From the Slavic Review Editorial Board:

Slavic Review publishes signed letters to the editor by individuals with educational or research merit. Where the letter concerns a publication in Slavic Review, the author of the publication will be offered an opportunity to respond. Space limitations dictate that comment regarding a book review should be restricted to one paragraph of no more than 250 words; comment on an article or forum should not exceed 750 to 1,000 words. When we receive many letters on a topic, some letters will be published on the Slavic Review website with opportunities for further discussion. Letters may be submitted by e-mail, but a signed copy on official letterhead or with a complete return address must follow. The editor reserves the right to refuse to print, or to publish with cuts, letters that contain personal abuse or otherwise fail to meet the standards of debate expected in a scholarly journal.

## MICHAEL K. LAUNER PHD

Professor of Russian, Emeritus Florida State University

To the Editor:

Slavic Review has recently published a Critical Discussion Forum regarding Kate Brown's Manual for Survival. For this Forum, Professor Choi Chatterjee assembled a distinguished panel representing various academic disciplines. As an academic who was actively involved in nuclear safety programs for twenty-five years, I bring a non-traditional perspective to consideration of the Chernobyl disaster.

The lasting impressions for most people who have read Brown's *oeuvre* stem from her rare story-telling ability. Indeed, her greatest talents lie in the realm of ethnography and cultural anthropology. In other aspects, however, Brown's basic approach and use of evidence are suspect—which is where I diverge from the Forum participants in my assessment. I will concentrate here on only one facet-the lack of historical context when examining scientific sources. Several years ago I critiqued Brown's lack of historical perspective in my review of *Plutopia*.<sup>1</sup> The same problem plagues important aspects of this study, most significantly in the way she ignores the environmental disaster wrought by the Soviet government, which-combined with the poverty endemic to the country and the complete lack of medical infrastructure-left average people with dreadful health problems and declining life expectancy in the years before Chernobyl.

There is a vast literature in English describing the wasteland that was the Soviet Union which Brown fails to take into account, including those by Ziegler (1987), Pryde (1991), Turnbull (1991), Mnatsakanian (1992), and Peterson (1993). In addition, there is the prodigious scholarship of demographer Murray Feshbach, which provides a devastating picture of the public health system in

1. Due to editorial constraints, no references are provided for the quotations and citations provided here. A full bibliography is available upon request (mlauner@fsu.edu).

Slavic Review 79, no. 4 (Winter 2020)

© The Author(s), 2021. Published by Cambridge University Press on behalf of the Associahttps://doi.org/10.1017/slr.2020.206 Published online by Cambridge University Press doi: 10.1017/slr.2020.206

rural areas and of the post-independence economy in general. I particularly recommend Feshbach and Friendly, *Ecocide in the USSR* (1992).

Here is just a small sample of quotations from his various studies:

- "about 80 percent [of Soviet rural hospitals] do not have any hot water at all, 25 percent do not have sewage treatment, and 17 percent no piped water of any sort"
- "the all-but-universal horror of maternity ward conditions"
- "Some Soviet scientists assert that 75 percent of all illness is related to the use and consumption of polluted water."
- "estimated Soviet GNP down by 4 to 5 percent in 1990 and 8 to 10 percent in the first half of 1991"

## Why is this significant?

Consider the following: Brown notes that in 1990 "Soviet doctors were well aware of a new trend in thyroid cancers among children" (243). In a footnote (379, note 11) she cites David Marples, who wrote: "Among children prior to Chernobyl, there were seven cases...in [Belarus]. Between 1986 and 1989 a small increase...was detected among children: two cases in 1986; four in 1987; and five in 1988. However, in 1990, 29 cases were suddenly detected. By 1991 the figure had jumped to 59."

Brown offers this information as one form of "proof" that Chernobyl caused a great number of childhood thyroid cancers. *Which indeed it did*. However, she should have realized that, because of the 5–10 year latency period, any cancers clinically identifiable in 1986–89 developed *before* Chernobyl blew up. Brown makes a similar erroneous assertion in reference to Rivne oblast in Ukraine: "Most alarmingly, the number of tumors among children was up to twenty times higher in 1988 than in other contaminated regions," (181).

Again, this cannot be attributed to Chernobyl: increases in childhood cancer in those years were occasioned by the worsening ecological conditions in Belarus and Ukraine *prior to* the accident.

Ironically, the evidence Brown seeks did exist—just not in the late 1980s. In 1991, at the end of the latency period, a team of Ukrainian and British researchers identified an unprecedented increase in thyroid cancer among children. See: Prisyazhiuk, et al., *The Lancet* 338 (November 23, 1991). This was the first of more than three thousand studies conducted by international research teams funded by western governments and Japan that have appeared in leading scientific publications. Indeed, a team of Ukrainian researchers headed by Boris Sobolev studied four 2-year intervals and one 1-year interval (86–87, 88–89, 90–91, 92–93, and 94) and made the following statement: "[W] e have assumed that the consequences due to the Chernobyl accident had not manifested themselves during the first two time intervals."

It is hard to believe that the failure to cite any of this literature is accidental on Brown's part. Such studies obviously undercut her claim that the west conspired to ignore the medical consequences of the Chernobyl accident and failed to do anything to support medical researchers in Belarus, Russia, and Ukraine. Nor is her mistaken comment about "early" post-Chernobyl cancers an isolated example. She clearly believes that hundreds of thousands of people died as the result of Chernobyl: "At the Pripyat visitors' center on the thirtieth anniversary, the guide gave a death toll of 150,000. These are conservative numbers. Ukraine received only a small portion of Chernobyl fallout. The most radioactive clouds went to Belarus and western Russia," (278–79).

This claim is based predominantly on a compilation of reports from around the Soviet Union edited by Aleksei Yablokov, et al., which has been roundly criticized by respected scientists. "[The book] reflects a conspiracytheory approach which implies...that [western organizations] 'completely neglected'...significant information." "Yablokov's estimation of population mortality due to Chernobyl fallout of about one million before 2004...transports this book from science to the realm of science fiction."

The information provided above reflects a systematic selection of data conforming to Brown's fundamental belief that the west—with active collusion by some of the world's most respected epidemiologists—conspired to lie about the medical consequences of Chernobyl in order to shield the American government from active lawsuits arising from above-ground testing of nuclear weapons in Nevada.

What Brown has done is fall victim to Confirmation Bias, the tendency to search for information that confirms one's preexisting beliefs or hypotheses. The effect has been to overwhelm her training as a historian. She claims to be the victim of malicious attacks "with little engagement with the evidence at hand." I suggest that this commentary has provided substantive evidence to the contrary.

## Kate Brown responds:

Thank you for your attention to *Manual for Survival*. I appreciate your consideration of the medical and epidemiological complexities of the Chernobyl accident. I am somewhat confused, however, by the logic of the argument you put forth in your letter. I did not have pre-existing "beliefs" about Chernobyl health effects that then led to a "confirmation bias." I had pre-existing knowledge about potential harmful effects caused by human exposure to low, chronic doses of radioactivity in food chains; knowledge I learned working through more than ten thousand documents of the US Department of Energy and Soviet archival sources related to the production of plutonium.

You state that I fail to take into account the "devastating picture of public health" in the late USSR. You give sources ranging from 1987 to 1992; sources researched during the Cold War when the scholars you cite had no access to Soviet archives. We know that western scholars focused on failures of the Soviet public health system as one of many ways to condemn the Soviet adversary. Perhaps because of these ideological blinders these scholars missed the fact that thanks to Gorbachev's anti-alcohol campaign, Soviet citizenry experienced an increase in life expectancy at just the time under question. As devastating as public health was, Soviet citizens were living longer in the mid to late 1980s than they had in previous years. This public health renaissance continued until Boris Yeltsin took over and introduced shock therapy.<sup>2</sup> Indeed, I do in *Manual for Survival* take into account the problems with rural medical service; how for the lack of basic supplies and personnel many illnesses went undiagnosed.

I am also confused by your use of Prisyazhiuk, et al., *The Lancet* in 1991. Prizyazhiuk was not alerting the world to a rise in childhood thyroid cancers—a source you say I deliberately overlooked because I want to condemn the work of international research teams on Chernobyl consequences. On the contrary, Prisyazhiuk ends his article: "These figures [on cancer in Ukraine] indicate that even in the most highly contaminated areas of the Ukraine, no large increase in cancer has yet occurred as a result of the Chernobyl accident." He is basically saying there was, by 1991, yet no cause to worry.

A vear later, several Belarusian and two British researchers published material in *Nature* showing that a thyroid cancer epidemic was underway; one that had been slowly growing annually from less than one annual case of pediatric thyroid cancer before 1986 to 1990, when the number of cases leapt to twenty-nine in 1990 and fifty-five in 1991.<sup>3</sup> Scientists in the west soundly denounced this article. Valerie Beral, one of Prisvazhiuk's co-author for the 1991 Lancet article, joined in the pile on against the Belarussian researchers.<sup>4</sup> These western scientists had to admit in 1996 that they had been wrong. Researchers had a difficult time accepting the connection between radioactive iodine and childhood thyroid cancer because doctors at the time saw radioactive iodine as a useful cure for thyroid cancer in adults, not as a cause of cancer in children. As a correction to your point on the latency period, scientists in 1992 considered the latency period to be closer to ten years than five. These were educated guesses formed on just a few small studies of children with thyroid cancer because it was so rare at the time. They did not yet know the latency period from high doses of radioactive iodine. A five-year or ten-year latency period was not some kind of natural law; it was a good guess at the time. All of this material is in *Manual for Survival*. I am sorry you did not see it.

Finally, I am also perplexed about your charge that I am citing unreliably high death tolls from Chernobyl; which is because I am somehow related to the "conspiracy theories" of Aleksei Yablokov's compilation of Soviet and post-Soviet research on Chernobyl.<sup>5</sup> Engaging in an interesting smear by association, you cite critical reviews of Yablokov's book as if they have something to do with *Manual for Survival*. I did not use Yablokov as a reference on estimated deaths. I stated that I did not know the death toll; that Russia and

2. N S Gavrilova, V G Semyonova, G N, Evdokushkina L. Gavrilov, and A E Ivanova 2003 Annual Meeting of the Population Association of America 1–3.

3. Kazakov VS, Demidchik EP, Astakhova LN (1992) Thyroid cancer after Chernobyl. *Nature* 359: 21; and Keith Baverstock et al., "Thyroid Cancer after Chernobyl," *Nature* 359 (September 3, 1992).

4. I. Shigematsu and J. W. Thiessen, "Letter to the Editor," *Nature* 360 (October 22, 1992): 680–81; V. Beral and G. Reeves, "Letter to the Editor," ibid; and E. Ron, J. Lubin, and A. B. Scheider, "Thyroid Cancer Incidence," *Nature* 360 (November 12, 1992): 113.

5. Alexey V. Yablokov, Vassily B. Nesterenko, Alexey V. Nesterenko, and Janette D. Sherman-Nevinger, *Chernobyl: Consequences of the Catastrophe for People and the Environment* (New York, 2010).



Figure 1. N. S. Gavrilova, V. G. Semyonova, G. N. Evdokushkina, L. Gavrilov, and A. E. Ivanova, 2003 Annual Meeting of the Population Association of America, 1–3.

| Region of<br>Belarus | Years |      |      |      |      |      |       |       |
|----------------------|-------|------|------|------|------|------|-------|-------|
|                      | 1986  | 1987 | 1988 | 1989 | 1990 | 1991 | 1992* | Total |
| Brest                | 0     | 0    | 1    | 1    | 6    | 5    | 5     | 18    |
| Vitebsk              | 0     | 0    | 0    | 0    | 1    | 3    | 0     | 4     |
| Gomel                | 1     | 2    | 1    | 2    | 14   | 38   | 13    | 71    |
| Grodno               | 1     | 1    | 1    | 2    | 0    | 2    | 6     | 13    |
| Minsk                | 0     | 1    | 1    | 1    | 1    | 4    | 4     | 12    |
| Mogilev              | 0     | 0    | 0    | 0    | 2    | 1    | 1     | 4     |
| Minsk City           | 0     | 0    | 1    | 0    | 5    | 2    | 1     | 9     |
| Total                | 2     | 4    | 5    | 6    | 29   | 55   | 30    | 131   |

Table 1 Incidence of thyroid cancer in children in Belarus

\* Six months of 1992

## Figure 2. Table, Astakhava, et al.

Belarus publish no figures on this issue. I did report that Ukraine gives compensation to 35,000 women whose husbands died from a Chernobyl-related illness. That number includes only men who had documented exposures; no women, children or unmarried men are included in that number. Filling out the picture, the public relations official at the Pripiat visitor's center in 2016 gave a number of 150,000 fatalities, which I could not verify with any other than one off-the-record source in the Ukrainian government. That is what I reported. If giving this range of numbers and sources is a "systematic selection of data," then I find that a strange evaluation. I try in my work to be as transparent as possible about how I obtain information and analyze it. That is the major purpose of the first-person narrative in *Manual for Survival*. I am not a cultural anthropologist or an ethnographer. I work primarily as a historian. *Manual for Survival's* seventy pages of footnotes show the work I did with two colleagues, Olha Martynyuk and Ekaterina Kryvichanina, to dig up information from twenty-seven archives and cross-check them as best as we could. We are proud of that work and are grateful it was recognized in two book prizes from ASEEES.

> Kate Brown *MIT*