The fourth Saturday of March found us in Baroda eager to spend the weekend embracing the city and its lessons.

**ISLAMIC STUDY CENTRE**

Our classmate Vrinda Parikh had graciously opened her heart and home to us. So after a quick stop and breakfast at her place, we headed to Islamic Study Centre- a vocational and professional education & training centre for the Muslim Youth. We sat in rapt attention as the Architect- Mr. Yashwant Mistry explained through words and sketches how the Centre was conceptualized, and then constructed. He emphasized on the need to ‘know’ the materials of choice (construction). He shared insights into how an architect should be more than a mere designer of buildings and in fact should be a facilitator in the generation of funds- to ensure the eventual build-ability of a project. Mr. Mistry walked us through the workshops and the lecture halls, pointing out details of the arches and the barrel vaults, their structural limitations, and therefore his solutions. He shared his views on the 22 designs of extruded brick especially crafted for the building; visual beauty; attention to detail; the importance of courtyards in stack effect; and how to lure wind within a building using the venturi principle. He took us through the journey of the building’s design and execution, reminding us at every point to take cognizance of ‘what can go wrong’ & designing accordingly.

It was a fresh approach to design. I mean, who thinks of ‘failure’ even before they have started? As we marvelled at the pristine lines of the mosque, he explained that the half cylindrical shafts on the two ends of the mosque were in fact wind channels that helped keep the interiors comfortably cool. He elaborated the science behind the parabolic ceiling in the mosque that carried the sound of prayer to the farthest person in the room, without any distortion or echo. We marvelled at the playful juxtaposition of walls in the dormitories, that allowed for just-about-enough privacy and created opportunities for trust, bonhomie and brotherhoods that would last a lifetime.
NALANDA INTERNATIONAL SCHOOL
Inspired by Mr. Mistry’s words, we headed to Nalanda International School- our next destination for the day. The school designed by Ar. Brinda Somaya, and recipient of the LEAF (Leading European Architect’s Award) in 2006, is a sprawling 25 acre campus. The school flaunts exposed brick and mortar, large open courtyards, wide verandahs, cross ventilated class rooms, concrete pergolas & more. The courtyard boasts of an ever-changing flooring pattern- as the geometric pergola above engages in a constant dialogue with the sun, offering scintillating sciography on the floor. The bell tower is an interesting element & even necessary, yet rarely incorporated in schools. The shaded and semi-shaded areas along with the earth tones of the building, made us forget that we stood under the scorching noon sun. The landscaping added to the visual, thermal and psychological comfort. On the neutral back drop of brown, walls here and there exploded with colour- creating visually balanced and ‘happy’ spaces. Even though the architect’s adherence to orthogonal geometry is obvious in every frame, the entire school with its huge courtyards and generous proportions looks anything but rigid.
AR. KALPESH & SHREYA DALWADI’S RESIDENCE

Huzefa Bhol, our coordinator for this visit, had us on a very tight schedule (for which, despite the initial ribbing we were actually thankful). After a quick lunch we reached Ar. Kalpesh and Shreya Dalwadi’s beautiful, award-winning, residence. Mr. Kalpesh, an alumni of Rachna Sansad offered to show us the residence he and his wife had constructed, incorporating the teachings of sustainable construction. The architects had decided to shun bricks for their house, as a means to fight global warming. The resultant house is a mud and stone construction, that employs compressed earth blocks made from mud that has been dug out from a 10’x10’x10’ pit on the site itself. This ensured a 25% cost reduction. The previous house on this site was owned by their father. When they demolished it, they did it in a systematic manner to re-use most of the wood and reinforcement steel. Limkheda and Akhik stones used for arches were also sourced from nearby Khambat. Local use of materials therefore ensured a small carbon footprint. Inverted earthen pots, painted in bright colours, were used in the filler slabs. The terrace above is covered by lawn and a veritable aquaponic vegetable & herb garden that gives seasonal produce. The green roof has effectively reduced the heat gain, since 80% thermal load in a building is due to horizontal surfaces. The use of cavity walls in the East and West direction, and the use of indirect lighting through strategic window placement further helped reduce radiation. The house boasts of temperatures 14°C cooler than neighbouring houses & a reduced electric bill! The Dalwadi residence, with its square courtyard, open plan kitchen and seating, yellow jaisalmer under bare feet, cool mud walls, gently swaying shell chandelier, creates a picture of an idyllic life- a life of simplicity and spiritual harmony.
MOGRI VILLAGE
Ar. Shreya and Kalpesh then took us for a quick visit to the Anoopam Mission in Mogri village. We were greeted with the breath-taking sight of peacocks strolling in the lush campus. As we watched a peacock take flight, the subtle knowledge dawned that this place must truly honour nature, for its birds to be able to live uninhibited. In an urban setup, rarely do we encounter birds that aren’t suspicious of human contact.

We were greeted by the ‘vratdhari shadhaks’ clad in sky blue shirts and crème earth coloured trousers, who live simply and frugally in the service of mankind. The main office building had been designed by the Dalwadi’s. As they took us around the brick and stone building, Ar. Shreya pointed out the upturned curvaceous cavity walls- that use earth below as the heat exchanger. The painted dholpur stone in window frames and sandcrete on the external wall, combined with the exposed brick wall and circular arches inside, gave the building a grounded appeal. One couldn’t help but observe the similarity between the building- designed as an octagonal plan, and the 8 spoke wheel- the logo for the Bochasanswasi Shri Akshar Purushottam Swaminarayan Sanstha (BAPS). The centre of the building acts as the main hall where prayers and havans happen. An arched colonnade flanks this central space. The building is planed like a ripple, with each quadrant serving a specific purpose.
MUNI SEVA ASHRAM

Next morning, we reached Muni Seva Ashram. We had heard a lot about the place and we were eager to pacify our curiosity. It was everything we expected and more. Mr. Deepak Gadhia, who kindly escorted us throughout the campus and patiently answered every question, welcomed us with fresh buttermilk as he narrated the vision of Anuben Thakkar-founder of Muni Seva Ashram. The ashram serves to strengthen and sustain the well being of less fortunate with the focus on agriculture, health care, education, welfare programmes and alternate energy. The thought and loving care that had gone into designing each of the lodging facilities such as Bhagani mandir (home for differently abled girls), parivar mandir (orphanage), Vanprastha mandir (senior citizen home), Kailash Cancer Hospital, is evident in the detailing. Brick arches and corbels, simple lines, utilitarian yet aesthetic planning of the buildings corroborated the fact that Anuben and Dr. Vikram Patel have created a place of beauty and functionality. It is not one of those dead perfunctory buildings serving a mere purpose in the name of philanthropy. You can witness the respect for people in the quality of construction, in the landscaping, the lotus pond flanking the Cancer hospital’s waiting area, where orange kois (fishes) frolic merrily in the water- offering welcome distraction to those who have come here with a chronic debilitating illness.

As if this weren’t impressive enough, Mr. Gadhia invited us to partake of the scrumptious lunch (continuing with the famous tradition of Gujarati hospitality) that had been prepared in the central kitchen. The meal, we were told, had been prepared using biogas, flat plate solar collectors and Schaeffler dishes.
Post-lunch we proceeded to the school in Vankua, where we saw more examples of the ingenious use of solar power generation: in the form of box solar cookers, more Schaeffler dishes and a thermic oil heat carrier. We observed Photovoltaic panels mounted on manual movable jacks- that were operated by students twice a day orienting them to the sun for optimum use. We also saw the gaushala- cow dung slurry from where feeds the biogas plant; the biomass gasifier- that uses gas produced from partial combustion of biomass (wood shavings & dry foliage) to generate electricity in an internal combustion engine, which is further used for the irrigation pumps. It was a humbling experience, to witness this wave of progress in a tucked-in tribal belt of Gujarat. We marvelled at what we had seen and learnt in these two days. We had travelled to this land in the pursuit of architecture; but at every stop we encountered- a deeper purpose, a conscious effort to bring about change; and driving passion & conviction behind every mission/building.

It was late afternoon, and we bid our farewell with a wistful heart. We had a train to catch, that would take us back to Mumbai; but we carried with us lessons from Baroda and the warm hospitality of its people.