

Design for Chernobyl / between power and plants

by Silke Rainen

The designers at LOLA
landscape architects, L+CC
architects and TALLER
Architects use glass as a
metaphor for the dilemma of
invisible danger in Chernobyl.





Nature returns,
even in Chernobyl.
Photo Kai van Reenen

What could the world possibly learn from a world that has died? Bright yellow warning signs and a silver lining! The post-nuclear landscape of Chernobyl in Ukraine has been dubbed the mother of all lost landscapes. Humans wisely abandoned the toxic zone created by the 1986 nuclear disaster. The cruel loss of a place of human habitation has in the meantime made way for the triumphant return of wild nature, to the astonishment of scientists. Despite the radioactivity, and faster than anyone would have imagined possible, life returned to the death zone.



*The only
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Scenes of the village of Pripyat,
founded in 1970 for the workers
of the nuclear plant.

Photos Kai van Reenen



Luxuriant nature overlaying an invisible danger made people believe it was safe to return to Chernobyl. And they have done so in large numbers. So much so that souvenir kiosks have sprung up and it is possible to take a guided tour around the site. Visitors can locate the highlights on a map that would not be out of place in Disney World. The only difference is, this is not a 'fun place' at all. Since the region has never been granted protected status, these developments are all omens that Chernobyl's Exclusion Zone could die another death.

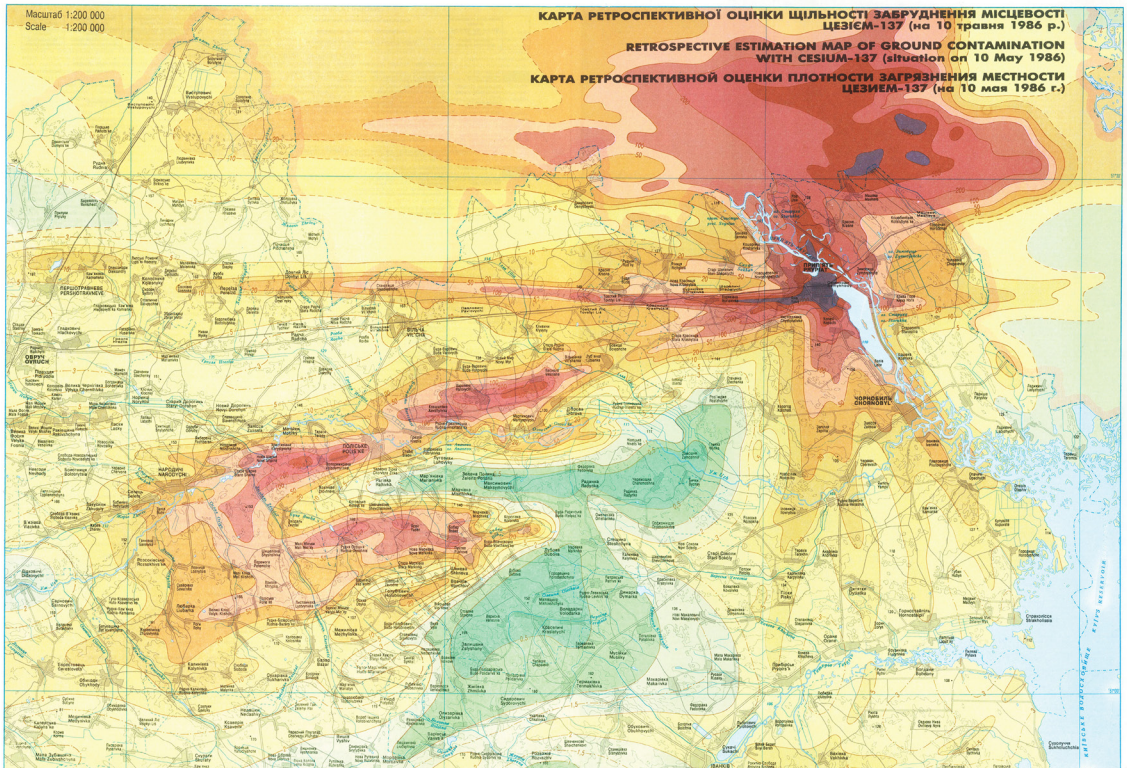


Tourism takes over: guided tours and lots of souvenirs.



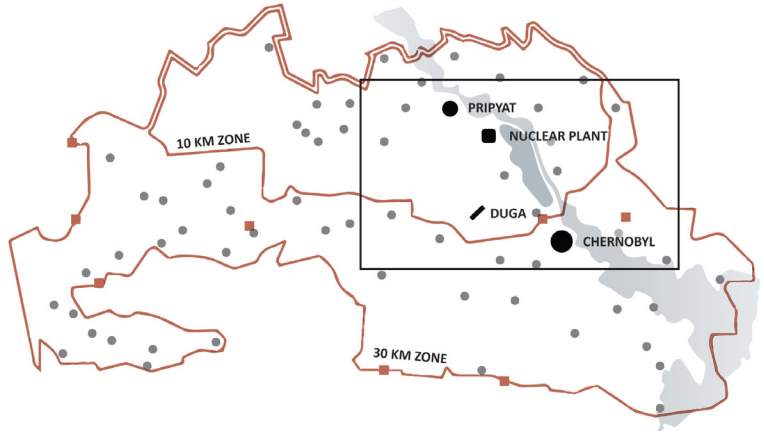
A plan for the future of Chernobyl would seem to be necessary, if only to protect it from the bizarre covering up of catastrophe through entertainment. Nobody needs yet another amusement park, or to build more and endanger more. Not here. More appropriate plans lie in wait on the authorities' desks. The Ukrainian government (which inherited the legacy of the disaster on the Soviet Union's collapse in 1991) itself announced that it would offer the 'idle' lands of the Exclusion Zone to developers of renewable energy. A strategy that is a symbolic nod to the future, slickly manipulating site-specific notions about energy, yet this would blur a crucial historical event and reduce the richness of this radiation ecology habitat.

Map showing estimated levels of nuclear contamination in the ground.



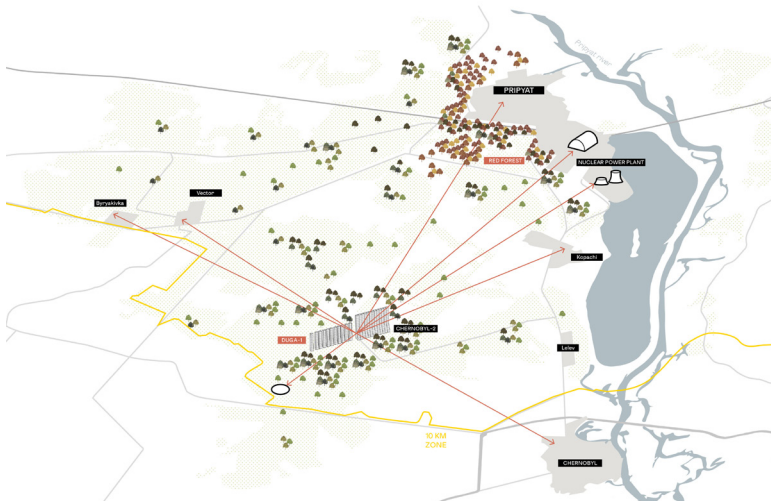
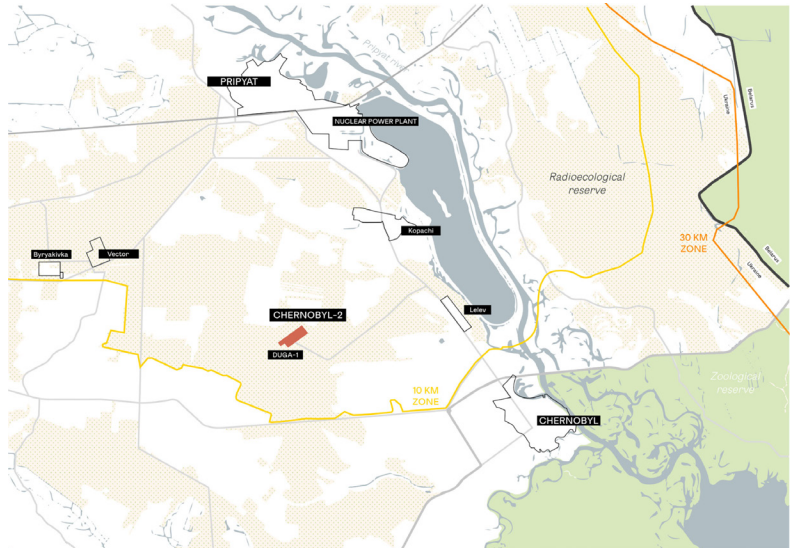
LOLA (LOst LANDscapes) landscape architects (NL), L+CC architects (UK) and TALLER Architects (COL) also felt a responsibility to somehow take the decaying area under their wing. To delve more deeply into the site and the subject, they initiated a summer school in Kiev in 2018, where students and professionals came up with preliminary ideas on a possible future for Chernobyl. Some stressed the urgency of updating pollution maps on the basis of physics and drone technology. Others proposed high-tech solutions for smart tourism, such as guiding and monitoring gadgets or driverless cars running between tourist attractions. Others wanted to create a homecoming for survivors, and one party was captivated by the unremitting march of nature into the infrastructure of the ghost town. There was widespread agreement that the Exclusion Zone should be preserved as a memorial landscape, given the significance of the disaster in the post-war era.

Art came up in the proposals too. One of the ideas, mooted by the artist-cum-investigator protagonist of the documentary *Russian Woodpecker*, was incorporated further into the initiators' design process. Out of this emerged the design concept for a Museum of Failed Communism, a multi-scaled exhibition environment centred around the old power plant and the Soviet intelligence gathering facility that happened to be located nearby. The design focuses on visual connectivity between site elements and the surrounding landscape. Dug out pathways run between glass boxes that pop up inside the ruins, showcasing the drama on a human scale. A new tower is envisaged, standing next to and equalling the exaggerated height of the Duga antenna installation – amateur radio operators in the west nicknamed the Soviet early-warning system for detecting hostile missiles *Russian Woodpecker* because of the sound they picked up from it. The new tower will provide a view that reveals the vast scale of the impact of the nuclear disaster, a reminder of the madness of Communism that haunted these lands.

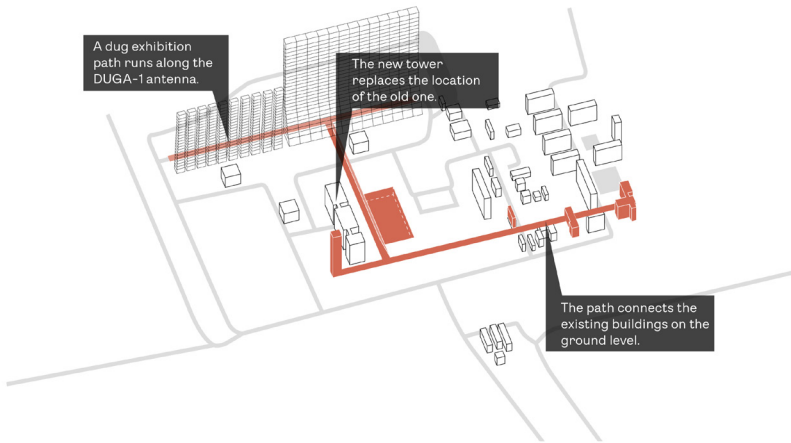


General overview of the 10 and 30 km Exclusion Zones. There are many abandoned towns and villages located in the area. All maps by LOLA landscape architects, L+CC architects and TALLER Architects.

The Chernobyl region. Among hundreds of ghost villages, the giant DUGA antenna is a reminder of the catastrophic events that occurred in 1986. The antenna was built to detect US nuclear cruise missiles and is believed to have been the cause of the accident.



The DUGA antenna plays a crucial role in the designers' large scale strategy for the visual connections in the Chernobyl exclusion area.

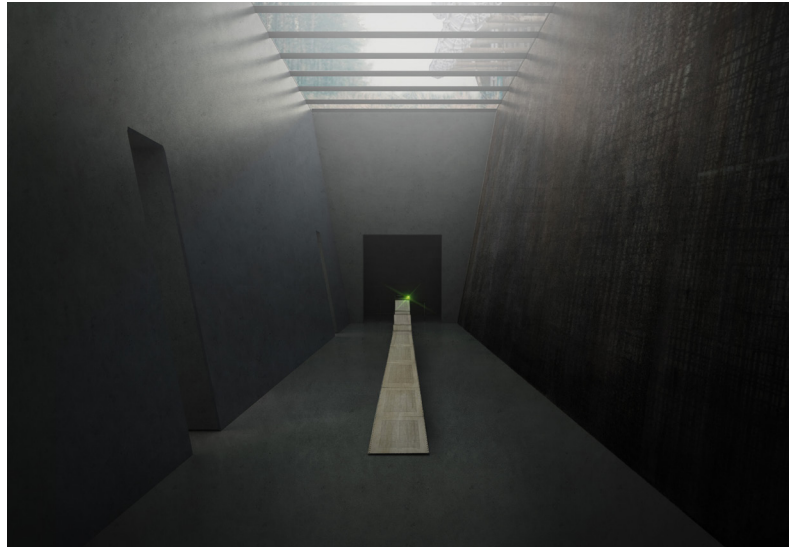


The designers want to preserve the Exclusion Zone. They suggest cutting out an exhibition area in the ground alongside the DUGA antenna. As visitors walk through the dug out area, they will experience the enormity of the DUGA towering above them.





The exhibition path is laid out underground, running adjacent to the DUGA radar. From this perspective visitors can admire the gigantic antenna on one side while exploring the exhibition. The linear design of the museum is inspired by military tunnels.

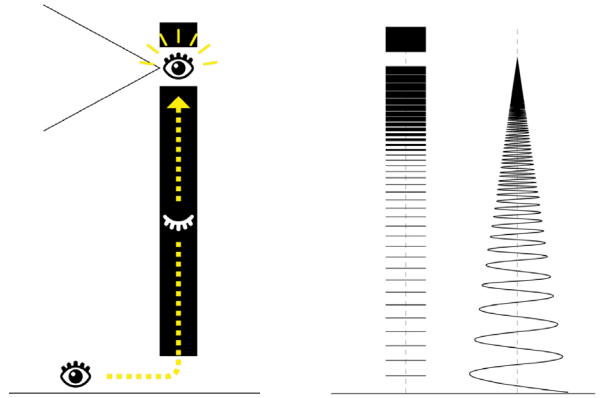
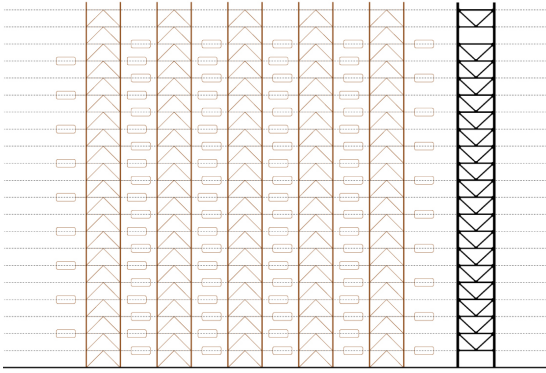


The underground exhibition path runs along the whole length of the DUGA antenna installation. The dug out space creates a new vantage point from which to view the radar, further exaggerating the vertical dimension. In the underground space an old printer will run off the names of all the victims of the Chernobyl disaster.

Dug out pathways run between glass boxes ... showcasing the drama on a human scale

A viewing tower is sited on the footprint of an old checkpoint tower. This replacement represents a democratic re-appropriation of the area: what was previously the preserve of the Soviet guards will become a place where visitors experience the 'Russian Woodpecker' from a privileged vantage point.





Three ideas for a new tower aligned with the DUGA.

In the first option, **'Duga rhythm'**, the new tower echoes the rhythm imposed by the axis of the beams of the existing Duga. The rhythm is only interrupted at ground level, where visitors enter the tower, and at the top, where there is a 360-degree view of the Chernobyl Exclusion Zone.

In the second option, **'Glaring landscape'**, the tower is almost completely closed off from the surrounding landscape. The vertical tube is 130 metres high and almost completely dark inside. As visitors ascend they become used to the darkness. Emerging at the top into the daylight it will take a while for their eyes to adjust to the brightness as they take in the view of the Exclusion Zone.

The third option, **'Radar radio wave'**, is inspired by the radio waves that were once the soul of the Duga. The facade of the tower shrinks and expands like a wave spreading out over the landscape, following the rhythm of the horizontal elements. As visitors ascend, the view of the landscape becomes obscured and they experience a feeling of acceleration created by the spacing of the openings in the facade. While the elevator rises a recording of a woodpecker sound is played. The increasing frequency of the tapping follows the rhythm of the facade elements, while the view is gradually reduced. The image below also shows the third option.



Caging visitors in glass boxes seems particularly apposite here. Not to make them learn from mistakes by a few, but to just learn. The effect is of a 'reversed zoo': the glass boxes showcase the architectural or natural spaces around them, showing the powerful ways in which nature corrects things. For nature's capacity to regenerate apparently automatically out of seemingly utter erasure is an almost sublime phenomenon that humans have yet to figure out, and adapt to.

In its heyday Chernobyl was regarded as an example of the 'superior' power of science, which brought progress and prosperity to the Soviet Union. Now, in line with that past and identity, Chernobyl would remain a place for science and progress. From behind glass walls visitors could gaze in awe, and start extracting wisdom and inspiration from nature's supremacy and the final victories of this landscape.

The fascinating reality sinks in that the horrors of the Chernobyl disaster are starting to become material upon which green city concepts and circular solutions could be based. New qualities of place, ranging from heritage to futurist science, are dimming the disaster and the still unknown effects of the radioactive fallout. Careful strategies, minimising human exposure to and interference in this landscape, must still take priority in any designs and development plans. As long as these remain the norm – for estimates suggest this will need to be so for 20,000 years – nature can perform its purifying stunts, while we watch and learn, biding our time, and proceed with caution to let design rise to this scientific test.

One of the many murals that were found in the houses of the Chernobyl area.

