

SHELTER FROM THE STORM

Resilience in International Slum Blue



India: a country so deeply rooted in the textiles industry that it is impossible to hear the name without imagining a land of antique woodblocks, fine cottons, exceptional crafts and colourful silks. But there is another fabric that is integral to life here. It weaves between the buildings, stretches through the trees, covers, conceals and protects from the sun or the heavy rain of the monsoon. The bright blue of tarpaulin spreads through the cities. It fills the skyline with construction and aspiration while providing shelter for the inhabitants down below.

Tarpaulin originated as a canvas or cotton that was treated to provide additional strength and waterproofing. Early examples show flax linen coated in linseed oil created from the flax seeds, providing the protective layer. Although heavy-duty flax canvases are still available, the name 'tarpaulin' now covers a multitude of synthetics, laminate sheets, plastic and vinyl. Historically this material was claimed by the maritime community as a 'tarred palling', a waxed canvas sheet that was pulled (from the word 'pall' meaning cover) over objects on deck. The durable and waterproof nature of these materials became essential in protecting humans and objects against the elements, making tarpaulin a valuable architectural fabric for creating temporary constructions and shelters. A vital piece of kit for the military, refugees and anyone with limited resources, tarpaulin provides protection for those in need.



Flying into Mumbai provides a unique arial perspective of a city adapting to the huge problem

of overpopulation. From the air, parts of the city become a patchwork of blue tarp creating some of Asia's largest slums. As the population of India continues to expand, people flock to the cities trying to make ends meet and over 50% will end up living in temporary housing. The low cost and temporary nature of tarpaulin creates adjustable shelters that allow people to function within such limited spaces. In *Transgression; Towards an expanded field of Architecture*, Louis Rice describes Mumbai's informal houses as active spaces performing a multitude of functions. He describes how 'the "building" is a swarm of activities and profusion of materials.' These resourceful communities create structures which function as office, laundry, workshop, kitchen and bedroom for an extended family, all from a few square metres. Local leatherworkers of Dhavari slum have found a new potential for the material, sewing the colourful plastic sheets into bags and wallets to sell to tourists as part of 'The Waterproof Project'.

During June to August the whole of the Dhavari becomes a shimmering sea of blue plastic, waterproofing the buildings for monsoon season. This iconic blue of tarpaulin is known throughout the world and has been identified as 'international slum blue' by Louis Rice (a play on Yves Klein's International Blue). But why this blue? Of course, with such a functional material the reason is primarily down to cost; blue dye is cheaper than other colours, even white which requires a less economical bleaching process. But this distinct colour also has other powers. Practically, its ▶



Known for taking some of the most captivating photographs of architecture worldwide, German photographer Deidi Von Schaewen has focussed her lens on all kinds of places; from the most glamorous, sky-scraping feats of contemporary architects to the everyday ad-hoc innovations of tarpaulin. Taking pictures since the 1960s, she has a reputation for living the nomadic lifestyle, travelling through India, Sumatra, Saudi Arabia, Algeria and Africa in search of new ways to look at architecture – showing no signs of slowing down.



vibrancy allows the tarp to be distinctive against natural materials, which assists construction in the wilderness and also allows any damage to be easily spotted. This shade also provides better protection against the sun's rays by reflecting UV and keeping the resulting shelters cooler than black or white plastics. For the same reason the fabric itself is more durable and less affected by sun damage. There is also a more psychological effect of blue which is thought to benefit in situations of crisis. Blue is calming, reflecting a cloudless sky or peaceful sea. It instils trust and encourages relaxation and it is employed for humanitarian shelters throughout the world. The different colours of tarpaulin refer to grades of thickness, but blue is most common as the 'lightweight' and cheapest option. The universality of this colour makes its abundance so apparent, as the eye is drawn to seams of blue through the landscape.



The international use of tarpaulin is explored in Dina Gusejnova's documentary for Radio 4, *The Tarpaulin; A Biography*, exploring the history of the material and ideas of statelessness. In our current political situation we have over 20 million refugees and Gusejnova explores the significance of this material in facing this humanitarian crisis, referring to the 'Jungle' in Calais. She describes how 'tarpaulin with its history as the world's strongest waterproof canvas... brings to life ideas such as home or homelessness, a biography wrapped up in people's desire for protection and shelter.' In this moving account, the volunteers of Calais describe the power of this humble material in its ability to offer the idea of a home to those who need it.

Tarpaulin doesn't just provide shelter, it can also stretch above us and mark our aspirations. As Indian cities continue to expand outwards as slums, they also extend upwards in a canopy of glass skyscrapers under construction. This same 'international slum blue' marks the power of a developing city and a growing economy. But even these shiny modern developments are subject to the conditions of India's tropical climate. The blistering heat, humidity and torrential rains make it difficult to replicate the high-rise glass skylines from other cities around the world. In an unlikely incident in 2014, Mumbai's most expensive residential skyscraper, Antilla, was completely shrouded in blue tarpaulin to repair the leaks from the heavy monsoon season – a reminder that no amount of money can escape the realities of this unforgiving climate.

In essence, it now seems that tarpaulin is the material that is repeatedly called upon when all others have failed. It fills the gaps, waterproofs the leaks, bandages the cities and creates a home out of impossible circumstances with little or no other resources. Through her fascinating documentary, Dina Gusejnova describes how it provides shelter from political storm, giving essential support in times of crisis. From domestic DIY to providing temporary solutions in the face of overpopulation, conflict and extreme weather, tarpaulin always finds a way to make do. The versatility of this basic material speaks to the resourcefulness, ingenuity and inventiveness of society in India and provides a temporary shelter from the storm. ♦♦♦ **Sophie Vent**

