

Lesson 3 Building for Change

Kéré, Architect of Dreams

"It is not because you are rich that you should waste material. It is not because you are poor that you should not try to create quality. Architecture, to me, is caring."

- Diébédo Francis Kéré

The role of architects is often associated with the design of luxury buildings. Architects mainly focus on how unique and extraordinary the buildings they design are, and thus it is easy to forget how architecture can modify places and give people better living conditions. Architects need to think about using architecture as a tool for the development of communities that responds to the current needs of society, even in places that lack money and building technologies, and Diébédo Francis Kéré is doing exactly that in Africa.

Francis Kéré, a winner of the Pritzker Prize, was born in Burkina Faso, one of the poorest countries in Africa. The region in Africa where he grew up didn't have any electricity or running water. When he was seven, he had to move 13 km away to attend school. He made history in his village as its first student ever. The conditions of the school he attended were very poor. The classroom, hastily constructed from cement, was filled with over a hundred children. With temperatures often exceeding 40 degrees and without any form of lighting, it was a challenging environment for learning. Although Kéré could have given up his dreams, he remained determined to study.

While still a young student, he was awarded a scholarship to study carpentry in Germany. He finished his high school studies in Germany and went on to attend university there as well. Even though he became a globally recognized architect in Germany, he has not forgotten his roots. His architectural designs are deeply influenced by his love for Africa and a profound sense of pride in his people.

Gando Primary School

For his first project, he managed to raise \$30,000 to build an elementary school in his native village, Gando. Instead of using more conventional modern materials like concrete, glass, and steel, he chose to use clay, embracing the traditional building methods of Africa. He made bricks by mixing clay, a locally available material, with 10% cement. This mixture helps keep classrooms cool during hot weather. Additionally, he used bricks with holes in them to make the ceiling and built a high roof using a contemporary architectural system to let hot air escape. The large overhanging roof provides shade and protects the clay bricks from heavy rain.

Traditionally, members of a whole village work together to build and repair homes in rural Burkina Faso. In keeping with this cultural practice, Kéré encouraged the villagers of Gando to take part in the construction process. His objective was for them to make the place on their own. Children gathered stones for the school foundation and women brought water for brick manufacturing. He also trained the young members of the village and then they collaborated on the construction. These trained workers have since used these new skills to build schools and houses in other communities. Furthermore, he made all the architectural plans for the school construction available to anyone in the village, which made it easier for two nearby villages to build their own schools. Thanks to the success of this project, the number of students increased from 120 to a remarkable 700.

Lycée Schorge Secondary School

Located in Burkina Faso's third largest city, the Lycée Schorge Secondary School is comprised of nine distinct modules. These modules house a collection of classrooms and offices, all centered around a main public courtyard. This design ensures privacy from the main public area while simultaneously sheltering and protecting the courtyard against wind and dust. Kéré tackled the problem of limited resources during the building's construction by using materials that were easy to find in the region in the same manner as before. First of all, he built the walls of the building using bricks made from readily available stone in the region. These bricks help cool the building by absorbing intense daytime heat and later releasing it during the night.

As with many other buildings, an overhanging roof protects the brick walls from the harsh African sun while also facilitating air circulation below. To capture fresh air and let hot air escape, Kéré also added wind towers on top of each classroom. The school is surrounded by a screen made from fast-growing local eucalyptus trees. This screen provides more than just protection against dust and wind. It also creates casual spaces where students can gather as they wait for their classes to begin.

Serpentine Pavilion

Over time Kéré's work has expanded well beyond Africa. It now includes temporary and permanent structures in Denmark, Germany, Italy, Switzerland, the UK, and the USA. Perhaps not too surprisingly, his works outside of Africa are influenced by his experiences in Gando. A perfect example is the colorful Serpentine Pavilion in London. Since the year 2000, the Serpentine Gallery in the UK has annually invited distinguished architects from around the world to design a pavilion, which provides a place of rest for visitors. In 2017, the honor was extended to Kéré. Drawing inspiration from his hometown, where locals would gather to work, converse, and study beneath the shade of trees, he modeled his design after a large tree. The pavilion's roof, resembling the wide branches of a tree, includes a transparent layer that allows sunlight to spread into the pavilion below. Visitors may enter the pavilion through one of its four entrances and sit around the central ring to look up at the sky.

The pavilion's exterior walls, shaped like triangles and made of blue wooden blocks, reflect Kéré's cultural heritage. In his hometown, residents traditionally wear blue clothing during times of celebration, and the triangles symbolize luck and confidence. Holes carved in the walls let in light to promote an airy, bright atmosphere, and a gap between the roof and walls ensures a lot of air circulation. The roof's unique funnel design channels rainwater toward the building's center. During rainfall, the water gathers and pours down like a waterfall. It is then sent through a drainage system for the purpose of watering plants. This method of rainwater collection stands as Kéré's symbolic message about the global challenges of water scarcity and climate change.

Kéré believes that architecture is primarily a service to humanity and hopes that his projects will inspire people "to dream of better." The more his vision is shared with a wider audience, the better our world will become.