The ecologists versus the builders: the conflict over the Leningrad dam in the nineteen-seventies and eighties

Leningrad’s flood protection system was a long-overdue initiative. St. Petersburg, aka Leningrad, nestles in the Neva River delta just above sea level, and floods were initially among the city’s most frequent, and memorable, guests. Once or twice each century, the city experienced catastrophic flooding (water level increase of more than 300 cm above the ordinar, or normal level) inevitably bringing death and destruction. In spring and autumn floods usually occur on a weekly basis, if not more often. They do not always represent a danger for residents, though they do herald major damage to city infrastructure. Engineers started to draft plans for a dam as early as the eighteenth century, but it was only in 1979 that one of these plans could be executed. By this time, however, many had grave doubts about the feasibility of such a project.
The conflict can be seen as the birth of Soviet political ecology, according to the definitions of Bruno Latour\(^6\). Unlike the countries of Western Europe, political ecology did not enjoy a gradual genesis, but came into being suddenly, during the six perestroika years.

Our attention now focuses on debates over the threat of flood and/or ecological catastrophe, from the viewpoint of several actors and groups: 1) experts involved in the planning and construction of the dam, 2) amateur ecologists and experts opposed to the dam, 3) the city and federal authorities, and 4) the press. Mother Nature also plays a role in this drama: although she cannot directly engage in the verbal discussion, her prerogatives are verbalized by the parties to the conflict, each channelling the Gaian monologue in their own fashion. The amateur ecologists, for example, are convinced that they speak on behalf of the natural environment. Verbal communication between all four groups during this period has been analysed in Bedrohungskommunikation (“Threat Communication”) by Werner Schirmer\(^7\).

Debate soon took the form of a competition to name the greater threat: the danger of further flooding competed in people’s minds with the risk of a man-made ecological catastrophe.

The official Soviet media systematically concentrated on flood risks. The message came from academics, while journalists were responsible for popularizing and spreading the word. The latter worked under the strict control of the Communist Party authorities in Leningrad. The publicized message underscored the additional economic benefits of the project: a ring-road was to be laid along the dam\(^8\).

The first mention of ecological catastrophe dates back to the 1970’s, and a private seminar between hydrologists and underwater construction experts who were in disagreement with the approved dam design\(^9\). In 1987, their ideas were picked up by the Delta amateur ecologists group. The group insisted that the dam would change the pattern of currents in the Neva and the Gulf of Finland, and facilitate the concentration of harmful substances in the body of water near the city, thus demanding the suspension of construction and the dismantling of the dam. Further, the group insisted on a foreign company performing this work, categorically declaring all Russian companies untrustworthy\(^10\).

The hydrologists — the official representatives of state-run scientific research institutes — claimed that the two threats were in no way related. The dam could

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9 Interview with Philologin Natalia V. Uspenskaja.

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protect the city from floods, and purification facilities were to be built to clean the waste water\textsuperscript{11}. In other words, the solution was not to fight \textit{against} the dam, but \textit{for} controlled waste water purification. Construction of the purification facilities was not completed, and just 58\% of the city’s waste water was cleaned before being dumped in the river\textsuperscript{12}. \textit{Delta} rejected all attempts to justify the dam project.

A major ecological scandal was fuelled by “blooming water” — the rapid growth of blue-green algae during the summer drought of 1986. Different parties to the conflict offered varying explanations for the phenomenon. Experts claimed that this was a temporary anomaly, explained by the incomplete state of construction, and warned that eutrophication was the scourge of the entire Baltic Sea, but especially prevalent in drought years\textsuperscript{13}. The amateur ecologists saw the water’s discolouration as an omen of looming catastrophe, and placed all the blame on the dam project\textsuperscript{14}. But what would make the local population believe in this view of events?

It is noteworthy that the group we call amateur ecologists were very professional in communicating their ideas to the public via a multi-part PR offensive. First, Delta forged international links with ecological groups in the West, including one that campaigned against dam construction. Unfortunately, information about this group has proved difficult to unearth; my own sources have been unable to provide names of either the organization or its members. However, we do know that there was an exchange of correspondence, and a number of meetings at international conferences. Second, Delta broadly advertised its views in the counterculture media, including even rock culture. A striking example from the rock band \textit{Akvarium} is the song \textit{Pokolenie dvornikov i storozhei / Generation of janitors and watchmen} (1987):

We were silent like dolls while we watched in being sold  
All they could possibly sell, including our next of kin.  
\textbf{And the poisonous rain falls into the root of the bay,}  
And we still sit here waiting for news,  
We still sit here watching the screen.  
And our fathers would never lie to us  
They do not know how to lie,  
Like wolves don’t know how to eat red meat,  
Like a bird doesn’t know how to fly\textsuperscript{15}.

\textsuperscript{11} Ibid. S. 14.  
\textsuperscript{12} Sosnov A. Istoki i stoki // Smena. 1987. 22 Oktober.  
\textsuperscript{13} Sosnov A. Začem mutit’ vodu? // Smena. 1987. 21 Oktober.  
\textsuperscript{14} Ibid.  
Texts were composed on behalf of “the City” and “Nature”, which begged citizens to take a considered stance on the issue\(^\text{16}\). Third, *Delta* used the press to directly attack the official Soviet line on the risk of catastrophic floods. Numerous political groups in the new democratic movement supported the group. Why did this happen?

The texts produced by *Delta* and other authors of the same period bear witness to the popular influence of the Chernobyl catastrophe. A fear had become evident, of the risks carried by the construction and operation of hi-tech installations such as nuclear power stations and hydroelectric dams\(^\text{17}\). The opinion was often voiced, that the authorities and the dam builders had no right to commence construction, if there was the slightest possibility of an ecological risk. In this connection, *Delta* and other ecological movements saw a threat not only in the physical infrastructure of Soviet power projects such as the Chernobyl power plant, hydroelectric stations or the Leningrad dam — they also saw a threat here in the form of Soviet power as an abstract construct, accusing the country’s leaders, the city authorities and leading experts of failing to meet their responsibilities to the population\(^\text{18}\).

A public conflict would have been impossible without the state policy of glasnost, which abruptly created a window for the public discussion of diverse and previously taboo topics. Unexpectedly, the dam appeared amongst a group of acute problems, which otherwise bore no direct relation to the project. First, the dam was co-opted into a discussion about political repressions under Stalin. In the 1930’s–50’s, hydroelectric power stations were built by prisoners, including political prisoners. The topic had languished under a cloud of silence, and so in the 1980’s such infrastructure projects continued to inspire persistent negative associations\(^\text{19}\). Next, the dam was adopted as a symbol of the battle between Leningrad separatists and the Soviet authorities. In order to obtain funds for large-scale restoration of the city, activists proposed declaring Leningrad an independent economic zone with a freely convertible currency and freedom to levy taxes, thus separating from the rest of the USSR. These ideas were seriously discussed by the first democratically-elected mayor of Leningrad / St. Petersburg, Anatoly Sobchak\(^\text{20}\). Meanwhile, the “agents of Moscow” were accused of deliberately sabotaging Leningrad, and the dam was cited as one


\(^{17}\) Pis’mo P. Koževnikova — general’nomu prokuroru SSSR A.M. Rekunkovu // Merkurij. 1987. № 5. S. 16 f.; Pis’mo № 7/243-88, General’naja Prokuratura SSSR — P. Koževnikovu // From the personal Archive of Petr Koževnikov.


of the most obvious examples\textsuperscript{21}. Similar statements against the construction of hydroelectric dams have been heard in recent years in Georgia\textsuperscript{22}. Simply put, calls to destroy the dam, and with it Soviet power, could be heard at every public meeting in the Leningrad democratic movement, regardless of the context\textsuperscript{23}.

How did the public at large come to forget about the city’s susceptibility to floods? One factor was the errors made by the Soviet information machine. Prior to \textit{perestroika}, ecological issues were given scarcely any attention, despite the strong interest of the city’s residents. Yet the threat of floods was played up by the press with excessive zeal\textsuperscript{24}. Conversely, there had been no major floods since 1955 — i.e. for more than 30 years. The result was a predictable devaluation of the concept of “security”. The threat of floods became little more than a figure of speech, while the public saw the real purpose of the dam construction in the personal careers of highly-placed party bureaucrats\textsuperscript{25}. The dam system was compared to Cairo’s pyramids to underscore its scale, colossal financial cost and inherent inefficiency\textsuperscript{26}.

Individual experts found themselves single-handedly protecting the dam from attacks in the press, as the authorities and journalists declined to play their roles at the very start of the conflict. Engineers and hydrologists had never been engaged in such activities, and naturally responded to polemics in their customary style of scientific discourse. They attempted to explain, in lay terms, the key principles of their various natural science and technical disciplines, to logically prove that there was no reasonable foundation for discussion of an ecological catastrophe\textsuperscript{27}. Naturally, the scientists were unable to convince TV viewers or newspaper readerships. A solution could have been found in an adapted, reactive threat communication (for example, on the ecological risks generated by an unfinished dam), and the use of PR techniques. But the experts were not politicians, and they were unaware of the laws of threat communication. They were unaware that in building communication against a value such as security, all other values are powerless, including the value of freedom\textsuperscript{28}, let alone scientific logic.

Ecological catastrophe threat communication was actively used by politicians in elections to the city parliament (1990) and the post of city mayor (1991). The city

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\textsuperscript{23} Interview with historian Nikolaj V. Mikhailov.

\textsuperscript{24} \textit{Bereslavskij V.N.} Štab delovogo sodružestva // Stroitelstvo i architektura Leningrada. 1980. № 5. S. 3.


\textsuperscript{26} Interview with Alexandr V. Kobak.

\textsuperscript{27} \textit{Sosnov A.} Začem mutiti’ vodu?

\textsuperscript{28} \textit{Schirmer W.} Bedrohungskommunikation. S. 147.
parliament, elected into office in 1990, voted by a majority of votes to suspend all financing of the project. The mayor’s seat was contested by Anatoly Sobchak (democratic movement) and the dam’s chief engineer, Yury Sevenard (communist). The former promised to destroy the dam\(^{29}\), while the latter promised to finish construction\(^{30}\). But as soon as Sobchak won the elections, all discussion of the risk of ecological catastrophe abruptly ceased, and the engineers received funding to continue construction\(^{31}\). In other words, communication had fulfilled its political function, and was then shut down. Just like any other threat communication, it was intended to achieve selected goals by disrupting the normal operations of existing institutions or organizations\(^{32}\). In truth, however, activists at \textit{Delta} had associated themselves with ecological interests, and so felt deceived\(^{33}\).

The consequences of the conflict over the dam included not only a victory for democratic forces, but also large-scale physical damage. The dam was unfinished when the USSR collapsed, and financial support dried up in the mid 1990’s. In the early 2000’s, the dam had to be almost completely rebuilt. With the dam and purification facilities unfinished, the ecological situation worsened throughout the area.

This failure also fatally undermined trust in Russian science and civil hydro-engineering. Conversely, the success of communication by \textit{Delta} was exceptional: comments in Internet chat rooms continue to repeat the same ideas to this day\(^{34}\). The dam became one of the symbols of the old regime and, as such, played a role not completely unlike that of the Bastille during the period of the French Revolution.


Abstract
G. Tziafetas. The ecologists versus the builders: the conflict over the Leningrad dam in the nineteen-seventies and eighties
This study explores confrontations over the construction of the Leningrad dam, a major engineering project designed to protect the city from flooding. During the perestroika years the project evolved into one of the biggest ecological scandals to precede the collapse of the USSR, and the leap from the socialist model of state development to capitalism.

The parties to the conflict insisted on their own visions of development within the city limits, in many ways guided by the ideas behind these two fundamental models. My study focuses on communications between the lead engineers responsible for managing the construction of the dam, and an unofficial group of ecologists.

Within the framework of the conflict in Soviet Leningrad, uncensored public discussion unfolded in a number of areas (the formation of new ecological requirements for urban space, the fear of high-tech installations originally created to offer protection from the destructive forces of nature, and the freedom to express one’s opinion). The conflict led not only halted construction, but also caused significant environmental damage. Politically, the conflict helped discredit the Communist Party as the governing party, and also undermined public faith in Russian science, as well as construction and industry.

Key words: Dam, social movement, Leningrad, social groups, anticommunism, risk society.

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