OVERLAPPING GEOMETRIES

1 + 1 = 3
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Hans Rott, Chairman

Kay Edge

William Galloway

Deidre Regan

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This book is divided into three sections which correspond to the development of the thesis. It began with a simple construct - two overlapping forms creating the potential for a third element [OVERLAPPING GEOMETRIES]. Theory was brought into practice with the development of the structure of the building and the study of the elements of enclosure [FRAME & ENCLOSURE]. In conjunction, ideas about spatiality, light and connectedness were brought to the project [SPACE & CONNECTION]. This was not a linear progression, but for the purpose of clarity, it is presented this way.
OVERLAPPING GEOMETRIES
The idea of two elements overlapping to create a third element is a very simple idea, yet one imbued with possibility. It can be as simple as two colors combining to create a new color: yellow + blue = green. This new, third element can stand alone, but it always retains traces of the two original elements. This third element is enriched by the two primary elements, and they, in turn, are enriched by this connection.

\[1 + 1 = 3\]
The place where two elements come together can become an integral part of both elements. It can become a central space where ideas meet and intermingle. In such a way, a school of architecture and design centers around its studio. The studio is, for the student, the place where living and learning come together. Here, the practicality of materials meets the theoretical concepts of the classroom. It is often, quite literally, “home away from home” for the student, who spends many hours working on studio projects, gathering with students and faculty, trying to bring design theories into practice.

With this idea in mind, a Girls’ School of Design is postulated.
By allowing the interlocking of the living space (dormitories) and the learning space (classrooms), a central studio space is created. The two overlapping geometries literally create the third element - the studio. Thus, the programmatic element gives the regulating idea to the building.
The chosen site for this project is located in the Dupont Circle area of Washington, DC, on the corner of P Street and 18th Street. As seen in plan, an overlapping condition existing in the urban development of Washington, DC becomes apparent - the overlaying of a circular geometry upon an orthogonal grid. The radial grid meets the orthogonal grid at P and 18th Streets. The site lies at the intersection of these two conditions.
The idea of overlapping forms lends itself to the integration of building and site. By pulling elements from neighboring structures, a building can speak a similar language to the site while also introducing a new dialect. New and old coexist in a way which can call attention to both, yet one does not overpower the other. By analyzing the basic form of the neighboring building, a similar grid of rectangular shapes can be seen in the window placement. This helps tie the new building to the other buildings in the block which lack this repetitive facade.
By opening up the corner of a building, a space is created for pedestrians. The building has a more direct dialogue with the other buildings at the same intersection. The corner becomes a place for entry into the building or a place to move off a busy sidewalk to rest.
This articulated wall breaks up the facade of the apartment building and adds interest to an otherwise flat wall condition. Light and shadow can play upon the surface of the building. Multiple views of the street are created as well as a variety of lighting conditions in the rooms.
Similarly, by projecting a box out from a house facade, multiple views and lighting conditions are created. In a tight situation where space must be maximized, this type of treatment can create space while keeping driveways and sidewalks accessible.