
Belarus and Chernobyl: Separating Seeds from Chaff

Grigory Ioffe¹

Abstract: Seventy percent of radionuclides discharged during the Chernobyl disaster were deposited in Belarus. Besides causing radioactive contamination, the tragedy at Chernobyl exposed some of the socio-cultural characteristics, such as mass dependency on strong patronage of the state, that buttress the political institutions of that country. On the basis of a literature review, a specialist on Belarus aims at separating proven health effects of Chernobyl from psychological and socio-political consequences of the disaster.

The spiritual self-isolation of Belarus from all of Europe is to a large extent conditioned by Chernobyl (Shevtsov, 2005, p. 178).

More than twenty years after the Chernobyl disaster, the issue of its magnitude and consequences is still debated. This article contributes to that debate and draws upon four principal sources: (1) David Marples's (1996) assessment of the effect in question; (2) a kind of travel diary by the Belarusian journalist Vasilii Semashko, who toured the contaminated areas of Belarus and Ukraine in the spring of 2006 (Semashko, 2006a, 2006b, 2006c, 2006d, 2006e); the 2005 joint report by seven UN agencies and the World Bank (Chernobyl's Legacy, 2005); and a book by Yuriy Shevtsov (Shevtsov, 2005). It is shown that in the context of Soviet and post-Soviet Belarusian society the psychological and socio-political effects of Chernobyl exceed the immediate and delayed effects of radiation.

The Chernobyl nuclear power plant is located 7 km south of the Belarus-Ukraine border. Seventy percent of all radionuclides (radioactive isotopes) discharged during the meltdown of one of its four reactors on April 26, 1986, were deposited in Belarus. Twenty-three percent of Belarus's land acquired a level of contamination in excess of 1 Ci/km². The contam-

¹Professor of Geography, Radford University, Radford, VA; gioffe@radford.edu

inated area is spotty. By and large the distances between those spots shrink with distance from the reactor, so in proximity to it they coalesce, forming areas with different degrees of threat. However, even within some of the originally most contaminated areas, like in the rayon town of Bragin in the southeast of Gomel *Oblast'*, the level of background radiation as measured in 2006 varied twofold just between neighboring streets (Semashko, April 11, 2006).

According to the Chernobyl laws adopted by the Supreme Soviet of Belarus in 1991, five zones were established within the affected area of Belarus (Marples, 1996, pp. 47–48). The first of them, straddling the border with Ukraine, is the zone with the highest level of contamination. It is the well-known *exclusion zone*, with a 30-km radius around the reactor. In reality the shape of the exclusion zone is erratic, and within Belarus its maximum distance from the reactor is 50 km (Semashko, April 17, 2006). Proceeding outward from the reactor, the following zone is that of *primary evacuation*, in which contamination levels of the soil with caesium-137 exceeded 40 Ci/km². The third zone is that of *subsequent evacuation*, with contamination levels for caesium-137 from 15 to 40 Ci/km². The above example of the town of Bragin pertains to this zone. The fourth zone (5–15 Ci/km²) is the zone with the *right to evacuation*, and the fifth one (1–5 Ci/km²) is the zone of *periodic radiation control*. Belarus's second and fourth largest cities—Gomel and Mogilev, respectively—fall within this last area. In Ukraine, 7 percent of the land area had levels of contamination in excess of 1 Ci/km² and 7 percent of Ukraine's population lived there, but in Belarus, the corresponding statistics are 23 percent and 35 percent, respectively (Shevtsov, 2005, p. 142). In Russia where the western part of Bryansk *Oblast'* was contaminated, the corresponding proportions are minute in view of Russia's overall size.

In Belarus, the pockets of extremely high radioactivity, exceeding 15 Ci/km² or 185 kBq/m², cluster in the southeast. One of the two most visible clusters (Fig. 1) is in close proximity to the power plant. Located south of the city of Mozyr, this cluster encompasses the rayon centers of Khoyniki, Yelsk, Narovlya, and Bragin and their surroundings—all in Gomel *Oblast'*—and also the surroundings of Stolin in the southeast of Brest *Oblast'*. The second cluster, more remote from ground zero but actually larger than the first one and encompassing at least ten rayons, is astride the border between Gomel and Mogilev *Oblast's* and the national border of Belarus and Russia (Fig. 1). A tenacious rumor attributed this second contaminated cluster to a rainfall suppression technique. It reportedly involved seeding radioactive clouds with silver iodide shortly after the explosion to prevent further movement of these clouds with southwesterly airflow in the direction of Moscow. As a result, premature rainfall was reportedly induced in the area astride the border between Gomel and Mogilev regions of Belarus and Bryansk region of Russia. Vasiliy Semashko, a journalist of *Byelorusskiye novosti*, who in 2006 published 15 articles reflecting his extensive travel throughout the affected areas of Belarus and Ukraine, posed the question about the reality of seeding

radioactive clouds to many specialists. Most replied that this would have been unlikely because seeding clouds is a complicated and expensive task, particularly within a vast area, but around Moscow such seeding was actually done during the 1980 summer Olympics (Semashko, May 11, 2006). Most probably the contaminated cluster straddling the border between Mogilev (Belarus') and Bryansk (Russia) *Oblasti* resulted from natural rainfall shortly after the explosion. In the areas in question, it rains 10–14 days a month in April and May, and the amount of precipitation is from 40 to 72 mm per month. Due to fire within the Chernobyl reactor that continued for ten days after the explosion, a large quantity of radionuclides was released into the atmosphere—300 times more than during the Hiroshima bombing—and many were deposited by rain.

RESEARCH FINDINGS OF DAVID MARPLES

In 1996, David Marples published the most comprehensive English-language analysis of Chernobyl-related problems and attempts at their solution in the Republic of Belarus to date (Marples, 1996). In retrospect, many of Marples's findings were proven right by the 2005 joint report by seven UN agencies and the World Bank group, a report which was also informed by the combined effort of about 100 local specialists. Consequently, several aspects of Marples's early analysis are worth summarizing. These cover: (1) the scope of resettlement; (2) the veil of secrecy enveloping the catastrophe; (3) definitive health effects of the disaster; (4) the juxtaposition of Chernobyl-related problems with problems arising from the breakup of the Soviet Union and the ensuing economic crisis; (5) international aid; and, finally, (6) life-style diseases as well as breaches of civility and of individual and public trust that have accompanied the sustained efforts to deal with the ecological and human catastrophe.

The most numerous category of people affected by radiation were the so-called liquidators or cleanup workers, whose number in Belarus Marples places at 66,000 (Marples, 1996, p. 88) and more recent sources at 110,000 (Shevtsov, 2005, p. 143). These people stayed in the exclusion zone for extended periods, and many received high doses of radiation. According to Marples, just 24,700 Belarusians were evacuated from the exclusion zone throughout 1986, while 652,000 residents were left behind in contaminated areas (Marples, 1996, p. 45). With organized resettlement undertaken in subsequent years, the overall effort of evacuation and resettlement affected about 350,000 people (Shevtsov, 2005, p. 143). However, in too many cases, resettlement subjected people to inordinate and often avoidable psychological stress. Moreover, in some cases, the evacuees found themselves in other heavily polluted areas, with non-radioactive but still hazardous sources of contamination.

A veil of secrecy was kept over the catastrophe up until the spring of 1989, but particularly throughout the first weeks after April 26, 1986. Not only did this secrecy inhibit and preclude coordination of efforts of numerous agencies but it also sowed seeds of distrust in any Chernobyl-related

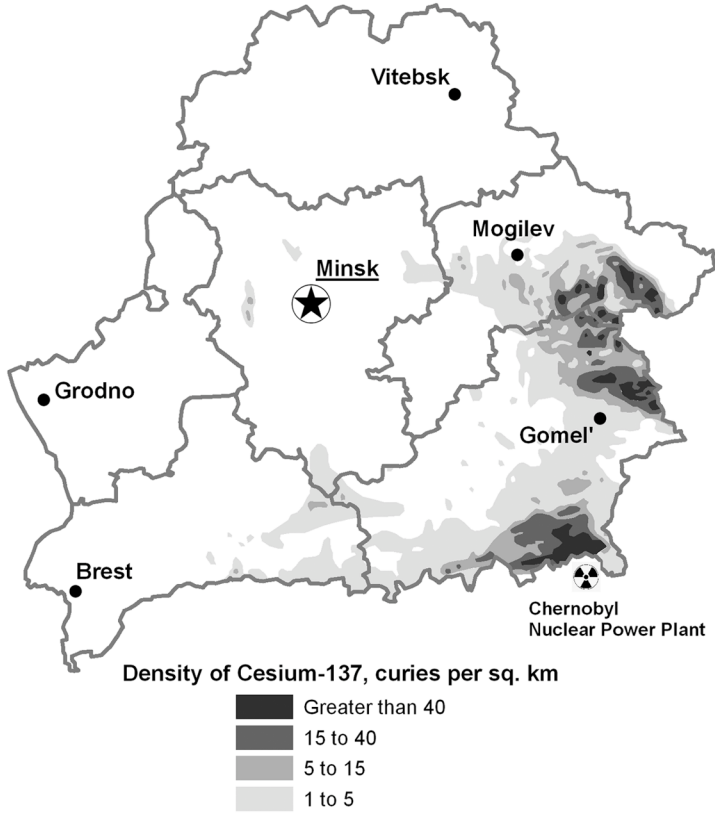


Fig. 1. Caption.

information that would at some later date emanate from public sources. Consequently, wild rumors and exaggerations abounded.

Despite the ensuing proclivity to attribute any death whatsoever or in fact any illness occurring in Chernobyl-affected areas to the 1986 catastrophe, the only definitive proof of that cause-and-effect relationship pertains to thyroid cancer. In southeastern Belarus, the actual rate of this disease was more than double the natural rate. The highest incidence of thyroid cancer was recorded among children and attributed to the radioactive isotope iodine-131, whose half-life is only 8 days. Thus children exposed to radiation shortly after the blast absorbed the largest doses of that isotope. Many of them drank locally-produced milk with high iodine-131 content. With the passage of a couple of weeks from the disaster, soil rather than air became the primary source of danger. However, the absorption of radioactive isotopes with a half-life of 29–30 years, such as those of caesium-137 and strontium-90, takes more time and can be prevented or significantly

reduced by precautionary measures. These include drinking bottled water, refraining from gathering mushrooms and berries, and closely monitoring radioactivity of the locally-produced milk and meat.

The breakup of the Soviet Union and the ensuing withdrawal of all-Union funds initially earmarked to combat the effects of Chernobyl have arguably exacerbated the situation, and so has the fact that in 1992–1995 the Republic of Belarus experienced a steep economic decline. When quality of life and health care deteriorate for reasons not related to Chernobyl, it becomes difficult to properly assign causes and effects, which leads to disorientation and frustration. From 1991 to 2003, the Republic of Belarus spent \$13 billion on fighting the effects of Chernobyl. In 1991, a whopping 22.3 percent of the entire state budget was directed to that purpose (*Chernobyl's Legacy*, 2005, p. 33). Thereafter, the share of budget allocations remained high but declined gradually to 6.1 percent in 2002 (*ibid.*). For any country, this financial burden would be difficult to sustain, but it was particularly so during the precipitous 1992–1995 economic decline.

International aid was solicited by Belarus and delivered by multiple countries and agencies. According to Marples, German aid was particularly significant. Indeed, a national survey from April 2006 validated Marples's assertion. The survey posed the question "In your opinion, which foreign country rendered the biggest help to Belarus in combating the consequences of Chernobyl?" Germany was number one with 21.3 percent of respondents, putting that country on top of the list; Russia was a distant second with 9.2 percent of respondents; Italy, USA, Poland, and Japan followed with 7.2 percent, 5.5 percent, 5.3 percent, and 3 percent, respectively (IISEPS, April 2006). In order to channel Western aid, particularly that from private sources, scores of charitable organizations emerged in Belarus. The foundation *Children of Chernobyl*, headed by Gennadiy Grushevoy, became the most well known of them. This agency alone dispatched over 60,000 Belarusian children to Germany in the summer of 1994 (Marples, 1996, p. 75). There, Belarusian children stayed temporarily with families and in summer camps.

CULTURE-SPECIFIC WAYS OF COPING WITH DISTRESS

Alongside the economic decline of 1992–1995, one particular set of local problems made combating the consequences of Chernobyl more difficult. This is what the UN document calls "culture-specific ways of expressing distress" (*Chernobyl's Legacy*, p. 21). In plain language, this is alcoholism. Widespread in Russia, Ukraine, and Belarus, this disease claims relatively more victims in rural areas. The Chernobyl-affected areas are overwhelmingly rural, with low personal incomes and few employment opportunities outside agriculture. The pervasive myth that alcohol somehow helps rid one's organism of radiation exacerbated the problem.

Marples describes cases of alcoholism he encountered during his 1995 tour of Chernobyl-affected areas, including alcohol abuse by the cleanup workers. More recent observations are not reassuring. Medical doctors interviewed by Vasily Semashko during his 2006 trips to the southeastern part of Gomel *Oblast'* "woefully state that alcohol abuse in those areas is by far a bigger problem than radiation" (Semashko, April 9, 2006). It must be added that the younger and more educated part of the population left the affected areas. As a result, the share of the elderly and resigned shot up. If only in part, therefore, the overwhelming feeling of hopelessness has roots in this change of the population structure.

No less disturbing are the problems caused by a low level of civility and public trust. Chernobyl did not cause those problems; it just made them more vivid. For example, Marples refers to cases of hostile attitude toward the evacuees, corruption, money-laundering through artificially boosting the costs of construction of new housing for the victims of Chernobyl, false claims of being a victim of Chernobyl in order to go to Spain and the Netherlands for recuperation, and "negative competition" (Marples, 1996, p. 72) between Belarus-based charitable foundations whereby each of them tried its best to undermine the efforts of the other. The above-mentioned case of resettling victims into other environmentally hazardous areas points to a problem of the same nature.

According to Vasily Semashko, *all* houses abandoned by the evacuees in the exclusion and primary evacuation zones have been plundered (Semashko, April 17, 2006). Those plunderers are for the most part residents of nearby villages (Semashko, April 11, 2006). Early on, much of the theft of abandoned property was perpetrated by police dispatched to guard the perimeter of the exclusion zone. Initially the police teams worked in two-week-long shifts, following which they were sent back to non-affected areas for recuperation. Throughout those shifts, many of those policemen drank heavily and robbed abandoned homes (Semashko, April 20, 2006). It thus appears that while many people suffered from Chernobyl, many others took advantage of them.

As Robert Putnam famously showed in his analysis of local communities in Italy, democracy builds upon homegrown traditions of civility and trust. If, however, "laws ... are made to be broken, [and] fearing others' lawlessness, people demand sterner discipline" (Putnam, 1993, p. 115), a nourishing environment for autocratic regimes arises. Writing about Russian political culture, a political scientist with close ties to the Kremlin acknowledged that "the personification of political institutions and the great role of leaders ... *make up for deficiency of mutual trust* [emphasis added—G.I.]. That is why Russians lean not to institutions but to strong personalities" (Nikonov, 2007). Apparently Belarusians do as well. By all accounts "fearing others' lawlessness" has been quite real in Belarus. In the desperate and crime-ridden situation that was exacerbated and in part caused by Chernobyl, and was further aggravated by the breakup of the Soviet Union, *Belarusians' longing for order was bound to become truly intense and overwhelming*. It is therefore hard to shrug off the assertion by Yuriy

Shevtsov that, in many ways, the current Belarusian regime is a side-effect of Chernobyl (Shevtsov, 2005, pp. 172–175). Surprisingly, no Western Belarus-watcher has ever looked at the Lukashenka regime from that perspective. According to a national poll from January 2007, 63 percent of Belarusians believe that Lukashenka's biggest achievement has been strengthening order (IISEPS, January 2007).

After his first presidential election, Alexander Lukashenka adopted a routine of visiting the contaminated areas each year on the 26th of April, the anniversary of the tragic blast. Around 2000 he began to suggest publicly that the Chernobyl-affected area is no longer unsafe for the most part. His suggestions were repeatedly and forcefully denounced by the opposition. How can a dictator be believed! "His authoritarian decrees on this and other topics," *The New York Times* wrote in October 2005, "have prompted shock, fear, and even ridicule, but a scientific study released in September by seven United Nations agencies and the World Bank more or less agreed with him" (Myers, 2005). Apparently eight international agencies and the president of Belarus are in agreement as far as the prospects of settlement and economic activity in Chernobyl-affected areas are concerned. In what follows, the major findings of the 2005 UN-sponsored study are summarized.

THE CHERNOBYL FORUM 2003–2005

Except for fatalities and serious health problems among 1,000 on-site personnel of the Chernobyl nuclear power plant and 240,000 recovery operation workers (most of those being citizens of Ukraine, Russia, and Belarus), few other people were exposed to high levels of radiation.

Among the 5,000,000-strong general population that lived in areas qualified as "contaminated" (above 37 kBq m^{-2} of ^{137}Cs), only one medical problem is definitely attributable to Chernobyl. This is thyroid cancer among children. Considerable thyroid exposure of local residents occurred through inhalation and ingestion of foodstuffs, especially milk containing high levels of radioiodine, during several days following the fallout. "From 1992 to 2002, in Belarus, Russia, and Ukraine more than 4,000 cases of thyroid cancer were diagnosed among those who were children and adolescents (0–18 years) at the time of the accident, the age group 0–14 years being most affected; ... The majority of these cases were treated with favorable prognosis for their life" (Chernobyl's Legacy, 2005, p. 17). There is no proof that several other health effects (notably leukemia, cataracts, and congenital malformations) typically ascribed to Chernobyl indeed resulted from the accident, as the dynamics in frequency of these effects inside and outside the contaminated areas are identical. Over the course of twenty years, "the average doses received by residents of the territories 'contaminated' by Chernobyl fallout are generally lower than those received by people who live in some areas of high natural background radiation in India, Iran, Brazil, and China" (*Ibid.*, p. 13).

“Since 1986, radiation levels in the affected environments have declined several hundred-fold because of natural processes and countermeasures. Therefore, the majority of the ‘contaminated’ territories are now safe for settlement and economic activity” (*Ibid.*, p. 8).

With the exception of the Ukrainian town of Pripyat, wherein most of Chernobyl power plant’s personnel resided, no significant *urban* cluster received harmful doses of radiation. The affected areas were overwhelmingly rural, and the major economic activity of those areas was agriculture with a low level of land use intensity. The population of such areas used to be the lowest-paid, poorest, and most afflicted by the above-mentioned life-style factors. Among the 5,000,000 general population of Belarus, 100,000 fatal cancers of all types can normally be expected. In addition to that, about 4,000 fatal cancers of all types are likely to occur, possibly attributable to Chernobyl, a rise of 4 percent. In order even to approximate the human effect of Chernobyl, one ought to know that adult mortality has been rising at an alarming rate across the former Soviet Union for several decades. Much of that dynamic has to do with poor diet and life-style factors such as alcohol and tobacco use, as well as with poverty and limited access to health care. In overall terms, Chernobyl did not contribute much to this grim situation. To validate this conclusion further, it makes sense to refer to life expectancy statistics, which were not included in the UN document in question. In Belarus, Ukraine, and Russia, these statistics are alarmingly low. However, in Belarus, which has borne the brunt of the Chernobyl fallout, women live on average four years longer and men three years longer than in Russia, even though Belarus absorbed thousands of times less radiation from the same fallout both in per capita terms and in terms of the share of affected area.

The Chernobyl accident created an inordinate amount of stress. Many people were traumatized by rapid relocation and by the Chernobyl stigma whereby their poorly informed compatriots from unaffected areas declined to socialize with them and refused to allow their children to play with those from Chernobyl-affected areas. To cap all of this, great economic turmoil occurred in the 1990s—owing to factors completely unrelated to radiation but rather related to the collapse of the Soviet Union and the introduction of market mechanisms. Exacerbating the situation of affected areas even more is that, in the aftermath of Chernobyl, most younger and educated people abandoned those areas in droves, leaving the most vulnerable population groups behind. Now, in all Chernobyl-affected rural rayons, the population of retirees equals or exceeds the working-age population.

In combination with poor information about the accident early on and with a “legacy of mistrust” (Chernobyl’s Legacy, 2005, p. 40) whose roots extend far beyond 1986, the situation just described breeds hopelessness. It encourages the individuals living (or rather left to live) in the Chernobyl-affected areas to “think of themselves fatalistically, as invalids” (*Ibid.*, p. 21). Indeed, “populations in the affected areas exhibit strongly negative attitudes in self-assessments of health and well-being and a strong sense of lack of control over their own lives.... Added to exaggerated or mis-

placed health fears, a sense of victimization and dependency created by government social protection policies is widespread in the affected areas. . . . [T]he dependency culture that has developed over the past two decades is a major barrier to the region's recovery" (*Ibid.*, p. 36).

Although there has been a substantial reduction in the transfer of radionuclides to vegetation and animals, and the *exclusion zone* has become a unique sanctuary for biodiversity, uptake of radionuclides through plant roots from soil may still pose a danger. Consequently subsistence farmers ought to exercise care in monitoring the radiocaesium contamination of their produce. Freshwater fish, berries, mushrooms, and game products ought to be tested as well. Interestingly, the output of large agricultural enterprises is less dangerous, as they have practiced special treatment of land used for fodder crops, clean feeding, and application of Cs-binders such as Prussian Blue. By and large, "outside the Exclusion Zone, no acute radiation-induced effects in plants and animals have been reported" (*Ibid.*, p. 29).

In the meantime, the governments of Belarus, Russia, and Ukraine have accomplished much in order to combat the effects of Chernobyl. The analysis of construction in Chernobyl-affected areas shows that Belarus has been particularly active. From 1986 to 2000, 49.7 percent of all new houses and flats, 53.9 percent of new outpatient health centers, and 55 percent of new kindergartens (out of the overall number of those commissioned in Chernobyl-affected areas) were built in the Republic of Belarus (*Ibid.*, p. 38).

In all three countries, including Belarus, hundreds of thousands of people have received various privileges and benefits available for Chernobyl victims. For example, by the late 1990s, Belarusian legislation provided more than seventy such privileges (*Ibid.*, p. 39). "Somewhat counter-intuitively, the number of people claiming Chernobyl-related benefits soared over time, rather than declining" (*Ibid.*, p. 40). The UN-sponsored study recommends that the governments "focus resources on those most in need" (*Ibid.*, p. 43) and as such it qualifies "a small but important minority, numbering between 100,000 and 200,000" in all three countries. These people are described as "caught in a downward spiral of isolation, poor health, and poverty" (*Ibid.*, p. 42). The report recommends that most other people, like numerous resettlers, ought to be helped to reintegrate into society and to be provided with accurate information on the effects of the accident. The report underscores that such a reallocation of resources requires political courage, and it will inevitably face strong resistance from vested interests.

The report, issued on behalf of eight influential international institutions, is a powerful read. One of its by-products is that it helps the reader understand the consequences of sundry unfounded speculations and unscrupulous business ventures related to the tragedy of Chernobyl. Some of these speculations are not particularly vicious but aim at quick cash. For example, a tourist business launched in Kiev, Ukraine, offers a one-day tour of the environs of the Chernobyl power plant, including a tour of the abandoned town of Pripyat, for \$150—quite a bit of money for a person of

average means in that part of the world. One of the trip's highlights is an opportunity to walk on grass in the vicinity of the power plant using protective rubber overshoes. Needless to say, that grass has grown on clean land, as all topsoil around the reactor was removed and buried in special places. And the personnel of the Chernobyl plant, whose closure turned out to be a lengthy endeavor, all go to work in their normal everyday shoes. Not all snake oil salesmen are this innocuous, though.

YURIY SHEVTSOV'S VIEW

A book by Yury Shevtsov, by coincidence released in September 2005—that is, simultaneously with the aforementioned study—is a case in point. Eye-opening on many aspects of modern Belarus, the book is more alarmist and speculative on the issue of Chernobyl. Here is one excerpt devoted to the people living outside the *exclusion zone* in Belarus:

Collective farmers, small-town dwellers, local intelligentsia ... have been receiving their lethal doses [of radiation] for twenty years on a daily basis. None of them will die in peace. Everybody will suffer from agonizing pain before he or she dies. This pertains to those who say it is safe to live in the Chernobyl zone and to those who say that it is not. This pertains to those who vote for the president and his program of rehabilitation of dirty areas, and to those who got fired from work for their participation in Chernobyl NGOs. This pertains to those who pillage abandoned villages and to those who guard them. Although practically all of them work for the state and approve of its leadership, nobody will receive from the state compensation commensurate with the damage inflicted on their health (Shevtsov, 2005, p. 164).

One may mistake part of this excerpt for its author's critical attitude toward the Belarusian authorities. In fact, Shevtsov is a faithful supporter of Alexander Lukashenka. Central to Shevtsov's perspective on the legacy of Chernobyl is his description of the Chernobyltsy community, *i.e.*, those affected by the catastrophe. These people developed a collective identity that transcends ethnic and denominational lines. The psychological complex of Chernobyltsy includes feelings of insecurity and abandonment, as well as a proclivity to self-segregation and opposition to the rest of society. According to Shevtsov, the crime rate in the areas with a high concentration of Chernobyltsy in Gomel and Mogilev regions is twice as high as in the regions with a limited number of Chernobyltsy. Also, the community in question is characterized by the utmost nostalgia for the Soviet Union, the staunchest anti-market attitudes, and sky-high support for Lukashenka despite the fact that much of the post-1996 economic growth in Belarus has been achieved at the expense of scaling down the post-Chernobyl recovery programs (*Ibid.*, p. 145).

Shevtsov believes that Belarus cannot afford to say the whole truth about Chernobyl and has to reallocate funds—that on moral grounds ought

to be spent on Chernobyl-related purposes—in favor of other pursuits. According to Shevtsov, it is the outside world that ought to take up the slack. This is because “the Chernobyl catastrophe gave to Belarusian culture moral justification of its independent existence and the right to evaluate the degree of morality of other cultures, particularly those of advanced countries” (*Ibid.*, p. 138). Moreover, “today’s spiritual self-isolation of Belarus from all of Europe is to a large extent conditioned by Chernobyl” (*Ibid.*, p. 78). Consequently, the tension between Belarus and the West could be relieved if the “West commits itself to very significant spending in order to remove the conditions that perpetuate the existence of Chernobyltsy community” (*Ibid.*).

Although Shevtsov criticizes the dependency culture whereby “all life is transformed into anticipation of humanitarian aid” (*Ibid.*, p. 170), it is hard to resist the notion that his overall stance and even his choice of words to describe the effects of Chernobyl are part of the problem, not the solution.

MISCELLANEOUS FINDINGS

Several facts not united by a common theme, other than being related to Chernobyl and Belarus, deserve to be mentioned here in addition to what has been outlined so far.

A silver lining in the otherwise ominous cloud of Chernobyl is the state-of-the-art Research-and-Practice Center of Radiation Medicine and Human Ecology, located in the city of Gomel. The stylish appearance of the center contrasts with its surroundings: by and large Gomel is not taken care of as well as Minsk. The Center was built by a Slovenian and Swiss construction firm. The construction commenced as early as 1991, but due to delays in funding the Center was not completed until 2002. Currently, the Center is the largest medical research facility dealing with effects of radiation in the former Soviet Union. Although the Center focuses on the aftermath of Chernobyl, some of its patients come from all corners of the former USSR. The in-patient care unit has a capacity to treat 450 patients at the same time. Predictably, the most widespread medical problem treated in the Center has to do with thyroid gland disorders. The Center has close cooperation with the National Institute of Cancer (NIC), USA. Within the framework of a collaborative project with the NIC, 12,000 Belarusians undergo regular health screening. The duration of the collaborative project is 30 years. This is a unique project that will allow researchers for the first time to analyze the long-term effect of small doses of radiation on the human organism (Semashko, April 19, 2006).

Rural depopulation fostered by Chernobyl has opened new opportunities for long-range migration. For example, in many rural districts within the zone of voluntary resettlement, the most widespread category of newcomers is ethnic Russians from Kazakhstan and other republics of Central Asia. This is the case in Vetka district. Located 15 km to the northeast of Gomel and 150 km from the nuclear power plant, Vetka was nevertheless one of the most damaged areas. Prior to April 1986, the district was home

to a big community of the Old Believers, the descendants of late-1600s refugees from Russia proper who did not embrace the reform of the Orthodox Church conducted under Patriarch Nikon. Almost all of the Old Believers left Vetka after the Chernobyl accident, so the population of the district halved, from 40,000 to 20,000, and some of the abandoned homes are now claimed by the resettlers from Kazakhstan (Semashko, April 20, 2006).

Chernobyl has made Belarusians extremely reluctant to ever “host” a nuclear power plant on their soil. In fact, from 1983 to 1986, such a plant was being built in Minsk *Oblast'*, but after Chernobyl the project was terminated and a thermal station was built instead. Despite the authoritarian nature of the Belarusian political regime, until recently the government was not particularly forceful in promoting its stance, according to which: (a) a nuclear power plant will lessen the country's arch-dependency on imported energy; (b) security of such a plant can be reliably maintained, and (c) Belarus is surrounded by nuclear power plants anyway—besides Chernobyl, located 7 km from the Belarusian border, there is the Ignalina station in Lithuania located 5 km from the border with Belarus, the Smolensk station in Russia located 80 km from the border with Belarus, and the Rivne Station in Ukraine located 60 km from the border. The final decision to build a new station was made in late November 2006, when the trade war with Russia was about to break out. The Belarusian government plans to have the nuclear power plant commissioned by 2013. The selected site is located in Chausy district, Mogilev *Oblast'*, 60 km east of the city of Mogilev. It will be interesting to see which construction firms, Russian or French, will be contracted for that purpose (Kirillov, 2006).

In April 2006, a national survey by the IISEPS² revealed mass attitudes of Belarusians to Chernobyl-related issues. More than 85 percent of all respondents believe that their health and/or that of their relatives worsened after Chernobyl (IISEPS, April 2006). Only 16.2 percent said that they are not concerned about the effects of Chernobyl; however, 41 percent *are* concerned, and another 41 percent feel dismayed by the consequences of the accident. Only 28.3 percent agree with the statement that under strict control any agricultural production from the affected areas can be used; 33 percent believe that only selected products may be consumed; and 35 percent think that under no circumstances should food from the affected areas be consumed. Most Belarusians (69 percent) disagree with gradual removal of Chernobyl-related benefits.

²IISEPS is an opposition-minded Minsk-based think tank and polling firm headed by Dr. Oleg Manayev, a sociologist with an international reputation. IISEPS was subjected to harassment by the Belarusian KGB in December 2004. On December 27, 2004, the US ambassador visited IISEPS as a sign of support for the beleaguered Belarusian NGOs. On April 15, 2005, the Supreme Court of Belarus ruled to close down the institute. It is currently active as a non-profit organization registered in neighboring Lithuania.

CONCLUSION

The legacy of Chernobyl is versatile and multilayered. As time goes by, it appears that immediate and delayed effects of radiation are easier to deal with than psychological traumas and political consequences. These cannot be studied by abstracting from the social setting as well as the recent and more remote histories of Belarus, Ukraine, and Russia. A delicate relationship exists between the entire issue of Chernobyl and Belarusian politics. Besides causing radioactive contamination, the tragedy of Chernobyl has exposed some of the very same socio-cultural characteristics (such as dependency on strong patronage of the state) that prop up the political landscape of Belarus and have been discussed by this author elsewhere (Ioffe, 2004). By no means did Chernobyl produce those characteristics, but it most definitely exacerbated them. In the words of an opposition-minded Belarusian analyst, “stability of the system of governance created by Lukashenka is based on rational choice by Belarusians: a redistribution-based populist model converts all those who would be the first to lose from liberal economic reform into beneficiaries. Hence the perceived cost of sustaining the regime is dwarfed by the perceived cost of change” (Schastlivchiki, 2007). Indeed, if there is some truth to the observation that in every society there is a limited number of people with inborn entrepreneurial skills, while some others are congenital dependents, and the rest are activists *and* dependents to a degree, then the effect of Chernobyl could not but significantly boost dependency as the prevalent mode of social expectations. This is because so many people became displaced and many more became immersed in constant fear of being affected by the invisible enemy, such that they had to *depend* on various state agencies most of the time. Moreover, such visible enemies as breaches of civility and trust may be even more powerful than radiation. And if this is the case, national consolidation and the development of civic culture in Belarus may contribute no less to overcoming the legacy of Chernobyl than health care, construction, and international aid combined.

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