

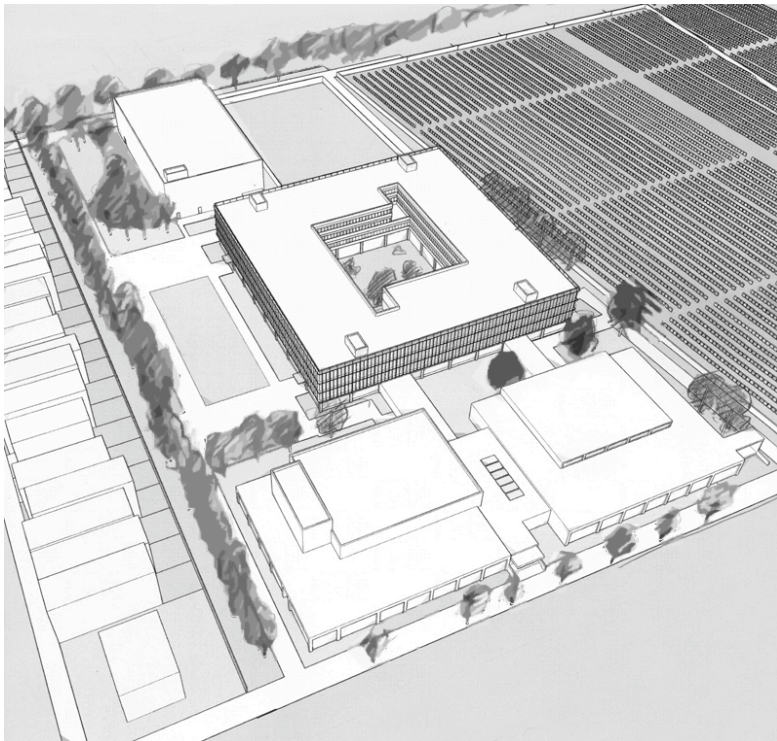
## Diagram in a Diagram

### Raymond & Rado's Franklin Delano Roosevelt High School

The first thing to say about Raymond & Rado's Franklin Delano Roosevelt High School is that Antonin Raymond, the protean Modernist who has lately become something of a cult figure, had nothing to do with the project. Although Raymond entered into a New York-based partnership with fellow Czech émigré Ladislav Rado in 1945, he returned to Japan within four years, and after 1955 his ties to the office were entirely nominal. This arrangement seems to have suited both architects: with Raymond off pursuing expressive structural forms, Rado continued in a pragmatic, goal-oriented mode shaped by his studies with Gropius at Harvard and his experience in Norman Bel Geddes' industrial design studio.

Rado's predilections are starkly expressed at the Roosevelt School, which reads as a throwback to the straight-ahead efficiency of pre-war Modernism, transplanted to 1965 Brooklyn. Edmund Caddy, the project architect (and partner in the firm from 1968 on), put it bluntly: "There is too much style in contemporary architecture ... The objective in designing a school is to concentrate on a solid solution."

Caddy's "solid solution" had to account for some dispiriting circumstances. New York's public schools had become the focus of an orgy of vandalism; the seemingly inexplicable fort-like designs of the time were, in fact, exasperated responses to the barrage of rocks aimed at every unprotected window. Further, the client for the Roosevelt School was the Board of Education's Bureau of Construction, which did little more than provide a standard program for a ~3500 student facility. Finally, the site in Borough Park was a strange one for a public building: a strip of land through the center of a block, with short frontages at either end, residential backyards to the south, and a cemetery to the north.



Franklin Delano Roosevelt High School  
*Aerial view from southeast*

The Raymond & Rado office faced up to these circumstances, and even managed to exploit them. In the absence of an end-user client to negotiate with, the architects could treat the program's arrangement on the difficult site as a pure logic problem. They jettisoned the city's schematic proposal to compress the whole school into a multi-story building at one end of the lot, arguing that this complicated both structure and circulation. Instead, the school is laid out as a tightly-packed campus of low buildings and small courtyards. The gymnasium, cafeteria, and auditorium are pushed to the street edges, making them easily accessible for public functions and presenting a minimum area of glazing to vandals. Extracting these blocks of large-scale specialized program leaves the center of the site free for the core educational spaces, which are accommodated in a perfectly square, obsessively regularized courtyard building.

The rhetorical extremity of this resolution saves the Roosevelt School from dry rationalism. It also lays bare a basic tension in approaching design as a logical unfolding of project requirements: the imperative to respond to circumstance versus the temptation to perfect a generic type. This is literalized in the relationship of the differentiated gym, cafeteria, and auditorium blocks to the platonic classroom building: the school is essentially a utilitarian, circumstantial diagram that contains, at its heart, an ideal diagram. Further, the circumstantial diagram supports and serves the ideal diagram, both cradling it and accepting all the anomalous uses excluded from it.

Circumstantial versus platonic is signaled over and over again in the Roosevelt School's design. While the secondary program elements sprawl across the site, often running together into a continuous single-story mat, the classroom block is a precise, prismatic form, "raised" off the ground by a heavily-glazed first floor. The gym, cafeteria, and auditorium are framed in steel, allowing for various long spans, variable roof heights, and opportunistically shifting bay sizes that read clearly on the exterior elevations. By contrast, the central palazzo is a relentlessly regular concrete structure with a module that corresponds exactly to a



Classroom block facade  
*View from southeast*

single classroom, and stairs and services organized in rigorous symmetry. Most obviously, the secondary programs have frame-and-infill facades that could hardly be dumber, while the classroom block has a revetment of finely proportioned precast concrete panels to make high-end corporate architects weep with envy. In fact, these panels themselves are highly idealized: although they frame real windows, their deep modeling suppresses the actual sill and head locations in favor of suggesting an elegantly attenuated floor-to-ceiling opening.

In practice, the Roosevelt School functioned much as anticipated, with some exceptions. Rock-throwing vandals broke into the adjacent cemetery to get at the windows of the classroom building, and the central courtyard was locked shut after teachers found it projected even the softest noises into the surrounding rooms. A more ambiguous issue was raised by the school's principal, who regretted that "you cannot see the building from the street." Of course, this isn't literally true, but the campus layout does submerge its most impressive architecture within a nondescript perimeter. On the other hand, this reticence is sort of charming, especially since a public path through the block allows anyone to discover how the "perfect" classroom building is nested inside the extensive infrastructure that supports it.

The Roosevelt School is a work of great competence, if that word has any positive sense left. Moreover, Raymond & Rado's design suggests that competence can even develop its own kind of lyricism—precisely by elaborating that signifier of bloodless reductivism: the functional diagram. The school's architecture is activated both formally and conceptually by the play of inclusive and exclusive diagrams, encapsulating an ideal schema within a situational one. As a building, the Roosevelt School provides not only the solid solution Caddy aimed for, but also heeds his open-ended qualification that "...perhaps it is possible to give the client something far in excess of his program."