An Illustrated Guide to the Post-catastrophe Future

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Abstract: This article is a satirical consideration of real and hypothetical projects to "revitalize" parts of the 30 kilometer zone of alienation around the Chernobyl Nuclear Power Plant, the site of the 1986 Chernobyl nuclear disaster. This tongue-in-cheek treatment reveals that projects for "redevelopment" and "exploitation" of the contaminated zone are about many things: money, ideology, memory, fantasy, safety, power, ethics, and the value of life itself.

Keywords: Chernobyl, Pripyat, tourism, revitalization, satire, visual anthropology, Ukraine

Marking the Territory

The first time I heard that plans were being set in motion to "revitalize" parts of the 30 kilometer zone of alienation around the Chernobyl Nuclear Power Plant (NPP) was during a visit to Kharkiv in May 2010. I happened to catch a TV news report about a recent meeting in Kyiv of an international group of experts who shared ideas for "redevelopment" and "exploitation" of the exclusion zone. Potential enterprises discussed at the meeting, I learned, included a brick making factory, alternative energy sources, facilities for storing nuclear waste, and most surprisingly, agriculture. Fascinated, I decided to learn more.

It quickly became apparent that the widespread perception that the zone of alienation is a "dead zone" devoid of life is a highly mistaken one. In fact, due to the greatly reduced presence of humans, in some ways the 30 km zone is a green oasis where flora and fauna thrive, albeit with some important radiation-induced twists. This point is made powerfully by Mary Mycio (2005) in her book *Wormwood Forest*, which describes the exclusion zone as "Europe's largest wildlife sanctuary." Of course, areas of the zone still have very high levels of radioactive contamination, but it is certainly not the "giant radioactive parking lot" (Mycio 2011) or barren apocalyptic moonscape many falsely imagine it to be. As Mycio explains, the vast majority of radionuclides are in the top several inches of soil, not on the surface—"radiation is no longer 'on' the zone, but 'of' the zone. It is part of the food chain" (ibid.).

Also, it is important to recognize that the 30 km zone has never really been "closed" or sealed-off; nor has it ever been emptied of humans. A crew of 3,500 Chernobyl NPP staff and zone administrators live and work in the town of Chernobyl, and hundreds of "self-settlers" (samoseli) have returned illegally to their homes in the zone. Lax surveillance and a lack of security, along with shoddy and broken-down fencing in places around the zone's perimeter, mean that the zone of alienation has very porous borders. Wildlife and people roam in and out. In short, the area has never truly been an "exclusion zone." Therefore, it should come as no surprise that many of the proposed projects for rejuvenating the 30 km zone are based on transformations that are already happening and small-scale experiments already in process.

Zona iak...Ferma³

Let's start with what is probably the most counterintuitive project for rejuvenating the zone—farming. Controversial programs for returning formerly highly contaminated land outside

the 30 km zone to agricultural use have been developing for some time now, particularly in Belarus. Proponents claim that levels of cesium-137 and strontium-90, both of which have half-lives of around 30 years, in some areas have sufficiently decreased to support safe farming. I do not know of any serious proposals to grow food for human consumption inside the 30 km zone, where 95% of radionuclides are in the top two inches of soil (except by the *samoseli*, who already do so) (Mycio 2005:144). On the other hand, German Bondarenko, assistant director of the Ukrainian Institute of Environmental Geochemistry, has said that areas in the southern and eastern parts of the exclusion zone have gone through a natural decontamination process and are "basically ready for agricultural activities" (Shevchenko 2005:24).

But other types of farming have been proposed: forestry farms, fish farms and fur farms, as well as bee breeding and horse breeding. In fact, saplings for future forestry farms have already been planted in the zone. Bees would be kept not for honey, which most certainly would be radioactive, but to breed new colonies for sale. Similarly, fish farms would be for breeding young fish that would then be "finished" to adulthood in another location. Animals farmed for their fur would presumably be given non-local feed and water. This would be harder—though not impossible – to do with horses, if they were fed "imported" hay in winter and allowed to graze during summer only on grasses tested as "clean." These forms of farming, therefore, would focus on utilizing particular spaces in the zone for economic activity, while preventing the "products" from participating in the radioactive local food chain. Even if they are finished out elsewhere, will these fur coats, fish, bees, and trees sport a "made in Chernobyl" label?



Figure 1. Made in Chernobyl. Copyright: Sarah Ostaszewski.

And who will manage these farms? Former Nuclear Power Plant staff? *Samoseli*? Unemployed university graduates from the U.S.?



Figure 2. Farming in the zone. Copyright: Sarah Ostaszewski.

Zona iak...Touristichna Baza⁴

The Chernobyl exclusion zone already is one of the world's hottest destinations for so-called "extreme" or "toxic tourism" (Pezzullo 2007). Individuals and small groups have been moving through the zone for various purposes for a full 25 years, and organized tours of the zone for paying customers have been active for at least a decade. In 2009 Forbes named the Chernobyl zone one of the world's most unique adventure travel destinations. According to the zone administration's estimates, more than 20,000 people visit the zone as tourists each year, and the majority of them are foreigners. A typical one-day tour in the zone costs between \$140 and \$240 per person.

Bizarrely, an increasing number of Chernobyl tourists are enthusiasts of the blockbuster S.T.A.L.K.E.R. video games (e.g. Shadow of Chernobyl and Call of Pripyat), in which players battle zombies, mutant animals, "bloodsuckers" and other improbable foes in a hypersensationalized contaminated "zone of alienation." The designers of S.T.A.L.K.E.R. took great care to incorporate some of the zone's most famous landmarks into the game—for instance Pripyat's hotel Polissia, police station, and beloved never-used Ferris wheel. Previously, one tour company offered specialized "Stalker tours" especially for gamers.

One suspects that after battling through a surreal virtual "zone of alienation" these gamertourists might experience the "real" Chernobyl zone as something of a letdown.



Figure 3. Still shot from S.T.A.L.K.E.R.



Figure 4. Still photo in the zone. Copyright: Vitalii Makarenko

In Ukraine at least ten private tour firms traffic in Chernobyl tourism, but recent clampdowns by the Ministry of Emergency Situations (MChS) and Chernobylinterinform, the government agency that oversees visits to the zone, may end in the closure of all private tour enterprises. Simply stated, MChS wants full control over all Chernobyl tourism. This move to a monopoly began with a series of strict rules imposed on tourists and private tour operators, and culminated in a legal challenge by the General Prosecutor and a temporary ban on all Chernobyl tourism in June 2011. Clearly, the profit motive is central to this conflict between the state administration and private tour companies. MChS seeks to push out the competition and establish a monopoly on the Chernobyl tourism, which has become increasingly popular and profitable.

However, narrative authority is also at stake. The Chernobyl zone of alienation is a profoundly multivocal space, ripe for the negotiation of myriad "little histories" and rememberings. According to private tour guide Serhii Mirnyi, Chernobylinterinform offers only a single, official narrative of the Chernobyl accident in the zone. The state tour focuses exclusively on Chernobyl negatives—the sequence of events that caused the explosion, the accident's devastating ecological effects, forced evacuation of residents, and so on. In response to this perceived narrative monopoly, Mirnyi, a former liquidator, started his company Chernobyl Tour to provide tourists with "life-changing" experiences through a range of "thematic" tours that provide a "modern" perspective on the disaster. 11 In addition to the gamers' tour mentioned above, previously Chernobyl Tour offered a "Places of Chernobyl Bravery" tour, in which veterans of the Chernobyl clean-up effort told their stories to tourists. In winter 2009, the company offered a tour that featured extended interactions with the zone's samoseli and a trip to a vernacular museum of the history and folk life of the Polissia region. Mirnyi explains that his company tries to share with tourists some of Chernobyl's positive dimensions: the disaster sped up the downfall of the authoritarian Soviet regime, the nuclear power industry came under much needed increased scrutiny, and resilience in the face of disaster constitutes a "victory" of Ukrainian culture and society. 12

Chernobyl Tour's initiatives suggest interesting alternatives to Chernobylinterinform's narrowly packaged "toxic tourism." These tours which feature different vernacular perspectives offer new possibilities for tourists to explore Chernobyl and its effects. If private tour agencies are successful in breaking the state's monopoly, more might be done to creatively refashion Chernobyl tours. For instance, the zone offers a fascinating study into the uneven long term effects of radiation on fauna and flora, and the unexpected resilience of most life forms in the zone. Extended ecotours with knowledgeable guides to deeply explore these effects would appeal to ecologically- and scientifically-minded tourists. Wildlife tours featuring the zone's incredible variety of wildlife could cater to animal lovers, birdwatchers in particular.

Think of such tours as a weekend Chernobyl safari, with dosimeters.



Figure 5. Chernobyl safari. Copyright: Sarah Ostaszewski.

Undoubtedly, ongoing struggles about oversight of Chernobyl tourism will hinge both on economic issues—control of tourism revenues—and discursive ones: control of Chernobyl narratives.

Zona jak...Historic Landmark

In what may be interpreted as an anti-tourism move, a group of activists interested in the "defense" of the city of Pripyat, which they describe as an "abandoned city [that] is defenseless against marauders and lovers of extreme tourism," have for some time been petitioning for that city to be recognized as a "city-museum of technological catastrophe" and placed under special state security. Led by former Pripyat resident Aleksandr Sirota (son of the poet Lyubov Sirota), the group meanwhile organizes bimonthly clean-up initiatives to clear Pripyat's city center of the tons of garbage left by tourists. Sirota insists that, contrary to popular assumptions, Pripyat is not "dead," and will be re-opened for human habitation in the future. Designation as a historic landmark, he believes, would help protect the ghost city from further damage by tourists and vandals until people can return to live there. As recommended by experts convened by the UN in 2010 to discuss potential revitalization plans for the zone 5, Sirota and his colleagues appear to have devised an effective "brand" for the city of Pripyat. "Their" Pripyat is branded as a sort of post-Chernobyl Snow White: a poisoned and abandoned, but still young city that is not dead, but merely sleeping, and needs looking after until it is ready to reawaken.

Two details of this seemingly straightforward historic preservation effort add complexity to the story. First, although critical of Chernobyl tourism on the one hand, saying that the

practice threatens to turn Pripyat into a "huge dump," Sirota and his colleagues nevertheless conduct tours of Pripyat themselves through their private tour firm "Center PRIPYAT.KOM." These tours are marketed as different from those of "companies who merely exploit the Chernobyl theme;" after all, one of Center PRIPYAT.KOM's guides was himself a firsthand witness of the explosion and evacuation. Also, Center PRIPYAT.KOM promises to "immerse [visitors] into the atmosphere of the world's largest technogenic catastrophe" by letting them watch "our own footage of the modern zone, plus our exclusive archival footage" during the ride from Kyiv to Pripyat. Center PRIPYAT.KOM further highlights the tour guides' personal investment in the zone as key to the authenticity of the promised Pripyat experience: Aleksandr Sirota, "a former resident of Pripyat, has himself experienced everything he [will] talk about." Anton Iukhimenko, although "never directly tied to the catastrophe, is consumed by the tragedy and has dedicated himself completely to the Chernobyl Zone." Iurii Tatarchuk "has worked for 15 years with [tourist] delegations and knows the Zone like his own five fingers." Interestingly, Tatarchuk is also Assistant Director of the International wing of Chernobylinterinform. Presumably, these defenders of the city of Pripyat require their paying tourists to clean up after themselves.

Even more interesting, the tour company is part of a larger initiative—the most popular online community dedicated to Pripyat and the Chernobyl zone. As the site's creators explain, "PRIPYAT.com is a place for everyone who loves the City. Its short, flowering youth, its terrible fate, its silenced and lonely present, and its future. As long as the site exists, the city of Pripyat lives, too." The interactive site, which reportedly receives 90,000 visitors a month, is a place for collective "re-membering" of the cities of Pripyat and Chernobyl. Besides having access to a number of documents about the histories of the two cities and various maps and scientific and popular publications, site members can participate in Forum discussions and share their personal stories and memories of the catastrophe. They can upload their own "firsthand accounts," photographs, maps, and other materials to create a collaborative archive. Many visitors to the site share their own impressions of traveling to Pripyat after a long absence. All these materials create a textured, re-membered (that is, reconstructed and layered) view of Pripyat very different from that achieved by a "real life" visit to the abandoned ghost city. So while the crumbling physical city of Pripyat plays host to tourists forming their own Chernobyl zone experience, the virtual city of PRIPYAT.com expands with the bricolage of collective re-membering. It is not hard to see that the two Pripyats are both imagined Pripyats, and neither is any more real than the other (Jordan 2009). Pripyat as a proposed "historic landmark" refuses to sit still.

Perhaps other virtual sites of re-membering Pripyat and Chernobyl also thrive online. There is a "Destination" called "Pripyat Shattered Skies" in the online world Second Life. Appropriately, "Pripyat Shattered Skies" is found under the category of "Real" virtual spaces in Second Life. The first time I visited, no one else was there. The second time, someone called "Jade" tried to sell me weapons. Bricolage, indeed.

Zona iak...Artists' Colony

In many countries, but especially in European countries and the U.S., artists frequently have sought inspiration and productive working conditions in art colonies. Such colonies often are located in rural, "village" settings, and artists usually are in residence on a temporary basis, for one or a few months. The Chernobyl zone of alienation seems a nearly ideal place to nurture an intentional community of artists. A Chernobyl art colony there might appeal especially to

artists interested in ecological issues, unusual landscapes, and diverse flora and fauna. At the very least, artists would have a quiet place to work (if they can avoid the tourists).



Figure 6. The artist at work, Chernobyl. Copyright: Sarah Ostaszewski.

The idea of a Chernobyl art colony as a tactic to rejuvenate the zone is not as far-fetched as it may seem. Chernobyl and art of all kinds have been closely intertwined since the 1986 disaster. Painting, drawing, and other art forms have been a means for many people to make tangible the meanings of the Chernobyl accident and its aftermath. Schoolchildren from all over the world sent their Chernobyl-inspired artwork to Soviet children in sympathy after the disaster. Frequently, art produced by "Chernobyl children" is exhibited and sold in fundraisers to assist Chernobyl victims.¹⁷

An artists' community has already been founded around Chernobyl, an association of graphic designers called "4th Blok." Named in memory of the ill-fated Reactor No. 4 of the Chernobyl NPP, 4th Blok is a group of designers and art managers interested in connections between ecology, design, and culture. 4th Blok's main goal is to cultivate the development of "eco-posters" and associated art forms to increase public awareness of ecological issues. To this end, the association sponsors art shows, design contests, and traveling exhibitions of eco-posters. Blok's official home is in Kharkiv, not Chernobyl. However, some members and allies of 4th Blok participated in a so-called "designers' brainstorming attack landing" into the Chernobyl zone in October 2009. The stated purpose of this "attack landing" (which actually was a specialized tour offered by Sergii Mirnyi's Chernobyl-Tour) was to help ecologically-minded designers develop ideas for artistic commemorations of the 25th Anniversary of the disaster in 2011.

Other artists' collectives have worked briefly in the zone of alienation. In October 2005, a group of seven artists from Minsk, Moscow, and Berlin collaborated on a project called "Radiating Places: A Requiem of a Special Kind." Working in their own varied styles, five of

the artists painted directly onto industrial and residential buildings in Pripyat. Some images are meant to recall shadows of former residents and things they left behind—a schoolgirl turning off a light switch; a boy playing on a balcony. Other images are more politicized—a despairing, screaming face appears unexpectedly around a corner; a flower wilts over a gravestone. As part of the multi-media project, others in the group documented their colleagues' work in photography and film. The artists state the primary goal of "Radiating Places" as "to keep the memory of the suffering of the people alive. To arrest oblivion..." This collaborative project is a controversial one, and the works are frequently called "graffiti" by those who disapprove. Many members of PRIPYAT.com believe the "graffiti" should be removed.

The "Radiating Places" project and the 4th Blok collective are provocative for thinking about the continuing place for art and artists in the Chernobyl zone. What creative works might a space thought to be "dead" and damaged inspire? The Chernobyl art colony could be built in an area of the zone with low levels of radiation, and residents could take their meals in a cafeteria with food "imported" into the zone. Or, artists could be housed right alongside some of the *samoseli*, in fixed-up evacuated houses in a classic Ukrainian-Polissia village setting. Limiting visits to a few weeks or a month, as is standard in many art colonies, would be especially appropriate in this case.



Figure 7. A backyard chat—samoseli and visiting artists. Copyright: Sarah Ostaszewski.

Zona iak...National Park

It has been suggested that the Chernobyl zone could be transformed into a protected national park, an idea that also builds on existing trends. In this way, the zone would serve both as a nature and wildlife reserve in the long term, and as an ongoing "live experiment" to track the resilience of plant and animal life after a radiological insult. In effect, the zone already is such a

space—it is what Bruce Sterling has called an "involuntary park." An involuntary park is a place that has "been reclaimed by nature" and gone back to the wild. But such parks do not represent untouched nature; rather, involuntary parks are the result of "vengeful nature," or "natural processes reasserting themselves in areas of political and technological collapse" (Mycio 2005:128).

See if this description—which reflects the species diversity of the zone today—might appeal:

Chernobyl National Park is a sanctuary for wildlife and has seen the return of some endangered and near-endangered species. Visitors will see a wide variety of grazing animals such as roe deer, red deer, moose, beavers, and European bison. Also keep alert for wild boar, brown bears, raccoon dogs, foxes, lynx, and wolves. Many of these animals had nearly disappeared from the area before the Chernobyl accident. Though very rare in the rest of Europe, the Chernobyl National Park is home to approximately 50 white-tailed eagles.

The Chernobyl National Park could also be utilized to intentionally relocate and shelter endangered species whose habitats are disappearing. One such project has been underway in the zone since 1998—the "Fauna" project which relocated a group of endangered wild Przewalski horses to the zone from a nature preserve in southern Ukraine (Askania Nova). Unfortunately, financing for the Fauna project ceased in 2000, but there were 65 wild Przewalskis in the zone as of December 2003 (Mycio 2005:135).

It is reported that much illegal hunting already occurs in the zone of alienation, and this interest in hunting certain species in the zone could be cultivated to the National Park's benefit. Limited hunting could be allowed for population control of certain animals such as wolves, which some argue have become an intolerable threat to other wildlife in the zone. But even if hunting is prohibited, visitors to the Chernobyl National Park would be guaranteed rewarding sessions of "photo-hunting."

A few more ideas...

Several other projects for the future of the Chernobyl zone of alienation deserve consideration. Perhaps it makes sense to throw in the towel and refuse to "rejuvenate" the Chernobyl zone at all. Perhaps the logical fate for a contaminated disaster zone is to become a reservoir for the world's nuclear waste. Plans are already in place to build a nuclear waste facility called "Vector" on 60 hectares in the Red Forest, the area most highly contaminated by the Chernobyl accident (Mycio 2005:230). Presumably, other countries would gladly pay Ukraine to store their nuclear waste in the zone—Vector begets Vector II, begets Vector III, and so on. At present there is not a single final storage facility for high-level nuclear waste anywhere in the EU member states. Such waste is being held in the short term in interim storage facilities.²²

It will be a long time before the EU allows Ukraine in the European Union, but perhaps in the meantime Ukraine can take out the garbage?



Figure 8. Ukrainian nuclear garbage worker. Copyright: Sarah Ostaszewski.

Or perhaps we should follow the opposite path and make the Chernobyl zone of alienation a mecca of alternative energy production. Is there any better backdrop for radical projects to develop truly cleaner, safer energy sources than the site of the world's worst nuclear accident? A Ukrainian-Belgian joint enterprise is already planning experiments to see whether alternative fuel sources in the form of biomasses can be grown in the exclusion zone. The expansive meadows of Polissia may be ideal for a wind farm; there are few neighbors around to complain about the noise or voice concerns that the turbines spoil their view. Or, why not transform the zone into an ocean of solar panels, in a radical post-Soviet, post-Chernobyl project of "greener electrification to the whole continent?"

And right in the middle of the biomasses, wind turbines, and solar panels sits a brand new building, a model of green design and sustainable living—the new worldwide headquarters of Greenpeace, International.



Figure 9. Chernobyl zone of alternative energy production. Copyright: Sarah Ostaszewski.

In Lieu of a Conclusion

Revitalization projects are about many things: money, ideology, memory, fantasy, safety, and the value of life itself. In more classic anthropological terms, Chernobyl is a "key symbol" (Ortner 1973) that can be analyzed to reveal different aspects of post-Chernobyl culture and socio-political life. Who stands to benefit from the "rejuvenation," or "revival," or "renewed exploitation," of the highly symbolic zone of alienation, the "circle of shame" surrounding the site of the world's worst nuclear accident? Who has the power to decide what is "safe," what is feasible, and what is not? How much space is there to accommodate competing interests and competing narratives about what has happened here and what must happen next? Life-and-death questions of value (of life), responsibility, and power are at stake here.

What can our own reactions to notions of the zone as an artists' colony, a national park, or a mecca for environmental activism tell us about various relations of power, Chernobyl's symbolic fallout (Phillips 2004), and nuclear politics today? What diverse forms of remembering might be harnessed to assure a democratic, multivocal, and safe rejuvenation project? Is it likely that any of the Chernobyl zone rejuvenation projects imagined here will have a decent half-life?

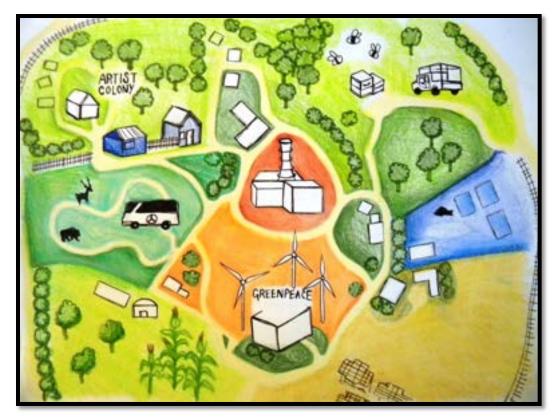


Figure 10. Chernobyl Visitors' Center. FREE MAP! Copyright: Sarah Ostaszewski.

¹ This is not to discount or downplay the serious biological effects of low-level radiation on animal and plant life in contaminated areas. For example, scientists have found that numbers of invertebrates (insects and spiders) decrease with increasing levels of radioactive contamination in the irradiated territory (Møller and Mousseau 2009).

² See http://naviny.by/pda/material/?type=articles&id=165950.

³ The Zone as...Farm

⁴ The Zone as...Tourist base

⁵ See http://www.forbes.com/2009/11/04/unique-vacations-travel-lifestyle-travel-adventure-tourism.html, and http://life.pravda.com.ua/surprising/4b02880cb9507/.

⁶ See http://podrobnosti.ua/podrobnosti/2007/07/09/438981.html.

⁷ For comparison, in 2011, the Gross National Income per capita (PPP) in Ukraine was \$6,175, or \$515 per month (UNDP 2011:128).

⁸ See http://www.stalker-game.com/.

⁹ See http://www.chernobyl-tour.com/poezdki/17-25-oktyabrya-stalker-trip-poezdka-dlya-fanov-igry.html.

¹⁰ See http://news.zn.ua/articles/83264, and http://news.zn.ua/articles/83549.

¹¹ See http://www.chernobyl-tour.com/o nas.html.

¹² See http://www.youtube.com/watch?v=xiPlWMwMEJg&feature=player_embedded, 6:45-7:24.

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¹³ See http://pripyat.com/about.html.

¹⁴ See http://podrobnosti.ua/podrobnosti/2007/07/09/438981.html.

¹⁵ See http://www.crdp.org.ua/main/ua/news/detail/126.htm.

¹⁶ See http://pripyat.com/.

¹⁷ See http://www.cofcsd.org/art-sales.asp.

¹⁸ See http://www.4block.org/.

¹⁹ See http://www.chernobyl-tour.com/english/16-1st-designers-brainstorming-attack-landing-into.html.

²⁰ See http://www.26-04-1986.com/.

²¹ See http://www.26-04-1986.com/presse/ENG/1986-2006.ENG.pdf.

²² http://europa.eu/legislation_summaries/other/127048 en.htm.

²³ See http://news.zn.ua/articles/81045.