were the only substantial structures along the entire extent of the La Jolla shores beach. Planned demolition of the immediately adjacent library which has towered over the Scripps building for many years will restore the opportunity to view the latter in a more favorable perspective.

The building is a landmark in Gill's development, being one of two buildings that ". . . marked the beginning of his mature style . . . Both were utilitarian with cost a major consideration. This was Gill's opportunity to experiment in concrete monolithic construction, to strip away ornament and projections and to flatten the roof." (Quote from *Five California Architects*, by Esther McCoy).⁴ This is the approach he, himself, described as "We should build our house simple, plain and substantial as a boulder, . . ." (in *The Craftsman*, May, 1916). The other building of this landmark pair (Holly Sefton Memorial Hospital for Children, San Diego) has already been demolished.⁵

The circumstances of the building's origin give it additional historical significance in the San Diego area as a

very early example of the now well-established constructive interaction between the city's political and business leaders and the scientific and architectural communities in the initiation of progressive new enterprises. Director W. E. Ritter and his staff had been supported locally in establishing and maintaining the institution in various temporary quarters starting in 1903 with backing from a special committee of the Chamber of Commerce. In 1907 the city agreed to auction off one of its Pueblo lots, which went to the fledgling institution for \$1,000, to provide its permanent home. As the plans for this, the first building on this land, were developing, there was close collaboration between the scientists—particularly Ritter and Kofoid—and the business and professional community, represented among others by E. W. and Ellen Scripps, H. L. Titus, Julius Wangenheim and Dr. Fred. Baker. When the scientific group worried about Gill's reputation for high cost structures, Wangenheim responded by guaranteeing to cover any overrun, while Gill responded with a design that fulfilled all desired requirements and which was built (by P. Acton) well within the budget.⁶

One can have a much deeper appreciation of Gill's own convictions about his work when one sees the pictures of the ornate, elegant marine biological laboratories to which he must have been exposed by Kofoid upon the latter's return from Europe. Instead of imitating these, he went his own way, combining various features such as skylights and internal windows, ample corridors and spacious north-lit offices to produce pleasant, effective places in which to work, within a simple and yet not monotonous exterior. He made full use of the latest experimental techniques in reinforced concrete (Kahn method) and designed and tested his structure to the same load-carrying capabilities as are normally specified today. While we do not know all the details of its engineering design, the building was an immediate forerunner of Gill's Homer Loughlin Theater in Long Beach, a structure which survived the major 1933 earthquake in that area.

In spite of the 1931 interior remodelling which produced a more cramped and darkened first floor, this simple, durable building seems to have been properly matched to the situation; able to play its role in providing the foundation, not only for Scripps, UCSD and San Diego's major role in marine science and engineering, but for all of modern oceanography as well. It seems unlikely that any other single building can occupy this position again.

References

- ¹ J. Hedgepeth, private communication
- ² *Biological Stations of Europe*, by C. A. Kofoid, available in SIO Contributions, 1910, part 2.
- ³ *The Oceans*, by H. U. Sverdrup, M. W. Johnson, and R. H. Fleming, Prentice-Hall, 1942.
- ⁴ *Five California Architects*, by Esther McCoy, Reinhold Book Corp., 1960.
- ⁵ H. Ferris, *Journal of San Diego History*, Vol. XVII, No. 4, Fall 1971.
- ⁶ *Scripps Institution of Oceanography, First 50 Years*, H. Raitt and B. Moulton, Ward-Ritchie-Press, 1967.