EDUARDO SACRESTE, JR.

BUILDING FOOTPRINTS

A SELECTION OF FORTY-FIVE BUILDING PLANS, ALL DRAWN AT THE SAME SCALE

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INTRODUCTION

When we walk by the proudy shore of a lake and see the footprints of animal, we can say that there stood a horse, a cow, an elephant, a snake, a crab, a bird. If we do not recognize the footprint we can guess quite easily the kind of animal that has left its mark. In other words, we can classify the footprint into some group. We can guess the volume, the weight and other particulars of the animal. We can judge because we have a visual education in footprints.

With the plans of buildings the same should happen as with animals. If we have a visual education we should be able to recognize the style of a building, the period of the techniques, the materials and the social conditions that the plan expresses.

The ground floor plan of a building is like a footprint. It is the essence of the building. The technical problem of architecture has always been the roof, to span, to defend gravity. When we put a structure into the air, a play of forces takes place. The resultant of this play of forces ends with an impact against the ground; this impact is the footprint of the building. Then those forces dissipate into the earth through the foundations. This character of the floor plan—one be the impact of the resultant of a play of forces—is what gives it its importance. It is in many ways like an X-ray of the building. In the plan we find clearly expressed the technical system and the social conditions that made it possible, the space, the height, the rhythms and so on. “The plan has within itself the essence of the sensations.” It is a summary. “The law of the building is written on the floor.”

Because of this ability to judge the building from the footprints we can find today many things of the past which would otherwise be lost. Tol El Amarna, Mahenjo Daro and Priene are examples. In England, in Old Sarum, we have the opportunity of seeing the footprint of a Romanesque church. How suggestive is this footprint! Looking at this plan in full size on the ground we can imagine the rhythms, the spaces, the actions of that vanished church. The plan is not an arbitrary thing, not a pretory picture to admire for its own sake. It is the result of much experience and research. A plan is like a decantation of wine—it needs time to settle. This is the reason that the plan is so rich in expression and in intuitions. There is no difference between the plan of a house and the plan of a temple within this context. Both change slowly, with time, with feeling, with the new ways of life. The history of architecture should have as one of its aims to acquaint us with the footprints of each epoch. It should teach us how to read in the plans of the past the life, the struggles and the joys of the people who supply the imprint. A comparison of plans is illustrative. It helps us to realize the scale, techniques, spaces and social conditions of different times. Yet, what generally happens? Our books on history will show the plan of a big building like St. Peter in Rome on a small scale and the plan of a tiny cathedral as at Athens on a large scale. We are misled.

If we compare our own plans with plans of other good buildings, we will profit by the accumulated experience that is the history of architecture. In this way we can visualize more easily the kind of space we are creating and the scale of our own structures.

Aside from the profit we can draw from comparing plans, the study of plans of well-known buildings should be for an architect a joy and a source of pleasure. When an architect looks at the plan of a Roman, a Gothic, or any other good building, he can see many things and can imagine many others. I consider that for an architect a visual education in plans of buildings is a necessity. That education will enrich his knowledge and experience and help his judgment and sense of self criticism. But looking at this collection of plans, all at the same scale, we can understand and understand many other things; for instance, in the plan of the Hypostyle Hall at Karnak we see the strong emphasis on the longitudinal axis, and we understand how right is Spengler when he says that for the Egyptians space existed at the moment the procession was moving along this axis. He is right also when he notes that the temple was the Egyptian model of life: a straight line that we must follow from the day we are born until the day we die, whether we like it or not.

Then if we compare this plan with the one of the Hundred Columns at Persepolis we can see how different they are in space—although they have a very similar appearance; there is no dominating emphasis in any direction at Persepolis. This is a room in which to move to and fro; a throne room.

If we compare then the plan of the Johnson Office of Mr. Wright, we can state without doubt that the columns in Racine are for the sake of the spatial sensations Mr. Wright wished to create, not for any technical reason.

Through this comparison we can realize, possibly for the first time, the real size of St. Peter in Rome, of Romishape, and of the tiny Cathedral of Athens. We can understand Bramante’s idea of St. Peter when he explains it saying: “I will place the Pantheon above the Basilica of Maxentius.”

We can learn much when we study the plan of the small Temple of the Bull in India. We see how rich is the space and the variety of the temple despite the fact that the plan is laid out on a strict rectangular module; all the buildings is built using granite pillars, slabs and lintels of this dimension.

It is possible that as a result of this review of plans we can better understand the richness and variety that has been attained by architectural creations throughout history, despite the generally limited list of materials available—stone, brick, concrete and wood. We can see that richness and variety do not lie in the materials but in the spirit and intelligence of the people who develop the different structures (constructive forms) in answer to their physical and spiritual needs. After the nineteenth century things began to change. Society became more complex. Population increased and new materials began to appear, such as steel and reinforced concrete. Now, today, a new scale and a new footprint are emerging. A new chapter of possibilities is open.

When the great problems of our present society begin to be solved, we shall have new plans, at a new scale.
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