

10 The Future of Housing? Architects Designing for Multispecies Cohabitation

Can we also think of human relationships as interspecies relationships (beyond the familiar concepts of ecological diversity) – as a condition without which humans ultimately cannot exist? (...) The idea that even humans could only emerge in interspecies relations, in each case in most different interactive and cooperative forms with other species, would be an approach to think a new politics and subjectivation beyond neoliberal individualism (Marion von Osten, “Taubentürme und Trampelpfade” (“Pigeon Towers and Trampling Trails”), 2022; translated from the German original).

The cultural scientist and artist Marion von Osten initiated the exhibition project *Cohabitation* and she developed the concept with the project team before she passed away in November 2020 (the exhibition took place in Berlin in 2022). Among many other interesting activities, the exhibition also resulted in an issue of the magazine *Arch+ für Architektur und Urbanismus*, in which von Osten’s essay “Taubentürme und Trampelpfade (pigeon towers and trampling trails),” originally published in 2020, is also reprinted. An initial consideration for the project *Cohabitation* was the fact that architecture and urban planning have so far paid little attention to non-human species or perceived them primarily as obstacles to construction projects. In the exhibition, artistic approaches were attributed a central mediating role that can provide new models for thought as well as designs for the future of our cities. New terms, such as Animal Aided Design (AAD), show that this perspective has in the meantime received more acceptance.⁸¹

81 See, for instance, the publication *Animal-Aided Design in the Living Environment. Integrating the needs of animal species into the planning and design of urban open spaces* (German Federal Agency for Nature Conservation, 2022) Available online at https://www.bfn.de/sites/default/files/2022-03/AAD_Brosch_Eng_Web_bf.pdf (last access Jan 3, 2024).

The question of cohabitation also pointed the way for the 17th Biennale Architettura in Venice which ran from May to November 2021 under the title question “How will we live together?”. The international exhibition was curated by architect and scholar Hashim Sarkis who is convinced that we need “a new spatial contract. In the context of widening political divides and growing economic inequalities”, he called on architects to “imagine spaces in which we can generously live together”.⁸² The idea of *generously living together* can of course refer to many different dimensions and ways of life (see Schneider 2022). It may also be understood as an invitation to rethink the question of shared habitats and how we as humans coexist with other species, or how we might even create the basis for new forms of cross-species socialities – inside as well as outside our dwellings.

Online and in many magazines pictures of Anupama Kundoo’s famous second house, which she built for herself in Auroville, can be found (see Chapter 8 on this planned city experiment in the southern Indian state of Tamil Nadu) Although an interspecies design of the house actively enabled it,⁸³ the extent to which all kinds of animals felt invited to fly through the house, fitted into it or “colonized” the area around it, as Kundoo puts it, surprised her nevertheless. However, the most astonishing experience she made during that period was that her house was in fact so open and *generous* that even the neighbor’s horse felt free to just enter her house and visit her and her paralyzed mother every day, as Kundoo mentioned in her talk in Berlin in 2018.

Anupama Kundoo’s house seems like a perfect illustration of philosopher Emanuele Coccia’s idea that building a home is not necessarily a way to start a family or bring relatives together. Rather, it may be a deliberately chosen method to rid ourselves of our fixed identities as well as to create “uncertain and unbalanced blends to live a life outside our own species.” Coccia argues that in the future, “we as humans must welcome back and reopen the doors to living beings who are not family or part of our species and whom we have pushed out of the house” (Coccia 2022: 156 f.).

In what follows, I will introduce an example of an innovative interspecies housing design created for a unique form of animal-human cohabitation with a long history in Asia: Hathi Gaon, or the “Elephant Village”, in the state of Rajasthan.

82 See <https://www.labiennale.org/en/architecture/2021/statement-hashim-sarkis> (last access Jan 3, 2024).

83 Anupama Kundoo describes very vividly in her 2018 talk how freely and without regard to the ideas and wishes of clients she was able to experiment in the planning and implementation of her own house in Auroville.

Raman Sukumar describes the relationship between Asian elephants and humans as “the most contrasting and complex interaction between any animal and human through history”:

The elephant is a creature that has been tamed yet never really domesticated, that has carried our heaviest burdens, yet has also been a huge burden to farmers whose crops it has ravaged. It has been a participant in Asia’s fiercest battles for over two millenia, yet it has also played the role of an ambassador of peace. Elevated to the status of a supreme god, the elephant has also been kept in chains and brutally slaughtered for its ivory. It is then not an easy task to fully comprehend the legacy of *Elephas maximus*, one of the planet’s most intelligent and charismatic denizens (Sukumar 2016: 31).

10.1 Hathi Gaon in Rajasthan

A few years ago, architect Rahul Mehrotra and his firm were commissioned by the BJP state government of Rajasthan to design very low-cost housing for the elephants that transport tourists to the Amer Fort in Jaipur, and for their keepers – the *mahouts* who are traditionally Muslims in this region of India.⁸⁴ Animal-rights groups in India had successfully put pressure on the state government because the elephants didn’t have access to water. Elephants bond with their mahouts through bathing, for instance. The mahouts often sing the elephants to sleep, so it is a close relationship, and it was therefore no question that they had to be housed together. However, the mahouts themselves had never lived together with their own human species, so Rahul Mehrotra and his team found out that they had no real experience of community. Although they were only allocated 45 square meters per family at Hathi Gaon, the team was nevertheless able to build extra space into each house in the form of inner courtyards. This way, clusters of houses share bigger courtyards and communities could form. But before this became possible, they had to solve the water problem, as the land which had been given to them

84 According to Thomas R. Trautmann, the “unity of elephant and mahout” has its origin in the long history of the war elephants in South Asia, as “the emergence of the mahout as a professional elephant rider depended on the sponsorship of kings, who also managed reserved forests to ensure their continued supply” (Trautmann 2016: 47). Although he admits that it is difficult to prove that this continuity exists, or, in other words, to link the text-based research on ancient Indian history to contemporary ethnographic research on mahouts and the human-elephant relation, he nevertheless thinks that mahouts of the present day are “the recent twigs of branching lineages of teachers and pupils extending far back into the past. We know this, even though the mahouts left no written record of their own and are only rarely mentioned in the record written by the literati” (Trautmann 2016: 48).

was an old sand quarry, basically a big hole in the ground. Accordingly, the first step was to develop a concept for the slow regeneration of the landscape and then to design interspecies housing around water pools filled by the monsoon. In the beginning, most of the rainwater was absorbed which was good because this supported the tree-planting project. The clay walls of the water pools then compacted naturally, as local craftsmen had assured Mehrotra and his team they would, so that the loss became less and there remained enough water to keep the pools filled and to support vegetation. Within a few years only, the landscape was thus transformed, and the new low-cost houses could be built.

The houses in Hathi Gaon are small, one-storey structures in which the elephant occupies a portion of the ground floor, and the mahout and his family another. Mehrotra's team designed the roofs as flat slabs so that the families can build on the upper levels as their incomes grow. Like the inner courtyards, the principle of incrementality was a central aspect in architect Charles Correa's approach to low-cost housing. Incrementality means in this context that a low-rise house can always grow according to the owner's requirements and his or her earning capacity. In addition, this also allows the inhabitants to adjust the available spaces to suit their personal needs and preferred lifestyles, hence they can design the house individually. Not least, a low-rise housing can be constructed much faster, as an individual building his or her own house is, in Correa's view, a highly motivated person. It is also much easier and less cost-intensive to maintain low-rise houses.⁸⁵

The walls were made of local stone. As Mehrotra explained in interviews and talks about this project, their most important and inspiring tools were local wisdom and local building materials, whereas the negotiations with the state government proved to be extremely tedious throughout.

How can modern technology mesh with village wisdom?

Refraining from fetishizing the local as an end in itself is not productive. So in this case, for us it was more important to focus on water and contemporary ways of doing things to improve the lives of the mahouts. Evoking the architectural splendour the Mughals used to house elephants in, would be a non-productive or irrelevant approach, which would not sustain. So while we

85 Especially in combination with a policy of equity plots, that is, a distribution of urban space not according to income or social status but to the actual household size, Correa's hope was that the kind of low-rise high-density housing that he envisioned could constitute a crucial step towards defining a truly egalitarian urban society (Charles Correa [2012]. "Equity". *A Place in the Shade. The New Landscape & Other Essays*. Ostfildern/Berlin: Hatje Cantz. 199–205, p. 202). From the perspective of animal-human cohabitation and interspecies design of housing, it would be an interesting question if this approach can be expanded to include the co-production or co-designing by non-human species too.

built on local wisdom about how to hold water or ventilate the buildings, we were not constrained by the traditional images that went with those practices.⁸⁶

A six-and-a-half-minute video on the Sahapedia platform, an online encyclopedia on Indian culture and heritage, shows how an elephant in Hathi Gaon in Rajasthan is elaborately painted with plant motifs by its mahout and subsequently decorated with jewelry and textiles, at least on special occasions. Shakshi Gupta describes this in article as a contemporary continuation of a very old courtly tradition, which was particularly pronounced in Rajasthan:

Since ancient times, harnessed elephants have been employed by emperors and religious institutes for various purposes. They have always been an essential part of the lifestyle of Indian royalty, especially in Rajasthan. Therefore, they were groomed with great pomp and ceremony. But with the passage of time, the use of bedecked elephants gradually declined, which gave rise to rapid commercialization.⁸⁷

However, animal rights activists have repeatedly pointed out in recent years the health hazards to animals that regularly have chemical dyes applied to their skin which sometimes contain toxic elements.

The first families of the mahouts and their elephants arrived in early 2012 in Hathi Gaon and the village was finally ready to house between 70 and 100 families. According to press reports, there are currently 65 elephants in this village, although some sources mention a higher number. Over the last decade, Hathi Gaon has been regarded as a highly innovative architectural project and received a lot of attention worldwide, it has also won awards for sustainable architecture.⁸⁸ However, it is important to mention that because of the dependence on tourism, the imposition of a severe lockdown in India in response to the outbreak of COVID-19 had terrible effects on the elephants as well as the mahouts and their families, as elephant rides at Amber Fort and weddings, which used to be their primary source of earnings, had come to a halt ever since the lockdown began, and the government did little

86 Deepika Sorabjee (2013). "Rahul Mehrotra. Elephantine vision". *Mint*, Oct 26. The interview with Rahul Mehrotra is available online at <https://www.livemint.com/Leisure/570oqHdiGbWdiVd2hO4nBK/Rahul-Mehrotra--Elephantine-vision.html> (last access Jan 3, 2024).

87 Shakshi Gupta (2018): "Decorating Elephants in Hathi Gaon in Rajasthan". *Sahapedia*, Jun 18. Online available at <https://www.sahapedia.org/decorating-elephants-hathi-gaon-rajasthan> (last access Jan 3, 2024).

88 See <https://www.gsd.harvard.edu/2013/05/rahul-mehrotra-architects-awarded-top-prize-for-hathigaon/> (last access Jan 3, 2024).

to improve their situation.⁸⁹ At the same time, there is increasing activism by animal rights groups who fight for a banning of the elephant rides and also want to free elephants from captivity.⁹⁰

After the Wildlife Rescue and Rehabilitation Centre and others had filed a petition against the use of captive elephants' rides with the Supreme Court of India, the Ministry of Environment & Forests (MoEF) commissioned a team of veterinary doctors to investigate the health and living conditions of elephants in Hathi Gaon and Amer in Rajasthan. In their findings report on this investigation, which was published in 2020, the responsible team also mentions the extremely difficult situation of the captive elephant owners who, with no income at all during the Covid lockdown in India since March 2020, had to additionally cover all expenses for the upkeep of the elephants. The report does not mention when exactly any form of support began and over what period of time it was made available to the mahouts and their families, but only states that "(t)he Forest Department of Rajasthan, however, has come forward in assisting the captive elephant owners by providing a COVID maintenance ration of Rs. 600/day/elephant."⁹¹

The ecofriendly rubber mat floorings, which are used in some of the accommodations for the elephants in Hathi Gaon, are positively emphasized in the same report. Unlike the constant marching on asphalt or concrete, these are very good for the feet of the elephants and should also be used on the paths they cover daily to Amer Fort, according to a recommendation in the report (ibid.: 485). However, Peta India, the Indian branch of the animal rights organization, would rather see the elephant ride replaced altogether by electric vehicles. A vehicle named "Maharaja" was designed in collaboration with the design firm Desmania Design and according to Peta India resembles a royal chariot and will ferry four tourists around. It is considered suitable for the hilly terrain the fort is located on.⁹²

89 See Tabeenah Anjum (2020): "Of Tuskers and Mahouts: The Elephantine Issues of Jaipur's Elephant Village". *India Today*, Jun 02. Online available at <https://www.outlookindia.com/national/india-news-of-tuskers-and-mahouts-the-elephantine-issues-of-jaipurs-elephant-village-news-353965> (last access Apr 3, 2024).

90 See for instance Peta India at <https://www.petaindia.com/blog/torturing-elephants-for-rides-at-amer-fort-endangers-everyone/> (last access Jan 3, 2024).

91 The pdf version of the report is available via https://www.petaindia.com/wp-content/uploads/2020/12/MoEFCC-Health-Investigation-Report-of-Captive-Elephants-in-Jaipur_2020.pdf (last access Jan 3, 2024).

92 See also "PETA has designed an electric chariot to replace elephant ride at Amer Fort", *Outlook India*, Feb 02 (n.a.). Online available at <https://www.outlookindia.com/national/india-news-peta-has-designed-an-electric-chariot-to-replace-elephant-ride-at-amer-fort-news-373068> (last access Apr 3, 2024).

Apart from these ongoing discussions, as a serious attempt by architects and designers to respond to complex situations in a meaningful way and to find the best possible solution in the given circumstances (and with a very limited budget), Hathi Gaon remains a very relevant example which offers fresh perspectives on the question how multispecies design and low-cost housing can be (re-)imagined in local contexts with unique requirements. The Hathi Gaon project also speaks to the thinking of Piers Locke in an interesting way, who argues that elephants should no longer be viewed as representatives of a seemingly unchanging species, but rather on the basis of “evolving ways of life in historically changing environments” as well as “their interactions with other lives in particular landscapes” (Locke 2016: 6).