

Commemorating the PRC's first artificial satellite

The contested legacy of “The East is Red-1” in today's China

Tonio Savina

On the occasion of the fiftieth anniversary of the launch of the first Chinese satellite—“The East is Red-1” [*Dongfang hong-1* 东方红一号 (DFH-1)]—an exhibition dedicated to it was held online on the website of the National Museum of China. Such an exhibition signals the on-going nationalist revival of the historical memory associated with the DFH-1 in today's China. However, having been built during a time that remains a kaleidoscope of divergent memories—that of the Cultural Revolution—the satellite's legacy remains contested too. Indeed, in the Party's official historiography, the satellite has been presented as a survivor from the “ten years of chaos,” mostly thanks to the commitment of the Chinese scientists and of the far-sighted leaders Zhou Enlai and Nie Rongzhen. Conversely, for some current “leftist” stances, the DFH-1 did not “survive” the Cultural Revolution—it was one of its greatest outcomes. Aiming to discuss such disputed memories, this essay will first outline a brief history of the DFH-1, analyzing how the activities of mass factions had a harmful impact on its construction. Then, the paper will focus on the ways in which the history of the DFH-1 has been framed by the Party's official historiography and contested by other unofficial “leftist” accounts—mostly untranslated and ignored by Western scholars—for example those that appeared on the “red websites” such as Utopia (*Wuyouzhixiang* 乌有之乡).

Keywords: China; Satellite; The East is Red-1; *Dongfang hong-1*; DFH-1; Cultural Revolution; Neo-Maoists; New-Left; Chinese Space Program.

1. Introduction

April 24th, 2020 marked the fiftieth anniversary of the launch of the first Chinese artificial satellite, The East is Red-1 (*Dongfang hong yi hao* 东方红一号—DFH-1). On that occasion, due to the circumstances of the pandemic, an exhibition dedicated to the satellite was held virtually on the website of the National Museum of China, recollecting the history of its construction and launch (*Renmin Wang* 2020). At the entrance of the virtual hall, welcoming the online visitors, a letter written by President Xi Jinping addressed the old Chinese aerospace scientists that took part in the satellite project: in the message, the General Secretary celebrated the spirit of hard work that infused the engineers, recalling how,

while he was in Liangjiahe, northern Shaanxi,¹ he was very excited to hear the news of the launch of the first satellite (Xi 2020). The exhibition then presented the preparatory work that led to the launch of the device, focusing on its technical features and key characteristics, and moved on to present the most recent Chinese space achievements, from the flight of the first astronaut Yang Liwei in 2003 to the accomplishments of the Moon program Chang'e.

Such an exhibition signals the ongoing nationalist revival of the historical memory associated with the Dongfang hong-1 in today's China, a phenomenon that has become particularly evident since 2016, when Xi Jinping chose April 24th as the date to celebrate the "Chinese Space Day" (*Zhongguo Hangtian ri* 中国航天日). This, indeed, became an occasion held every year to remember the flight of the first satellite, reaffirming that its launch was a turning point in the unique journey of the Chinese nation in outer space: nowadays, indeed, the memory of the DFH-1 has been strikingly revitalized, celebrating the country's long-standing commitment to conquering outer space since Maoist times (*Xinhua Wang* 2016).

In this perspective, the recovery of this memory has to be interpreted in relation to a more general, nationalistic revival of "red culture." When recalled in this context, The East is Red-1 is cheered as a symbol of the revolutionary spirit that China can claim as a distinctive feature of its historical path, taking it as another important pillar in the process of the 'great rejuvenation of the Chinese nation' pledged by President Xi (*Zhongguo minzu weida fuxing* 中国民族伟大复兴).

Although the recovery of the tradition associated with the first satellite reached its climax under the current administration, its revival is not an exclusive trend of Xi's "New Era" (*Xin shidai* 新时代). Indeed, as early as 1999, the memory of the first satellite had been already solicited: in that year, President Jiang Zemin, and the other members of the Politburo, held a meeting in the Great Hall of the People, honoring the scientists involved in the so-called "two bombs, one satellite" (*liangdan yixing* 两弹一星) project.² During the ceremony, several aerospace engineers that took part in the realization of the first satellite were eulogized, conferring on them medals for their merits in the scientific and technological development of the country (*Renmin Ribao* 1999). Also during Hu Jintao's presidency, the

¹ As is known, Xi Jinping spent the years from 1969 to 1975 in the poor village of Liangjiahe as an "educated youth" (Bandurski 2018).

² Although I chose to maintain the translation that is common in usage, it should be noted that, at least originally, the phrase *liang dan* 两弹 refers, not to two bombs (the nuclear and hydrogen ones), but to the atomic bomb (*hedan* 核弹) and the missile (*daodan* 导弹). Therefore, the entire expression should be properly translated as "a bomb, a missile, and a satellite" (Wang 2000).

memory of the DFH-1 was publicly re-evaluated with a celebration of the 35th anniversary of its launch through a series of symposia and ceremonies held at the National Space Science Center (*Guojia Kongjian Kexue Zhongxin* 国家空间科学中心) and at the China Academy of Space Technology (*Zhongguo Kongjian Jishu Yanjiuyuan* 中国空间技术研究院) (Yuan 2005). This is not surprising since in 2003 China was preparing for the imminent launch of its first astronaut: in that context, indeed, the commemoration of the voyage of the first satellite became a way of tickling the national pride of the population, stirred, shortly after, by the realization of the “flying dream” (*feitian meng* 飞天梦) of the Chinese nation (*Renmin Ribao* 2003; see also Savina 2023: 152-182).

Although recognized as one of the country’s greatest achievements, it is important to stress that the successful launch of the first Chinese satellite has always been treated with a certain degree of caution by the official historiography, mostly because its construction and launch happened during the turbulent period of the Cultural Revolution. Indeed, the interpretation of the history of the DFH-1 has been framed in such a way as not to alter the official verdict on this political movement reached on June 1981 in the “Resolution on Certain Questions in the History of our Party since the Founding of the People’s Republic of China” (*Zhonggong Zhongyang Wenxian Yanjiushi* 1983).

As is known, in this document, Chairman Mao’s Cultural Revolution was firmly condemned as responsible for the most severe setback and the heaviest losses suffered by the Party, the State, and the people since the founding of the People’s Republic. Therefore, in adhering to such a judgment, the Party’s official historiography has carefully avoided any evaluation of the DFH-1 that could be ascribed to an implicit positive reappraisal of that period. Consequently, the DFH-1 has been generally presented as a “survivor” in the turmoil of those years, mostly thanks to the commitment of the Chinese scientists, who, through an “arduous struggle” (*jianku fendou* 艰苦奋斗), succeeded in their launching plans despite the political degeneration of that time, the memory of which the Party has tried to erase (i.a. *Dangdai Zhongguo Congshu Bianjibu* 1986; Sun and Hu 2009; see also Chen 1991).

Noteworthy, however, the *Resolution* was also very cagey when denouncing the late Maoist period, drawing back from a blanket discreditation of Mao Zedong.³ The Chinese leadership has indeed unquestionably recognized the merits of the Great Helmsman as preponderant, continuing to show fealty to Mao’s legacy despite the reversal of his radical policies. In this sense, the references to Maoist

³ It is important to stress that the “Resolutions” made a clear distinction between Mao’s political line and Mao Zedong Thought (Mao Zedong *sixiang* 毛泽东思想). The latter was a doctrine separated from the political vision of Mao as a single leader. Therefore, Mao himself, as an individual, could make choices that were not in accordance with Mao Zedong Thought, as happened during the Cultural Revolution (Dirlik 2012).

imagery are now exploited not for their original ideological meaning, but as a political capital, used to preserve public support for the Party, mostly in a nationalist fashion (Dirlik 2012; Miranda 2013). Accordingly, the Chinese leadership made a concerted effort not to dispel the "red" legacy of the first satellite, recognizing its significance for the nation's further technological development and assigning to Mao Zedong the initial far-sighted decision to work on such a strategic technology.⁴

Nevertheless—as will be argued in the present paper—the satellite's legacy remains contested in today's China, given that it was build during a time that remains itself a kaleidoscope of divergent memories. As is known, indeed, in spite of the official attempt to condemn the Cultural Revolution and bury its memory, a large number of accounts has emerged that counter the official view (Bonnin 2007; Weigelin-Schwiedrzik 2006), sometimes looking back to that times in a nostalgic way: it has been especially during the last decades that some "leftist" stances challenged the narrative of the "ten years of chaos" (*shinian dongluan* 十年动乱), trying to rehabilitate the movement (i.a. Hu 2021; Han jiang chun meng 2009; Wu 2016; Zhang 2009; see also Miranda 2017b). This tendency has been highlighted by several Western scholars, who have analyzed the voices of those who demand a reassessment of the Cultural Revolution, demonstrating how this movement, although officially unaddressed and under-researched, remains the subject of an intensive debate, especially on the Internet (Berry, Thornton and Sun 2016; Heberer and Heberer 2016; Miranda 2017a; Miranda 2017b; Weigelin-Schwiedrzik and Cui 2016).

In contributing to the research field, the present paper focuses on a still little investigated case, that of the DFH-1, highlighting the existence of divergent narratives about it and showing that the revival of its historical memory is part of a broader attempt to reassess the history of the late Maoist period. Specifically, drawing on materials collected from the so-called "red websites,"⁵ the present essay argues that the DFH-1 has been used as a means to overturn the negative official verdict on the Cultural Revolution, stressing the positive impact that this time had on the technological development of the country. Indeed, even though the Party's historiography has presented the DFH-1 as a

⁴ Official historiography has traced the decision to start a satellite program back to the second session of the 8th Congress of the Chinese Communist Party (CCP), and, specifically, to a speech given by Mao Zedong on May 17, 1958. On that occasion, the Great Helmsman, moved by the Soviets' launch of the Sputnik-3, allegedly stated: "We too have to work on artificial satellites!" (*Women ye yao gao renzao weixing* 我们也要搞人造卫星; see Dangdai Zhongguo Congshu Bianjibu 1986; Li 2006).

⁵ The term refers to a series of online forums and blogs known as refuges for those nostalgic for the Maoist times. Among them: *Utopia* (*Wuyouzhixiang wang* <<http://www.wyzzwk.com/>>), *Red China* (*Hongse Zhongguo* <<http://www.redchinacn.net/portal.php>>) and *MaoFlag* (*Mao Zedong Sixiang qizhi wang* <<http://www.maoflag.cc/>>).

technological artifact that endured the “ten years of chaos,” for some current “leftist” standpoints, The East is Red-1 did not simply “survive” that period: rather, it was one of its greatest outcomes.

As we will see, these stances have become particularly prominent during Xi Jinping’s mandate, when though without altering the official verdict on the Cultural Revolution, the President subtly made acceptable a more positive appraisal of the Maoist period (Miranda 2018), making these “leftist” positions not totally out of line with the current orthodoxy (Weigelin-Schwiedrzik and Cui 2016: 736). However, before discussing such disputed memories, the next paragraph will present a brief account of the history of The East is Red-1, analyzing the harmful impact of the activities of mass factions on its construction.

2. The turbulent path toward the launch of The East is Red-1

Chinese engineers began planning to develop an artificial satellite around the end of the Fifties.⁶ Indeed, as early as 1958, this project was one of their priorities, although it was very soon shelved, due to the severe financial constraints brought about by the economic crisis of the Great Leap Forward. It was only at the end of 1964 that the satellite program was resumed, when the physicist and Director of the Geophysical Institute under the Chinese Academy of Science (CAS), Zhao Jiuzhang, submitted to the Party Secretary and Deputy Director of the CAS Zhang Qinfu a draft proposal to recommence it. The proposal was approved by the CAS Interplanetary Flights Committee (*Guoji Hangxing Weiyuanhui* 国际航行委员会), and then it was presented to the National Defense Science and Technology Commission (*Guojia Guofang Kexue Jishu Weiyuanhui* 国家国防科学技术委员会).⁷ Despite some initial doubts, on April 29, 1965, the Commission gave its consent, sending the proposal to a Special Committee (*Zhongyang Zhuanwei* 中央专委) chaired by Premier Zhou Enlai,⁸ who, conscious of its strategic value, approved the project, putting the CAS in charge of leading it and appointing Zhao Jiuzhang as the chief designer.

⁶ Unless otherwise specified, the main sources of information for the events described in this paragraph are Gong (2006), Handberg and Li (2007), Harvey (2013), Kulacki and Jeffrey (2009), Li (2006) and Li (2009).

⁷ Directly tied to the State Council, the National Defense Science and Technology Commission originates from a committee created in 1956, when Qian Xuesen requested to set up an organization to oversee the defense aerospace industry. The Commission is known by the acronym COSTND.

⁸ The Special Committee had been founded in 1962 in order to manage the organization of the nuclear program (see Nie 2013).

In July, the CAS presented the Suggestions for a Work Program for the "Development of an Artificial Chinese Satellite" (*Guanyu Fazhan Woguo Renzao Weixing de Gongzuo Guihua Fang'an Jianyi* 关于发展我国人造卫星的工作规划方案建议): it was a plan for implementation that addressed the construction of a scientifically advanced satellite, capable of collecting data for the future realization of a larger network of meteorological, telecommunications and Earth observation satellites. Furthermore, to satisfy the political propaganda demands, it was also decided that the Chinese device should be heavier⁹ and technologically more sophisticated than the first Soviet and US ones.

The project was identified with the code "651" and it was discussed from 20 October to 30 November 1965 during the eponymous "651" Conference held at the Beijing Friendship Hotel (*Beijing Youyi Binguan* 背景友谊宾馆). In those days it was decided that the satellite should be visible to the naked eye¹⁰ and that its signal should be audible all over the world.¹¹ These goals were summarized in the 12-character slogan: "going up, grasping [the correct orbit], being audible and visible" (*shang de qu, zhua de zhu, ting de dao, kan de jian* 上得去, 抓得住, 听得到, 看得见). For the launch, it was decided to use a modified version of the rocket East Wind-4 (*Dongfeng si hao* 东风四号), renamed, for the occasion, Long March-1 (*Changzheng yi hao* 长征一号). 1970 was selected as the launch date.

But the Cultural Revolution would soon impact such plans. Indeed, in the great chaos that followed the uprising of the Red Guards, violence was unleashed to overthrow those persons in authority who were presumed to be taking the "capitalist road," criticizing all the "reactionary bourgeois." In such a context of personal vilification, Chinese scientists ended up being labeled as rightists, spies, traitors, or villains. They were accused as "white experts" (*bai zhuan* 白专) and attacked not only for their alleged lack of loyalty to the Party and the socialist cause, but also for their family background. Many of them were criticized for having gone to study in the "Imperialist West" or for having spent a period of training in countries now considered revisionist, such as the USSR (Zhao 2006: 53-57).

⁹ The issue of the weight of the satellite was not a secondary one, since it was directly linked with the country's ballistic capabilities to carry a heavy nuclear payload. At the time of launch, the satellite weighed 173 kg, being heavier than both the Sputnik-1 (83.7 Kg) and the US Explorer-1 (8.2 kg) (Li 2006: 559-567).

¹⁰ The satellite should be visible around the world, which would be beneficial to reinforcing the propaganda effect. For this reason, an observable spheroid was attached to the third stage of the rocket (Liu and Zeng 2015).

¹¹ The satellite had to transmit the anthem "The East is Red" through an electronic music generator (Li 2006: 565-575, Liu and Zeng 2015).

In the Chinese Academy of Science, an “investigative group” (*zhuan’anzu* 专案组) was formed to dig into the past of its members, detecting even the smallest details that could prove their counter-revolutionary nature (Cao 2013: 123-124). Although it is difficult to obtain data on the exact estimate of the scientist victims of the Cultural Revolution, Cao (2013: 124) claims that of the Academy’s 170 senior scientists, 131 suffered various forms of violence and humiliation, and 0.4% of the scientific staff lost their lives; as a result, many research activities were halted and various research laboratories dismantled. Nevertheless, according to the memories of a former researcher at the CAS Institute of Physics, Du Junfu (2010: 19), who took part in the movement, the Cultural Revolution within the Academy was less fierce, if compared to other work units, mostly thanks to the commitment of Zhou Enlai, who tried to mitigate its damaging effects.

Regarding the satellite program, for example, on September 1966, Zhou joined the so-called “Great Debate of Ten Thousand People” (*Wanren Bianlun Dahui* 万人辩论大会), stating how cutting-edge scientific experiments should have not been delayed and advocating a quick resumption of the research on satellite systems. Then, he and Marshal Nie Rongzhen urged a reorganization of the defense sector, aiming, among other objectives, at safeguarding the technological progress achieved so far. In March 1967, the two leaders presented a “Report Requesting Instructions on the Military Takeover and the Reorganization of Defense Research Institutions” (*Guanyu Junshi Jieguan he Tiaozheng Gaizu Guofang Keyan Jigou de Qingshi Baogao* 关于军事接管和调整改组国防科研机构的请示报告). Once approved (Mao 1967), the document put the entire satellite program under the control of the military of the Seventh Ministry of Machine Building (*Diqi jixie gongyebu* 第七机械工业部), thus hoping to protect it from the fury of the Red Guards.

Concurrently, the Chinese Academy of Space Technologies (*Kongjian Jishu Yanjiuyuan* 空间技术研究院) was established, appointing the aerospace engineer Qian Xuesen as its Director. Qian replaced Zhao Jiuzhang—denounced as a reactionary in 1966 and forced by the Red Guards to commit suicide in 1968—with the engineer Sun Jiadong, who was nominated as the new chief designer of the satellite. Under Sun, Zhao’s original plans were largely modified: where the 1965’s CAS proposal had insisted on the technological sophistication of the equipment, now, the cult of Mao Zedong and the revolutionary spirit were placed at the center of the program. Indeed, due to the severe lack of resources,¹² Zhao’s original design appeared too ambitious to be realized in the limited time made available to the

¹² The Academy lacked the material conditions to build the satellite and test it. It is often reported that technical tools were limited (Yang 2014).

engineers, who were asked to complete their work as soon as they could, thus beating Japan to become the fourth country to launch an artificial satellite. Hence, the project went through a simplification process, reducing its objectives and transforming the satellite into a mere “political” artifact (*zhengzhi weixing* 政治卫星): to remain unchanged were only the propagandistic purposes of being audible and visible.¹³

Meanwhile, the Seventh Ministry also became involved in the Cultural Revolution. In fact, within the institute, two opposing factions had come into being as early as 1966, even if it was only in 1967-1968 that the struggle between the two groups became particularly intense. The first one, the “9.15” (*jiu yi wu pai* 九—五派), headed by Wang Dekui, was formed by members of the bureaucratic apparatus—the “cadres for political work” (*zhenggong ganbu* 政工干部); the second one, the “9.16 faction” (*jiu yi liu pai* 九—六派), led by the engineer and son of People Liberation Army’s General Ye Ting, Ye Zhenguang, was composed of technical and scientific personnel (*jishu ganbu* 技术干部).¹⁴ It is beyond the scope of this essay to reflect on the political battle between the two factions and on its impact on the work of the Seven Ministry; here is sufficient to say that on January 23, 1967, the faction “9.16” seized power within the Ministry, removing Wang from his role. From that day on, frequent clashes between the two groups occurred, alarming Zhou Enlai to intervene to protect the Ministry. As the Head of the Committee for Military Management in the Third Academy Yang Guoyu recalls in his diary (Yang 2010), on April 26, 1967, Zhou declared that the institutes under the military should not be involved in the power struggles. On September 10, the Premier met with the leaders of the two factions, pressing them to stop fighting, but in vain. Only later in September, after a missile engine was tested successfully, did the two groups enjoy a brief moment of reconciliation during a parade organized to celebrate the event (Yang 2010: 43).

The spring of 1968 saw again an escalation of violence, as the notorious episode of the “Great Fight of Nanyuan¹⁵” (*Nanyuan da wudou* 南苑大武斗), that took place on June 8, testifies. On that day, the missile engineer Yao Tongbin was beaten to death: according to Yang Guoyu’s reconstruction, Yao was

¹³ Notably, Sun’s proposal was opposed by those who had worked on the Zhao’s one; it was only due to Qian Xuesen’s support that in October 1967 the new plan was eventually approved.

¹⁴ The two factions were respectively named after 15 e 16 September 1966, the dates of their formation. Both the groups were inspired by Mao Zedong Thought and they opposed Deng Xiaoping and Liu Shaoqi. However, the “9.15” faction contested the authority of Luo Ruiqing, Zhao Erlu, and Liu Bingyan, supporting the director of the Seventh Ministry Wang Bingzhang, while the “9.16” was lined up against Marshals He Long and Nie Rongzhen, criticizing also Wang Bingzhang (Li, Zhang and Hu 2017).

¹⁵ Nanyuan is an area in southern Beijing, where a research and development base for aerospace industry was located.

killed by the members of the 9.15 faction, struck by a blunt object, as confirmed by the autopsy. The death of Yao shocked Zhou, leading him to enact a State protection of key scientific and technical personnel (Yang 2010: 52).

Later, in August 1968, 2,000 members of the Mao Zedong Thought Propaganda Team (Mao Zedong Sixiang Xuanchuandui 毛泽东思想宣传队)¹⁶ entered the Seventh Ministry, initiating a series of critical and debate sessions. In a climate of growing tension, the scientists working on the satellite project found themselves having to bear a double pressure: on the one hand, they were afraid of being accused of not taking part in the revolutionary activities; on the other, they feared committing technical errors that might have led to a satellite launch failure, and, as a result, to even worse personal consequences. It is estimated that of the total of workers in the Seventh Ministry involved in the construction of the satellite, 9710 were sent to the military farms of Hubei, while 1538 were sent to the May Seventh Cadre School (Wu Qi Ganbu Xuexiao 五七干部学校) for political re-education;¹⁷ Sun Jiadong himself was eventually forced to step down from his position (*kaobianzhan* 靠边站), while the engineer Qian Ji was accused of being a spy (Zhao 2006).

Nevertheless, despite the turbulent times during which it was built, on April 24, 1970, the DFH-1 was sent into orbit, making China the fifth country in the world to launch a domestically-manufactured satellite.

3. The evolution of the official narrative on the DFH-1

When it was announced by the State media, the news of the launch of The East is Red-1 was completely imbued with Maoist rhetoric, reflecting the galvanizing atmosphere that animated the Chinese population in those years. Indeed, that success was a political more than a scientific-technological achievement: in the litany of the “red” propaganda, it embodied China’s ability to realize the construction of a socialist country “under the leadership of Chairman Mao and the vice-Chairman Lin Biao” (*Renmin Ribao* 1970: 1). Two days after the launch, the *People’s Daily* reported the news in the following tones:

¹⁶ The Mao Zedong Thought Propaganda Teams were introduced in 1968 and they were composed primarily of workers and soldiers. Their task was to demobilize the Red Guards, restoring social order (Perry 2019).

¹⁷ The May Seventh Cadre Schools were established in 1968 in accordance to Chairman Mao Zedong’s *7th May Directive* (1966). They were located in the countryside, often in very backward areas.

[The launch of the DFH-1] is a good beginning for the development of the Chinese space technologies, it is a great triumph of Mao Zedong Thought, it is a great victory for the proletarian revolutionary line, it is a further important result of the Great Proletarian Cultural Revolution (*Renmin Ribao* 1970: 1).

Nevertheless, this representation centered on the eulogy of the Maoist campaign was destined to change dramatically in the following decades. During the Deng era, when the first comprehensive volume on the PRC's space program was published (*Dangdai Zhongguo Congshu Bianjibu* 1986), it presented a completely different version of the story, re-written in line with the condemnation of the Cultural Revolution as stated in the 1981 "Resolution." The book established that the excesses of the "ten years of chaos" had been the main cause of the delay in the country's aerospace development:

In 1966, just as Chinese aerospace projects were being implemented, a Great Cultural Revolution broke out, bringing severe suffering to the Party, the country, and the people. The aerospace industry was no exception, suffering setbacks and damage. [...] Every structure within the Seventh Ministry suffered the impact and was paralyzed or semi-paralyzed; cadres at all levels were commonly subjected to [sessions of] struggle and criticism, numerous scientific and technical workers were repressed and attacked, the masses were divided, the production of scientific research was in chaos (*Dangdai Zhongguo Congshu Bianjibu* 1986: 57).

Marshal Lin Biao and the Gang of Four were accused of being the ones mainly responsible for the deadlock condition. Their "leftist deviation"—the book argued—had indeed caused such serious damage that even the Prime Minister Zhou Enlai—who had worked to safeguard the space industry by placing it under military control—was not able to restore order. According to this assessment, although the military control exercised over the Seventh Ministry and its work units played a positive role in bringing more stability, a situation of general disorder continued to reign throughout the country from 1967 onwards. This disorder was blamed on "criminal" activity carried out by the counter-revolutionary clique of Jiang Qing and Lin Biao (*Dangdai Zhongguo Congshu Bianjibu* 1986: 57-58).

This situation was reflected also in the Ministry, which remained in a state of chaos for a long time. The excesses of Lin Biao and Jiang Qing were evident in the circulation of slogans such as "reaching [the advanced countries] in three years, overcoming them in two" (*san nian gan, liang nian chao* 三年干, 两年超): it was precisely on the basis of this formula that, in August 1970, a space program "completely disconnected from reality" (*wanquan tuoli shiji* 完全脱离实际) was established, aiming to launch fourteen space vehicles in just five years. But in the era of "reforms and opening up" (*gaige kaifang* 改革开放)—the book concluded—the failures that followed the illogical policies of the Gang of Four seemed to have been finally overcome: the 3rd plenum of the XI Central Committee of the CCP

would mark the beginning of a new phase of prodigious space development, destined to draw the attention of the world (*Dangdai Zhongguo Congshu Bianjibu* 1986: 61).

This narrative, rooted in the condemnation of the Cultural Revolution and of the Gang of Four and projected on the space accomplishments of the near and distant future, continued to be widespread during the following years, under the leadership of Jiang Zemin and Hu Jintao, when the DFH-1 began to be elevated to a national symbol, a starting point in the space rise that China was at that time starting to enjoy. Emptied of its original Maoist ideological connotation, the satellite could now assume a new meaning, becoming an allegory of the nationalist path toward the conquest of outer space. In this sense, it was used by the official propaganda as a tool for enhancing the patriotic spirit of the nation and reinforcing the image of the Party as the ultimate mastermind behind the Chinese space accomplishment.

In this context, the central government allowed the publication of essays and the production of documentaries that recovered the memory of the satellite and of the famous scientists that were involved in its realization (i.a. Li 2009, Wang 2003, Wu 2011), while discouraging a serious discussion and research on the tragic events that occurred in those years: in this cultural production, the DFH-1 was presented as a technological artifact “saved” from the fury of the Red Guards thanks to the Chinese far-sighted leaders Zhou Enlai and Nie Rongzhen and to the PRC’s engineers’ strenuous commitment. Following this interpretation, any references to the acts of violence were merely used to confirm the official denouncement of the Cultural Revolution. In 2008, for example, a well-known author of reportage literature, Hu Ping, published an essay remarking how the launch of the first satellite was reached only at the expense of humiliation and death of numerous scientists: among them, the engineer Sun Jiadong had to step aside, Zhao Jiuzhang and Yao Tongbin lost their lives unjustly, others who participated in the early stages of the satellite project, such as Qian Ji, could hear the news of the launch only from the “cowsheds” (*niupeng* 牛棚).¹⁸ Therefore—Hu gloomily concludes—“the saddest darkness hides in the shadow of that beautiful flamboyant tree” (最悲伤的黑暗，就藏在那美丽凤凰木的阴影里) (Hu 2008: 41). Evidently, however, this account does not contest the official orthodoxy; rather, it implicitly confirms that if the Cultural Revolution had not happened, Chinese space achievements would be even greater. In this sense, the references to the sufferings of the scientists are paradigmatic of the turbulence of the entire nation, and it eventually serves for reinforcing the orthodox narrative on those events.

¹⁸ The so-called cowsheds were improvised jails set up by the Red Guards to hold people who were considered class enemies.

This nationalist interpretative framework is still valid today, in Xi Jinping's era, when, as we have already seen, the enthusiastic revival of the historical memory associated with the *Dongfang hong-1* reached its peak, drawing on the occasion of the fiftieth anniversary of its launch. Nevertheless, it is important to note, that the 2020's celebration became also the time during which some "leftists" interpretations of the history of the DFH-1 have clearly emerged, posing a counter-narrative to the position of seeing it as a mere technological "survivor" of the Cultural Revolution.

4. Leftists' interpretations of the launch of the satellite and the Neo-Maoists' view of the DFH-1

Since the legacy of the Cultural Revolution is still contested (Berry, Thornton and Sun 2016; Bonnin 2007; Miranda 2017; Weigelin-Schwiedrzik 2006; Weigelin-Schwiedrzik and Cui 2016), its impact on the development of the DFH-1 also remains disputed. In recent years, some Chinese scholars have challenged the official narrative of the "ten years of chaos" as an excessively reductive label in explaining the impact that the Cultural Revolution had on the development of the Chinese satellite program. In a paper published in the English-language journal *Endeavor*, Li Chengzhi, a professor at the Aeronautical and Aerospace University of Beijing (*Beijing Hangkong Hangtian Daxue* 北京航空航天大学), with his colleagues Zhang Dehui and Hu Danian, have partially overturned the official verdict on the movement (Li, Zhang and Hu 2017 and Lin 2013; see also Chen 2012 and Heberer and Heberer 2016: 225-229). While not negating the negative impacts that the Cultural Revolution had on the Chinese space programs, they reevaluated its positive effects: at that time, they argue, China successfully developed its first generation of intercontinental ballistic missiles and its rockets Long March-1, Long March-2, and Fengbao-1, also carrying out a series of satellite launches. For Li, Zhang, and Hu, the space projects initiated during the Cultural Revolution contributed significantly to today's economic and technological development. Therefore, Chinese satellite development during the notorious "ten years of chaos" should be considered an indispensable part of the entire history of the Chinese space program, considering it crucial in connecting the achievements of the Mao era with that of the following period of reforms and opening up.¹⁹

Noteworthy, such a positive reassessment of the Chinese space development during the Cultural Revolution has been part of a more general reappraisal of Maoist science carried out by several Western and Chinese scholars, mostly known for their militancy as New Left thinkers and activists (i.a. Brock

¹⁹ Note that Li reevaluates also the role of Lin Biao and the Gang of Four, criticizing the historical falsifications that portrayed them as responsible for the Chinese missile delay (Li, Zhang and Hu 2017).

2013; Gao 2008; Han 2008; Schmalzer 2006, Schmalzer 2007; Volti 2013)²⁰. These authors have tried to overturn the official accounts of the Cultural Revolution as constituting a total calamity for the scientific field, focusing on the development that popular science known during that period, and on its contributions to enhancing the living condition of the Chinese population. Limiting the present analysis to the development of the sole satellite technology, it is important to stress how some of these intellectuals have considered the DFH-1 a positive outcome of the Cultural Revolution's, albeit with different nuances: in his volume "The Battle for China's Past" (2008: 144), Professor Gao Mobo (University of Adelaide) lists the DFH-1 among the main Chinese scientific and technological achievements of that period. With a slightly different emphasis, Professor Han Dongping (Warren Wilson College) judges the first Chinese satellite as an important indicator of the advanced technical level that the nation had reached at that time, yet without a positive short-time impact on people's livelihood (2008: 109).

Although the attempt to reassess the positive impact of the Cultural Revolution on the development of the Chinese satellite sector could be seen as an indication of the scientifically respectable intention of re-establishing the historical truth about the Chinese space developments, such an attempt also results in a revisionist attitude, aimed at exploiting the satellite achievements of that time with the aim of completely overturning the official negative judgment on the Cultural Revolution, erasing its most controversial aspects and totally rehabilitating it. This operation is mostly being conducted by the so-called Maopai 毛派, a term that can be translated as "neo-Maoists," admirers of Mao or nostalgic for Mao—a rather heterogeneous group, ranging from the urban and rural proletariat, to cadres, veterans, and retired officials of the CCP, to scholars and journalists enthusiastic for the Maoist era.

Neo-Maoists have been particularly vocal on "red websites," a series of Internet forums, blogs, and social-networking spaces known as refuges for those nostalgic for the Maoist times (Blanchette 2019, Miranda 2017, Miranda 2018).

Numerous articles praising the space successes achieved during those years with the aim of reversing the official verdict on the movement appeared on the red portal *Utopia* (*Wuyou zhixiang 乌有之乡*)²¹ as early as 2016, on the occasion of the fiftieth anniversary of the Cultural Revolution: in one essay (Guo 2016), it is argued that the Cultural Revolution made it possible to take giant steps in the

²⁰ Further *ad hoc* studies are needed to investigate the differences between Western and Chinese scholars in this reappraisal, taking into account the global impact of Maoism and various forms of left-wing activism by Western academicians.

²¹ The site can be found at the following address <http://www.wywxwk.com/>.

technological and scientific fields, especially in the defense sector, allowing China to reach the technological level of the most advanced countries. Among the cutting-edge technologies developed at that time, the author records the first Chinese artificial satellite, praising also the foundation of industrial bases located in the province of Sichuan, Shaanxi, Guizhou, Hubei, and Henan as crucial for the future of the Chinese aerospace sector.

According to Neo-Maoists, it is—needless to say—the Great Helmsman who should be thanked for these technological achievements: the decision to build the first satellite is indisputably attributed to him, who laid the foundations for the future glory of the Chinese space industry (Song 2020). For the *Maopai*, indeed, Mao's strategic thinking has to be read as the sole source of scientific progress, in contrast to Deng's approach: discrediting the post-Maoist era, the Neo-Maoists deny the legacy of the reforms and opening-up period, looking at the New Course as a time during which the old anti-bourgeois ideals were abandoned in order to restore the "white terror" and to rebuild the capitalist class. In opposition to the scientific projects carried out in the era of reform, the Maoist satellite program is described as "democratic" (*minzhu* 民主), being carried out at a time during which everyone had the possibility to freely advance his ideas (Shenhai Wuweiyu 2008). Conversely, during Deng's era, the right to speak has been guaranteed only to the "hegemons of science" (*xuebamen* 学霸们)—a derogatory term used to refer to the representatives of an alleged "elitism" in scientific research. In this sense, Chinese space innovation during the Maoist period has been judged as relatively more significant than that of the later periods, since at that time, China had neither experience nor a model to learn from—a total falsification of history, since the Soviet had already provided China with their expertise (Handberg and Li 2007: 57-59).

The apex of this trend that draws on the DFH-1 success to discredit the era of reforms was reached in 2020, on the occasion of the fiftieth anniversary of the launch of the first Chinese satellite. At that time, it was argued that the success of the 1970s should be celebrated not only by the patriots who are aware of the importance that launch had for China's later technological achievements, but also by those who "slander" (*dihui* 诋毁) the thirty years preceding Deng's reforms: indeed, looking at the first satellite, everyone should admit that without that starting point, talking about subsequent aerospace missions would just be "sheer nonsense" (*wuji zhi tan* 无稽之谈; Zhang 2020). That is to say, without the Maoist period, China's rise and the nation's great renewal would not have been possible.

It is also interesting to note that, in eulogizing Mao and rehabilitating the Cultural Revolution, Neo-Maoists have been particularly eloquent in warning against the stigmatization of the rebels, mostly represented, by official accounts, as persecutors (Peng 2013). Indeed, even though the 1981

Resolution carefully avoided a straightforward verdict on the rebel faction, Maoists bloggers lamented what they perceived as an implicit condemnation of this group, insisting that the rebels were in fact victims of the “bureaucrats” (Weigelin-Schwiedrzik and Cui 2016). Particularly stressed, for example, are the responsibilities of the conservative faction of the Seventh Ministry—the 9.15—vis-à-vis the rebel one—the 9.16—in relation to the death of the engineer Yao Tongbin. In the Neo-Maoists’ view, the official narrative has simply chosen to distinguish between good and bad, black and white, assigning to the rebels the role of scapegoats, considered as the guilty party, hence simplifying and distorting the complexity of those events. Today, they lament, the responsibility for the murder of Yao has been placed on the rebels, omitting the fact that the engineer had himself sympathy for this faction. According to the ultranationalist website “Home of Yan-Huang” (*Yan Huang zhi Jia 炎黄之家*)²² (Wangyou 2016), Yao was in fact killed by the conservatives, as also confirmed by several witnesses (Yang 2010). This demonstrates, in the Neo-Maoists’ opinion, how the most extreme violence has to be ascribed to the conservative group: in confirming such assessment, an alleged conversation between Zhou Enlai and the representatives of the 9.15 and 9.16 factions is often reported, stressing how the Prime Minister had asked the 9.15 to cease their activities against the 9.16, which continued to suffer severe humiliation and discrimination from the opposing side (Ying shitou 2010).

In view of the above, it seems clear how the Neo-Maoists are carrying out an operation of historical revisionism, which calls into question the official Party line. In their analysis, indeed, the successful launch of the DFH-1 is used as an expedient to argue against the total negation of the Cultural Revolution as expressed in the orthodox discourse.

It is important to note, however, that the rise of these maverick statements took advantage of some subtle changes that occurred in the official interpretation of the Maoist period after Xi Jinping came to power. As is known, since 2013, the newly appointed Secretary advanced a new perspective on PRC’s history that can be embodied in the concept of the “two undeniabes” (*liangge buneng fouding 两个不能否定*). According to this formula, «the historical period after the economic reforms must not be used to deny the historical period before the economic reforms, and the historical period before the economic reforms must not be used to deny the historical period after the economic reforms» (Xi 2013). Apparently, this statement seems to be a stance against the above-mentioned leftist trends that tried to negate Deng’s legacy, confirming the value of the reform and opening up phase. However, by carefully deconstructing Xi’s formula, it became clear how it intrinsically relies on a more positive

²² The site can be found at the following address <http://womenjia.org/>.

appraisal of the last Maoist period, at least if compared to previous official assessments, which had recognized an implicit supremacy of the post-1978 period over the last Maoists decades.²³ In Xi's opinion, indeed, Mao's and Deng's legacies must be regarded as complementary—thus rejecting the idea of dividing the PRC's history into two opposing periods, one of tragedies and the other one of glorious economic and scientific development (Zhao 2016).

In this regard, it is also noteworthy that the "Resolution on the Major Achievements and Historical Experience of the Party over the Past Century," approved in 2021 by the sixth plenary session of the 19th Central Committee of the CCP, contains only a short passage on Mao's errors and on the Cultural Revolution. Though condemning the movement, the document avoids any harsh criticisms of the Great Helmsman, and the passage on the "ten years of chaos" appears brief and formulaic if compared to the lengthy analysis contained in the 1981 Resolution (*Zhonggong Zhongyang guanyu Dang de bainian fendou zhongda chengjiu he lishi jingyan de jueyi* 2021; see also Shiroyama 2022).

The Chinese leader, therefore, seems to court the above "leftists" stances, demonstrating that their arguments are not totally out of line with the current orthodoxy, yet without providing them with open support, aware that backing them up could pose a risk to the ideological bonding of the nation. That is why, it is possible to say that Xi's attitude still remains unquestionably consistent with the spirit of the 1981 Resolution, studiously unaltering the official verdict on the Cultural Revolution, but also making an instrumental use of the "red capital" in order to reinforce the patriotic spirit of the nation and reinforce its political legitimacy.²⁴

In conclusion, during the Xi Jinping era, the work of some 'leftist' commentators became more widespread. They are trying to rehabilitate the later Maoist period, and while their position is not directly supported by the central leadership, it nonetheless seems not to be entirely suppressed within the orthodox version of historical events. In this sense, the case study of the DFH-1, as examined in this paper, demonstrates how, if on the one hand the leftists are exploiting the first satellite to call for a total re-evaluation of the Cultural Revolution, the official nationalist revival of the memory of the first satellite Chinese also seems to contribute well to "dilute" the history of the movement.

²³ Official historiography has always recognized the "reform and opening up" period as crucial for China's further development and for its rise in the international arena. This assessment implies a supremacy of this period over the previous decades, tarnished by Mao's faults, as established in the 1981 "Resolutions" (Miranda 2018; Weigelin-Schwiedrzik and Cui 2016).

²⁴ As is known, Xi has a "red" ancestry, as the son of the veteran of the Long March Xi Zhongrun.

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Tonio Savina, Ph.D. in Civilization of Asia and Africa at the University of Rome “Sapienza,” is currently a Post-doc Fellow at the University of Siena. In 2023 he was selected as a MOFA Taiwan Fellow for a visiting research period at Academia Sinica, Taipei, and in 2022 he received a Post-doc Research Grant in History from the European Space Agency (ESA). He has carried out research at the main libraries and universities in the PRC and in Taiwan, where he was a visiting Ph.D. student at the National Chengchi University (Taipei). His research interests include the history of Chinese space exploration, identity narratives, techno-nationalism, and space diplomacy. He is a member of the Italian Association for Chinese Studies (AISC) and of the European Society for the History of Science (ESHS).

Tonio can be reached at: tonio_1993@live.it