

# Science for Vietnam: Grassroots Activism in East-West Relations in the 1970s

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#### Abstract

During the Vietnam War, dissident researchers in several Western cities formed collectives to directly support scientists and physicians in the war zones of Indochina. These collectives, which called themselves Science for Vietnam (SfV), sent laboratory equipment and materials to Hanoi, but also conducted research on medical treatments, reforestation, and chemical weapons to share their knowledge. In return for their practical help and solidarity work, the North Vietnamese taught these activists communist values. SfV thus illustrates a certain erosion of the ideological orientation of the Cold War with its communism/capitalism bipolarity between East and West. This chapter presents SfV as a self-organized and decentral non-state actor that aided the socialist Democratic Republic of Vietnam by researching and exposing the extent of harm done to the Vietnamese people. It thereby offers insights into the role of protagonists of science diplomacy operating beyond state regulation and outside official diplomatic arenas.

## Keywords

Science diplomacy · Grassroots activism · Non-state actor · Vietnam War

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#### 1 Introduction

In 1971, the grassroots organization Science for Vietnam (referred to by various sources as SfV or SFVN; hereafter SfV) was formed to directly support the communist movements in Indochina by providing intellectual, technical, and medical assistance to their resistance against the US military. In addition, SfV activists also researched the effects of new weapons and the diseases that were spreading in Indochina due to the disastrous living conditions in the war zones. SfV was founded in Chicago, but soon became active in several US cities, Canada, and some Western European countries. Its volunteers passed knowledge to Hanoi and published results in antiwar campaigns. They helped the communists abroad, and in return for their practical support, they received moral support to strengthen the struggle to overcome the capitalist system at home. Foreign aid at the grassroots level thus had political significance in addition to material consequences, as it was directed against US hegemony, but from within. SfV collectives consisted of dissidents, many of whom had turned to Marxism and defined their activities as anti-imperialism. As a result, SfV was targeted by the FBI (Klostermann, 2021).

Radical collectives of scientists and physicians are important but understudied self-organized and decentral non-state actors. SfV had overlaps with other activist groups, such as Medical Aid for Indochina, as well as contacts with the Black Panthers. The radical movement Science for the People (SESPA) provided the background for its foundation. SESPA criticized the scientific establishment in the West for providing knowledge for warfare and argued that science was intrinsically political, which is why SESPA called for a reorientation of scientific work (Greeley & Tafler, 1979; Moore, 2008, pp. 180–182). Its splinter group SfV went a step further, with activists cultivating transnational knowledge exchange and carrying out pragmatic solidarity work. SfV is worth its own analysis, as it linked communist struggles in Indochina with radical practices in the West. It emerged in an era of great political tension and ideological crisis, and therefore defies the capitalist/communist bipolarity between the Eastern and Western Blocs.

Since SfV organized itself through informal meetings, and no "official" correspondence found its way into the archives, this chapter's arguments are based on an analysis of the SfV newsletter, a booklet compiled after a year of activism, articles from this time, and declassified FBI and CIA files. It shows that SfV did not act as a state proxy, as its actions were intended to provide an alternative to the existing political order. However, SfV partnered with the socialist Democratic Republic of Vietnam by researching and exposing the extent of the harm done to its citizens. SfV was a peaceful non-state actor, but it radically opposed the US government's efforts to prevent the spread of communism.

The examination of scientific groups that were not part of the elite sphere, their agenda, campaigns, and diplomatic choices have only recently been added to the historical analysis of science diplomacy, whose study has often been limited to initiatives by research bodies that influenced relations between states through advisory work, generally from within state-funded institutions (Ienna, 2022; Ienna & Turchetti, 2023). This chapter suggests that limiting analyses to institutionalized

forms of dialogue between established scientists is particularly unhelpful for the study of informal science diplomacy during the Vietnam War, because at that time dissidents (supporters of SESPA, Medical Aid for Indochina, but also the Union of Concerned Scientists, etc.) argued that a reform of the institutional forms of scientific knowledge production was impossible. Radicals instead sought an approach to science that could "operate outside of existing political structures" (Wolfe, 2013, p. 115). The example of SfV provides insights into how the East/West dichotomy was challenged by a non-state actor composed of individuals who joined together in an interdisciplinary effort to do volunteer work, thereby acting in solidarity both beyond state regulation and outside of official diplomatic arenas.

## 2 Solidarity with the Communist Resistance

Activism among scientists is a well-established tradition, but there was a noticeable shift in the 1960s. In the previous two decades, activist groups had by and large avoided openly criticizing existing political structures (Bridger, 2015). After World War II, the campaigns of the Federation of American Scientists (FAS) for nuclear disarmament and an end to nuclear testing gained momentum. Later, the Pugwash conferences offered an influential transnational platform for protest against the arms race (Kraft, 2022). However, the triggers for these movements were different. After the outbreak of the American war in Vietnam in 1965, concerns about the misuse of science and the betrayal of democratic values provided fertile ground for mistrust and opposition to the US government. Grassroots organizations, such as SfV, represented an erosion of the strong and influential ideological orientation of the Cold War, which was characterized by a colorized bipolarity between the "communist enemy" abroad and the "capitalist hero" at home. By helping the resistance against the science-based military campaigns in Vietnam, this type of non-state actor undermined the dominance of the established actors of informal science diplomacy.

Around 1970, international relations became more globalized, tense, and polarized. The forms and tools of science diplomacy expanded, which was also because of the rise of grassroots networks among scientists (Robinson et al., 2023, p. 755). SfV emerged against the backdrop of the antiwar movement and, above all, the inflamed discourse on the responsibility of the research community. By 1966, information on the cruel instruments of warfare and their use against the civilian population in Vietnam prompted Western scholars to investigate US actions. Participants in the so-called Russell Tribunal examined the overall legality of the US involvement in the war and collected evidence of the use of "forbidden" weapons, such as defoliants and cluster bombs. Press coverage of the scandalous events in Vietnam brought to light by this unofficial war crimes tribunal galvanized antiwar struggles worldwide (Mehta, 2012). To demonstrate their solidarity, activists had held marches and organized teach-ins since the beginning of US intervention in Vietnam. But as the military conflict escalated, some dissidents expanded their means of activism. Scientists, physicians, and students joined grassroots organizations to support the communist resistance abroad.

The first SfV collective was founded after a visit by Chicago biology professor Richard Levins to Hanoi in December 1970. The trip was sponsored by the World Federation of Scientific Workers (WFSW) to investigate war crimes, particularly the use of defoliants. Despite the ongoing bombardments, Western scientists visited North Vietnam to provide personal accounts of scientific establishments and hospitals, and to document efforts to improve public health. During his visit, Levins discussed with local scientists ways to directly address their problems, which laid the foundation for SfV (Levins, 2016; Schmalzer et al., 2018; Zimmerman, 1971, p. 205). SfV constituted a new form of direct solidarity rather than another name for Science for the People, even though the FBI opened its case on the first collective under the name "Chicago SESPA" (FBI, 1973), which nevertheless reflected existing overlaps in terms of people and ideas.

SfV soon included representatives of multiple branches of science, and, in addition to Chicago, collectives were founded in Minnesota, Madison, New York, Cambridge, Berkeley, Philadelphia, St. Louis, and Santa Cruz, as well as in the Canadian cities Ottawa and Toronto. These collectives organized events and gathered to share knowledge and conduct research. The SfV newsletter published findings and opinions from activists, their speeches, interviews with Vietnamese "comrades," and calls for research contributions (Editorial Collective, 1972; SfV, 1972f, 1972h).

Grassroots movements like SfV marked a new era of contestation. In the 1960s, Marxist theory found support among the younger generation who had not experienced the "red hunt" of the McCarthy era in their own professional lives. Marxist-inspired activism was intended to overcome the established division of labor and traditional ways of doing science. SfV intended to make scientists better citizens (Strasser et al., 2019, p. 60), but also sought to include non-professional researchers. Having scientific, medical, agricultural, and technical expertise as a core asset, but taking a clear stand against a constraining notion of "professionalism," SfV crowdsourced help and information via newsletters and public speeches. Activists were keen to network and exchange ideas with others (SfV, 1972c).

Based on a critique of capitalism, SfV embraced basic democratic principles in its actions and running. Research projects were to overcome scientific competition and decisions were made collectively. The dominance of white men in scientific discourse and practice was challenged, as was hierarchy within laboratories, and the exclusion of the "oppressed" from key positions (Morales, 1972). At a meeting of the WFSW, activist Hedda Ribolow criticized that, when discussing the problem of young scientists, the older generation would think about job security, while her concern was equality, the presence of racism and sexism in science, as well as the problems of developing countries and the imperialist nature of science (Ribolow, 1972). The civil rights movement, feminism, and awareness of the problems in the

<sup>&</sup>lt;sup>1</sup>Source materials provide first names, which does not allow conclusions to be drawn about the social composition of SfV beyond gender.

newly independent countries formed the background for such considerations. However, the Vietnam War was the focal point for founding of the SfV collectives.

## 3 The "Radical International" of the Scientists

SfV was committed to radical internationalism in theory and practice, with activists in dialogue with their "comrades" across the North Atlantic. To the author's current knowledge, collectives (with the same or similar names) soon existed in Italy, France, Germany, Sweden, the UK, and Switzerland (Anonymous, 1972, pp. 14–16, 1975). Paris developed into the most frequented exchange hub for SfV. As Salar Mohandesi has noted, especially after "May '68", Paris had developed into a central location for committed militants and dissidents who benefited from the general anti-US attitude among the French population, from the political left to the right (Mohandesi, 2023). This was also true for SfV. In the fall of 1971, two members of the Chicago collective now living in Paris began working as the SfV Paris office (SfV, 1971a, 1972a). Because of the French colonial past, a Vietnamese community was there to support the actions of SfV, and also played a crucial role in disseminating information and establishing contacts. Under the watchful eye of the Central Intelligence Agency (CIA, 1972), interactions occurred in Paris with people from North Vietnam, delegates of the Provisional Revolutionary Government of the Republic of South Vietnam, and also with contacts from liberation movements in Laos and Cambodia (SfV, 1972b). Moreover, because of the limitations put in place by US export restrictions, equipment and materials were passed to Indochina via Paris. Activists often purchased medical and scientific supplies, journal articles, or textbooks abroad and relayed them through their European contacts (Wehrwein, 1972).

The most important areas of exchange for SfV were with scientists and physicians, as well as politicians of the Democratic Republic of Vietnam. Opinion-making against the US aggressor was part of the DRV's diplomatic strategy, so representatives reached out to socialist allies, but also to non-aligned, inter-governmental, non-state actors in the West. Pierre Asselin has shown how important solidarity movements were seen in the quest to isolate the decision-makers in Washington (Asselin, 2021). SfV activists received inspiration, ideological guidance, and moral advice for their anti-capitalist campaigns and were encouraged to radically change Western science. After a visit in Hanoi, the activist Val Woodward took a stance against the "distorted values" of US science, inviting the audience to break out of its "corporate-imperialist mentality" (SfV, 1971b, p. 2). SESPA founder Al Weinrub argued at a SfV conference that the traditional way of doing science in the US was inconsistent with the activists' goals, and that a "true Science for the People under a system of socialism in America" would justify opposition to the practices and assumptions of established science (Weinrub, 1971).

Sparked by revolutionary calls of the dissident youth, governments in the West expanded their investigative procedures. The FBI had informants and analyzed publications, but also searched luggage belonging to SfV volunteers because of

their association with SESPA and collaboration with communist Vietnamese organizations (FBI, 1972b, 1973). However, at least in the case of SfV Chicago, the FBI downgraded its activity, as there was no information indicating involvement in anything other than non-violent activity (FBI, 1972a). Instead of physical confrontation, SfV was about mobilizing people to contribute to the communist resistance to warfare.

# 4 When Science Follows Technology

SfV activists saw Vietnamese science to be at a high intellectual level, with strong applications, but reported a lack of laboratory equipment and research materials. Therefore, they called for Hanoi to be sent supplies, chemicals, small items, computer components, samples of the seeds of crop varieties, instructions for experiments, scientific books and journals, as well as new literature on science-based military applications and war crimes. Among the requests from abroad were also samples of the herbicides 2,4-D and 2,4,5-T (i.e., the components of Agent Purple, Agent Green, Agent White, and Agent Orange), which were needed to conduct studies on their effects (SfV, 1971c). But SfV did more than collecting and shipping materials. They also researched the consequences of the weapons deployed, as reports on the destruction of traditional agriculture and some causes of death in Indochina were alarming. SfV became most active in work areas such as cell and molecular biology, mathematical biology, population biology, entomology, herbicides, warfare damage, forestry, farming, fishing, computer science, and physics (Barth, 1971). SfV was not about doing science to generate insights to then produce new technology, but the other way around.

The SfV newsletter published lists of questions to work on, presenting the reader war applications with severe outcomes and unknown long-term effects. Activists were asked for information and samples of rice that was resistant to chemicals used in the war, invited to explore the consequences of plant and fruit growth after the spraying of defoliants and other herbicides on agricultural land, to study the impact of nerve gas use on humans, to share insights about reforestation techniques, to consider how to best decontaminate herbicide-saturated soils, and to provide information on medicine to treat malaria and tuberculosis. Of high importance to the Vietnamese was also more knowledge about the effects of herbicides and tear-gasses on humans, particularly because of the increase of births of malformed babies in sprayed areas. Another shocking problem presented was the location of plastic pellets in human flesh resulting from anti-personnel bombs since they did not show up on x-rays (SfV, 1971c, 1972d).

SfV activists sat down to investigate the grave consequences of US warfare, sending their results to Vietnamese scientists and physicians. Tuberculosis was studied, as well as current methods of malaria treatment. They explored the effects of herbicides on mice, human tissue culture, barley root tips, and soybeans. They also sent compiled information on the reforestation of bomb craters after collecting information on tree growth rates on strip mine spoils in North America, also taking

into account the difference in natural forests between the two global regions (SfV, 1972e).

In addition to passing on material and knowledge to Vietnam, SfV exposed the severity of the impact of miliary actions on innocent Vietnamese people in the Western press. SfV Chicago published a report on the continuation of classified methods for weather modification and augmenting rainfall in Indochina under US President Nixon, which had been developed as a research program during the Johnson administration in India (Doel & Harper, 2006). The report added to a pre-existing scandal following the publication of the so-called Pentagon Papers in the New York Times, which had depicted the "power" of Western technoscience. In 1972, the Chicago SfV collective distributed its mimeographed study containing evidence of rainmaking to soften roads, cause landslides, wash out river crossings, and augment poor traffic conditions (Caplan, 1974). SfV had put its focus on Project Nile Blue, the Pentagon's "climate dynamics" program, after Vietnamese intellectuals in France had asked if leaked information about it was accurate. Within a month of work by more than a dozen people, SfV Chicago completed its report illustrating the use of rain-making techniques and discussing the extent of US military research in geophysics (Looney, 1975; SfV, 1972g).

## 5 Conclusion

As part of the broader and diverse antiwar movement, and inspired by Marxist ideas of orienting academic work toward collective action, SfV was a non-state actor operating from outside established political and diplomatic regimes, from within universities. Although it was independent, SfV did not escape the campus, its laboratories, and other infrastructures. As seen, SfV actions were peaceful, but, feeling responsible as citizens of powerful and hegemonic Western states, its volunteers sought and supported radical alternatives, for which they established their own communications channels to exchange information, organize the transport of materials, and share expertise, results, and insights.

SfV was motivated by the belief that a victory for the North Vietnamese forces would advance the socialist agenda and lead to a more communist world. It was the same projection onto developments abroad, albeit with the opposite goal, that had led the US government to launch its military strike against the communists in Vietnam, namely the belief that after the Maoist victory in China and the Korean War, the fall of the entire Vietnamese territory to communism would pose a threat to the capitalist West. In this sense, SfV was both reactive and proactive, as its contributions were aimed at strengthening resistance of the communist forces abroad, and fighting capitalism through exposing and countering the consequences of US interventionism.

SfV conducted self-organized projects to provide real assistance, with documented activities from 1971 to 1975. As it was a small and radical movement, it had no official dissolution protocol or end date. However, it is very likely that targeted activism ended with the fall of Saigon and the surrender of South Vietnam.

Thereafter, SfV merged into Science for the People, a related but larger framework that continues scientific activism to this day. (The chapter is dedicated to the Italian physicist and antiwar activist 26 Bruno Vitale.)

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