

Sino-Russian Scientific Cooperation in the Arctic: From Deep Sea to Deep Space

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1 Discourse Power and People-to-People Diplomacy

China and Russia have been actively cooperating in Arctic science, which to a large extent has been a neglected topic. Collaboration in this area is important to China for generating discourse power (*huayu quan*) that supports its economic engagement and capacity building, which beyond the realms of science and the economy, also has impact on defence and security (Lulu, 2018).¹

“People-to-people diplomacy” (*minjian waijiao*) activities are meant to influence foreign societies’ outside state-to-state channels. The most active institutions in the Chinese foreign affairs system which carry out non-governmental diplomacy are the International Liaison Department (ILD, *Duiwai lianluo bu*) and the Chinese People’s Association for Friendship with Foreign Countries (CPAFFC, *Zhongguo renmin duiwai youhao xiehui*) (Goh et al., 2021).²

The Shanghai PAFFC (local level CPAFFC) explains the difference between governmental and non-governmental diplomacy by stating that the former involves only official channels of communication, while the latter is more complex and originates in Chinese history, when China had to use unofficial channels of communications to receive international recognition. Non-governmental diplomacy consists of public diplomacy (*gonggong waijiao*), which is practised by many governments, and people-to-people diplomacy, which is unique to China.

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¹For additional reading please see Brady (2003).

²To find out more about ILD and CPAFFC, see Jüris (2020b) and Lulu (2019).

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People-to-people diplomacy by “watering down the government’s role” (*danhua zhengfu secai*) in the foreign exchanges of Chinese citizens and friendship groups aims to achieve a long-term impact on a foreign society’s public opinion that is not dependent on the changing nature of party politics (Shanghai PAFFC, 2020).

In fact, PAFFCs are party-state entities functioning as Foreign Affairs Offices (FAOs, *waishi bangongshi*), which coordinate foreign affairs work at the central and subnational levels. The central level CPAFFC is managed by the Ministry of Foreign Affairs (MFA). At the subnational level, FAOs serve as offices of the Central Foreign Affairs Work Commission (the FAWC, *waishi gongzuo weiyuanhui*, is the highest body overseeing the Chinese foreign affairs system) under the local party committees. PAFFCs are managed as units or nameplates/aliases of their respective local FAOs (Goh et al., 2021, pp. 1–5).

Qiu Yongcai 丘勇才, the Xiamen PAFFC vice chairman, explained in an interview that people-to-people diplomacy’s role in China’s foreign policy is to expand the “circle of friends” (*pengyou quan*) by establishing friendship cities, ports and schools. The focus is on the central government’s proposed strategies of “community of shared destiny”, BRICS, and BRI that the city’s foreign exchanges help to develop in advance (Xiamen FAO, 2019).

The guiding ideology of Chinese non-governmental diplomacy is people’s diplomacy (*renmin waijiao*), which is meant to “preserve party leadership” (*jianshi dang de lingdao*) through “simultaneously developing governmental and non-governmental diplomacy” (*guan min bing ju*) by forging friendships “to lay the foundation for (favourable) public opinion” (*hangshi minyi jichu*) that transcends national boundaries, time, space and civilisations (Shanghai PAFFC, 2020).

China has been active in building people-to-people connections through academic exchanges and interactions with leaders at the local level. Polar scientists and leaders at the local level with limited Chinese language skills, poor knowledge of the Chinese political system and its operating mechanisms are easy and valuable targets for creating positive sentiment towards Chinese interests in the region through their high standing in society. In addition, neither target group is accustomed nor compelled to think in terms of national security.

The Ocean University of China (OUC) has since 2012 co-organised with St. Petersburg State University an annual China-Russia Arctic Forum (*Zhong E beiji luntan*), which the organisers claim to be the only academic exchange platform dedicated to the Arctic between the two countries. The OUC has close cooperation with the Navy Submarine Academy, PLA Navy, and is involved in research applicable to the military (“Ocean University of China”, 2021). The founder of the event is OUC political science professor Guo Peiqing 郭培清, a leading Chinese expert on polar politics and law (“Guo Peiqing”, 2018). Guo Peiqing is also a member of the China-Nordic Arctic Research Center (CNARC was established in 2013 with a secretariat at the Polar Research Institute of China) Executive Committee, which the organisers claim to be the only Chinese platform for academic exchanges between polar researchers of China and the Nordic countries. CNARC, like the

China-Russia Arctic Forum, holds annual symposiums with Nordic partners (“Guo Peiqing”, 2018; China-Nordic Arctic Research Centre, n.d.).³

In 2009, Guo, together with Li Zhenfu 李振福, wrote that to withstand the “China threat rhetoric” that hinders China’s participation in polar affairs, the Chinese government needs to create a self-image of a peaceful and cooperative state (Brady, 2017, p. 39). According to Dalian Maritime University scholars Li Zhenfu and Li Shiyue 李诗悦, the concept of a “near-Arctic state” serves this purpose and it is the responsibility and duty of Chinese Arctic research to make the concept internationally acknowledged, as acceptance of it is the pre-condition for dialogue on equal footing (Li & Li, 2020). Since 2018, Dalian Maritime University has been supervised by the State Administration for Science, Technology and Industry for National Defense, China’s governing body for the defence industry, and is involved in defence research (“Dalian Maritime University”, 2021). They find it necessary to declare that China is a “near-Arctic state”, because China as a great power has responsibility over the Arctic’s worsening “geopolitical security” (*diyuan anquan*) situation comprised of environmental, military, energy, transportation, economic and trade security (Li & Li, 2020).

According to Professor Sun Kai 孙凯 of the School of International Affairs and Public Administration of the Ocean University of China, China’s participation in Arctic governance is divided and decentralised, comprised of relevant government bodies, local governments, companies, non-governmental organisations, and related academic groups, each with their unique role to play. On official occasions it is important to promote Chinese discourse to countermand “threat theory” or “panic theory” by clearly explaining Chinese positions and principles on Arctic affairs. Sun finds that China has been successful in constructing the image of a responsible stakeholder and international discourse of itself as a “near-Arctic country” and a “contributor to Arctic affairs,” which he believes has helped China to become an observer of the Arctic Council and has created good international public opinion in relation to China’s participation in Arctic governance. In addition, eight Chinese academic institutions have become members of the Arctic University Alliance (*beiji daxue lianmeng*), which enables China, in addition to capacity building, to also build a presence in the region and generate soft power (Sun, 2014). The Nordic Baltic region, at least on a governmental level, already knows that Chinese soft power has sharp edges. Previously, China has punished Norway, which gave the Nobel peace prize to Chinese dissident Liu Xiaobo, with economic sanctions, and likewise Estonia and Lithuania for hosting the Dalai Lama (Andrulevičiūtė, 2015; Roonemaa et al., 2019; Storey, 2020).

The positive image creation process is also visible in the China-Russia Arctic Forum, which has been held annually since 2012 and targets Russian Arctic scholars, government officials, local level leaders, international organisations, etc. At the ninth online forum in 2020, which attracted more than 100 participants from China, Russia and France, four major themes were discussed: science and education,

³For additional reading on the impact of the format, see Yang (2017).

medicine, environmental protection, and economic development in the form of constructing the “Polar Silk Road”. In his concluding remarks, the founder of the forum Guo Peiqing said that by jointly developing the Arctic, China and Russia can meet their internal needs. The deepening of Arctic cooperation between the two countries can achieve complementary advantages and become another growth point for Sino-Russian bilateral cooperation (Polar and Ocean Portal, 2020).

This is an excellent example of people-to-people diplomacy at work promoting BRI and win-win solutions to a target audience that is not accustomed of thinking in national security terms. At the Far Eastern Forum held in Vladivostok in September 2021, the Minister of Development of the Far East and the Arctic, Aleksey Chekunkov, was frank in answering why China has not spent any money in developing Russian infrastructure: *“To attract Chinese money, do you think Russia should allow China [to] gain ownership of infrastructure facilities, similar to how Greece sold its main port, Piraeus, to China?”* (Lukin, 2021).

At the seventh forum in 2018, in addition to the usual participants, representatives from the Chinese state-owned shipping company COSCO, the Yamal-Nenets Autonomous Region, and the Sakha (Yakutia) Republic visited the event held in Qingdao. Professor Sun Kai found that increased Sino-Russian economic cooperation in the Arctic should be supported by more “cultural connections and people-to-people diplomacy” (*wenhua goutong he minjian waijiao*). According to him, this was in line with China’s Arctic Policy white paper that emphasised the promotion of Sino-Russian cultural exchanges in the Arctic. The holding of forums, summer camps and other (forms of) “second-track diplomacy” (*er guidao waijiao*) was expected to help promote “soft relations” between China and Russia in the Arctic, and better serve both sides in economic cooperation (Zhang, 2018).

With the help of people-to-people diplomacy endeavours, the Chinese side has been interested in developing the Irtysh River in the framework of the BRI. The Irtysh River starts in Northern Xinjiang in China and flows through landlocked Kazakhstan and Russia, and at Khanty-Mansiysk in Western Siberia, merges with the Ob River, which flows into the Arctic Ocean. The Ob-Irtysh River system encompasses most of Western Siberia and the Altai Mountains and forms the main drainage basin in Asia. At the fifth China-Russia Arctic Forum, OUC professor Guo Peiqing 郭培清 said that in addition to the horizontal trade routes connecting the Eurasian land mass, a vertical route along the Ob-Irtysh River system should be developed for the benefit of Russia, China and India (Tan & Chang, 2016).

For almost a decade, the China-Russia Arctic Forum has facilitated exchanges between Chinese and Russian scholars and local leaders from Yamalo-Nenets Autonomous Okrug and the Republic of Sakha (Yakutia). Via the forum, China has aimed to generate the necessary discourse power for economic cooperation. However, the prospects for such cooperation might not be perceived as favourably by the Kremlin. Two of the preferred ports (Sabetta and Tiksi) for the construction of the Polar Silk Road lie within the aforementioned administrative regions and are highly valued for their access to the Ob-Irtysh and Lena rivers, which have the potential to become cargo distribution hubs spreading development deeper into

Russia's heartland, and with it inevitably also Chinese influence (Academy of Ocean of China, 2019; Wang et al., 2018; Zhang, 2018).

2 Russian Scientific Cooperation with Chinese Defence Universities

Sino-Russian academic cooperation in the Arctic extends beyond the above-named forums and has borne fruit with visible results. In 2016, the Russian Far Eastern Federal University (FEFU) and the Chinese Harbin Polytechnic University / Harbin Institute of Technology (HIT) founded the Russian-Chinese Polar Engineering and Research Center with the aim of promoting the industrial development of the Arctic by finding technical solutions to extreme weather and ice conditions ("Far Eastern Federal University", 2016). In 1995, Harbin Polytechnic University merged with the Harbin Institute of Technology, which is run by the Ministry of Industry and Information Technology. Harbin Institute of Technology is known as one of the "Seven Sons of National Defence" (*guofang qi zi*) due to its close connection with the Chinese military and defence industry ("Harbin Institute of Technology", 2021).

In April 2018, Harbin Engineering University (HEU) and the Northern (Arctic) Federal University established the Arctic Blue Economy Research Center (ABERC) with the aim of establishing, in collaboration with Nordic countries, the Arctic Blue Economic Corridor and cooperating in the fields of sustainable development, marine engineering and navigation along the Northern Sea Route ("Arctic Blue Economy Research Center has been established", 2018). Harbin Engineering University is one of China's top defence research universities, which is subordinate to the Ministry of Industry and Information Technology and another of the "Seven Sons of National Defence." The university is a leading centre of research and training on shipbuilding, naval armaments, maritime technology, and nuclear power. In 2007, the PLA Navy became the supervising agency of the university.⁴

2.1 Collaboration in Undersea Surveillance and Hydroacoustics

Some aspects of Sino-Russian academic collaboration in the Arctic have potentially decisive military applications. In February 2018, HEU's College of Underwater Acoustic Engineering and FEFU's School of Engineering conducted joint research on sea ice acoustics in Vladivostok. The two sides conducted research on the polar shallow water under-ice acoustic environment and under-ice underwater communication. HEU has an advantage over its peers in the latter. Vladimir Korotchentsev

⁴For more information see "Harbin Engineering University" (2020).

from the FEFU said that to gain a foothold in exploiting Arctic resources, research on the shallow water acoustic environment is necessary, and suggested that Russian and Chinese researchers can achieve breakthroughs by combining their relevant strengths in data collection and data analysis (Jin & Zhang, 2018; Ocean Circle, 2018).

In April 2019, the Chinese Qingdao National Laboratory for Marine Science and Technology (QNLN) and the Shirshov Institute of Oceanology of the Russian Academy of Sciences (IOARAS) signed an agreement to create the Russian-Chinese Arctic Research Center in Moscow, with a branch in Qingdao for joint expeditions in the Arctic, exploring resources and monitoring changes in the ecosystem (“Russian Academy of Sciences”, 2019). The Ocean University of China is one of the governing units of the QNLN (“Ocean University of China”, 2021). The Chinese side hopes to support the construction of the Polar Silk Road through joint research, expeditions and training, and the sharing of research equipment and data (“Zhong E haiyang yanjiu”, 2019).⁵ In August 2019, the centre conducted its first joint expedition to the Laptev Sea to study the Siberian Arctic Shelf, conducting research in marine geology, topography, physical oceanography and marine chemistry (“-Russian, Chinese Scientists to Study”, 2019). The previous year, QNLN and IOARAS organised a joint expedition to the Barents Sea, and their cooperation dates back to at least 2015, when both sides signed an MOU (Laboratory of Marine Mineral Resources, 2018; Sun, 2018). In April 2019, shortly after establishing a joint research centre with IOARAS, QNLN made a military-civil fusion procurement bid to purchase underwater acoustic communication machinery (“Ocean University of China”, 2021; “Qingdao haiyang kexue yu jishu guojia shiyanshi”, 2019).

On its website, under the achievements section, QNLN highlights its research on fibre-optic hydrophones (FOH) and stresses their importance for national defence, as FOH-based systems can be used for target detection at strategic locations like ports, straits, and the seabed (“Guangxian shuitingqi”, n.d.). FOHs are underwater acoustic sensors which use fibre-optic cables as the medium for signal transmission and sensing. Due to its high sensitivity, large dynamic range, small size, light weight, immunity to electromagnetic interference etc., FOHs have applications in civilian and military fields: underwater target detection, prospecting, earthquake inspection, etc. (Meng et al., 2021). QNLN scientific cooperation with IOARAS is significant, because both China and Russia have stakes in the Finnish-led Arctic Connect data cable project that would enable their jointly built capacities in underwater sensing to be put into use for the detection of adversaries’ submarines in the strategically important Arctic region (Jüris, 2020a).

⁵ More information about the signatories: Qingdao haiyang kexue yu jishu shidian guojia shiyanshi (n.d.); Official website of the Shirshov Institute of Oceanology of Russian Academy of Sciences at Retrieved August 18, 2021, from <https://ocean.ru/en/>.

2.2 *Jointly Building an Underwater Great Wall*

The Finnish-led Arctic Connect project is an example of how improved connectivity may increase security risks. The project, which is based on Chinese technology, is meant to link internet users in Europe, Russia and Asia by constructing an undersea fibre optic cable system along the Northern Silk Road (NSR). At the same time, the project would improve both Chinese and Russian intelligence gathering and cyber defence capabilities. The Chinese company Huawei Marine, which is providing the technological solution for the project, is compelled by China's National Security Law to collaborate with Chinese intelligence services. Russia, on the other hand, could collect intelligence by tapping, exploiting optical overflow, or hacking into the control systems in its territory or territorial waters (Jüris, 2020a; Lehto et al., 2019, p. 20).

Both countries' cyber defence capabilities would also improve due to having control over the backbone of the internet infrastructure connecting them with Europe, which enables China and Russia to better shield their data transfer from the USA and its allies. In addition, the construction of Arctic Connect would enable China to implement the underwater surveillance capabilities it has been developing domestically through military-civilian fusion in the strategically important Arctic Ocean for the acoustic detection of adversary submarines (Jüris, 2020a). With the help of distributed acoustic sensing (DAS) technology developed by the British company QinetiQ for anti-submarine warfare, the fibre-optic cables along the NSR could be used for underwater surveillance and target detection without hampering their data transfer capabilities (Jüris, 2020a).

The project is currently on hold, because the only publicly known financier, the Japanese Sojitz Corporation, has failed to provide co-financing (Staalesen, 2021). Even if the Arctic Connect project remains stalled, NATO has every reason to closely monitor Sino-Russian capacity building in this field, as it has ramifications for nuclear deterrence and the defence of NATO's northern flank (see also chapter "China-Russia Cooperation in Nuclear Deterrence" by Brian G. Carlson).

2.3 *Space Cooperation and Implications for Security*

At the end of 2019, the Chinese scholars Guo Peiqing and Yang Nan 杨楠 of the OUC welcomed the news that Russia was helping China to build a missile defence system and hoped that by combining both countries' early warning systems, China would also have access to information from Russian Arctic satellite ground stations (Guo & Yang, 2020).

In December 2021, Roscosmos head Dmitry Rogozin and China Satellite Navigation Committee (Zhongguo weixing daohang xitong weiyuanhui) head He Yubin 何玉彬 signed the Russian-Chinese Roadmap for cooperation in the field of satellite navigation for 2021–2025 that envisions the integrated and innovative development

of GLONASS and Beidou systems and building of ground stations in China and Russia (Nie, 2021; Roscosmos, 2021; “Rossija i Kitaj”, 2021). Hu Yubin previously had a prolific career in the military, where he attained the rank of major general and served as the vice head of the People’s Liberation Army Rocket Force Equipment Department (Yue, 2018). According to earlier statements, Russian stations are planned to be built in Shanghai, Urumqi and Changchun, while Chinese stations are planned for Obninsk, Irkutsk and Petropavlovsk-Kamchatsky (RIA Novosti, 2021).

China already has access to ground stations in Kiruna (Sweden), Kárhóll (Iceland), Ny-Ålesund (Svalbard), Longyearbyen (Svalbard), Sodankylä (Finland) and plans to develop Nuuk (Greenland). Space ground stations are dual-use facilities, because they enable command and control of satellites and facilitate data transfer related to mission, intelligence, etc. (“China, Finland to Enhance”, 2018; Robinson, 2020). Data collected at foreign ground stations is likely to be subject to the National Cybersecurity Law, according to which personal or important information must be stored within China (Stokes et al., 2020, p. 93).

In 2019, the Swedish Defence Research Agency (FOI) expressed concern that data collected in China’s Kiruna ground station in Sweden could be used for military purposes (“Swedish Security Experts: We’re Too Naive”, 2019). In 2020, the Swedish Space Corporation said it will not continue cooperation agreements with China over its ground stations in Australia, Chile and Sweden due to a changed geopolitical environment (Barrett & Ahlander, 2020). According to a 2020 Norwegian intelligence report, Chinese intelligence has shown interest in its dual-use space technology, underwater and deep sea technologies, which China has been able to have access to on several occasions. From a counterintelligence viewpoint, a US Congress report associated 2007 and 2008 hacking incidents that involved the Svalsat ground station in Svalbard and cut communications with the US satellites Terra AM-1 and Landsat-7 with China (Wolf, 2011; Wormdal, 2020).

2.4 *Military-Civil Fusion in Arctic Underwater Acoustics*

In July 2019, the first China-Russia Polar Acoustic Symposium was co-organised by HEU and FEFU at HEU to exchange knowledge on under-ice acoustic research and technology to facilitate the construction of the Polar Silk Road (Jin, 2019). The symposium brought together more than 100 experts from over 30 Chinese and Russian academic institutions and companies with 23 presentations on polar acoustic research. The event from the HEU side was co-hosted by the Chinese National Key Laboratory of Underwater Acoustic Science and Technology UAST (*Shuisheng jishu zhongdian shiyanshi*) and the Key Laboratory of Marine Information Acquisition and Security Industry and Information Technology MIASIT (*Haiyang xinxi huoquan yu anquan gongye he xinxihua bu zhongdian shiyanshi*) (Meng, 2019).

In November 2020, the second China-Russia Polar Acoustic and Information Technology Symposium was organised by HEU and FEFU, but besides UAST and

MIASIT, the co-organisers list also included the Heilongjiang Province Key Laboratory of Maritime Information Technology (*Heilongjiang sheng haiyang xinxi jishu zhongdian shiyanshi*) and the Sino-Russian Maritime Technology Innovation Centre (*Zhong E haiyang jishu chuangxin zhongxin*).⁶ The provincial level lab was established within HEU in 2017, while the Sino-Russian Maritime Technology Innovation Centre was established by the Russian MARINET Industry Association, Harbin Engineering University and the Yantai Steering Committee of the Techno-Economic Development Zone/Yantai Steering Committee of the Pilot Free Trade Zone (Shandong, China) in September 2020 (“MARINET opens joint center”, *n.d.*; *Zhongdian shiyanshi*, *n.d.*). The cooperation agreement for the construction of the innovation centre was signed in November 2019 by the Far Eastern Branch of the Russian Academy of Sciences, by HEU and the Yantai Steering Committee of the Techno-Economic Development Zone with the aim of promoting “technology transfer, talent cooperation and introduction, training between China and Russia” in advanced applied optics (*xianjin guangxue yingyong*), marine information and detection technology (*haiyang xinxi yu jiance*), applied acoustics (*haiyang shengxue yingyong*), underwater robots (*shuixia zhineng jiqiren*), etc. (Yantai kaifaqu, 2019). The Russian MARINET Industry Association was established in December 2017 by leading Russian maritime enterprises and universities. It grew out of the Marinet National Technology Initiative Working Group that convened in 2015 to ensure Russian companies’ leadership in high tech maritime industry over the next 15–20 years, and combined 200 experts from more than 60 companies, research centres and universities.⁷

UAST is one of HEU’s two national defence science and technology key laboratories (*guofang keji zhongdian shiyanshi*), the other being the National Defense Key Laboratory of Underwater Vehicles Science and Technology (*shui xia jiqiren jishu zhongdian shiyanshi*). National defence science and technology key laboratories are quite often not transparent about their military links, and UAST’s name seldom appears listed as National Defence Science and Technology Key Laboratory of Underwater Acoustics (*Shuisheng jishu guofang keji zhongdian shiyanshi*) (*Zhongdian shiyanshi*, *n.d.*; Di er jie Zhong E jidi shengxue yu xinxi jishu luntan yaoqinghan, 2020a).

The UAST Academic Committee’s chairman is HEU professor Yang Desen 杨德森, and the vice chairs are professor Song Junqiang 宋君强 (宋军强 as on the website seems to be a common typo) from the National University of Defence Technology (NUDT), with the rank of major general, and researcher Ling Qing 凌

⁶See “Di er jie Zhong E jidi shengxue yu xinxi jishu luntan” (2020) and Di er jie Zhong E jidi shengxue yu xinxi jishu luntan yaoqinghan (2020).

⁷See the archived versions of the Russian-language Marinet webpage’s “About us” and “Industry Association Marinet” sections as of August 10, 2021 at: <https://web.archive.org/web/20210810185301/https://marinet.org/ru/about/> and <https://web.archive.org/web/2021081014858/https://marinet.org/ru/about/industry-association-marinnet/>

青 from the Naval Research Academy.⁸ According to ASPI's Defence Universities Tracker, NUDT is the PLA's main research and officer training university and directly subordinate to the Central Military Commission. NUDT's subordinate is the Institute of International Relations in Nanjing, which is a key training centre for intelligence officers. Besides being famous for research in supercomputers, autonomous vehicles, hypersonic missiles, and China's BeiDou Navigation Satellite System, NUDT is well known for its international interactions for capacity building ("National University of Defense Technology", 2019).⁹ Similar to NUDT, the Naval Research Academy is a "high risk" university due to its research in sensitive naval technology. It is supervised by the PLA Navy, belongs to China's military-civil fusion program and actively collaborates with civilian universities ("Naval Research Academy", 2019). In April 2019, Ling Qing, as deputy director of the Science and Technology Committee of the Naval Research Academy, visited Zhenjiang (in Jiangsu province) and attended the Zhenjiang Military Locality Industry Cooperation Symposium (*Zhenjiangshi jun di hezuo yingye zuotanhui*) to inspect local companies and meet with local officials to promote military-civil fusion cooperation (Meilong hangkong, 2019).

The UAST has conducted research on underwater acoustic technology for naval weapons development. UAST has four main research areas: underwater acoustic physics, target detection and localisation, underwater acoustic transducer technology and communication technology. Currently, it is undertaking 202 projects with a total value of 222.64 million yuan (29.0 million euros).¹⁰ In the past 5 years, it has received 23 scientific research awards at the provincial and ministerial level. It has also won the prize of Innovation Team of National Defence Science and Technology (*guofang keji chuangxin tuandui jiang*). As of 2020, UAST's total research assets were worth 28.6 million euros ("Shiyanshi jianjie", n.d.).

In February 2018, at the inaugural meeting of the MIASIT, the importance of military-civil fusion and building China into a great maritime power (*haiyang daguo*) were highlighted by several members of the academic committee. MIASIT's academic committee chairman is Yang Desen, the vice chairs are aviation expert Liu Yongcai 刘永才 (who has worked on missile designs) and marine geology expert Li Jiabiao 李家彪—all members of the Chinese Academy of Engineering, which is the highest professional honour in the field of engineering and technological science in China ("Liu Yongcai", n.d.; "Li Jiabiao", n.d.; "[Mingdan] 9 wei yuanshi lingxian!", 2018). Yang Desen was a representative at the 19th National Congress of the Communist Party of China and is head of HEU's Maritime Physics Institute ("Yang Desen jianjie", n.d.). Professor Yang is a

⁸See: Xueshu weiyuanhui, (2021); Zhongshan daxue xiaoyouhui (2020); "National University of Defense Technology" (2019); Quanguo yingcai shuju ku (2020); "Naval Research Academy" (2019) and Meilong hangkong (2019).

⁹To find out more, see Joske (2018).

¹⁰See: Shuisheng jishu guofang zhongdian shiyanshi (2017); Shuisheng jishu zhongdian shiyanshi (n.d.); Shuisheng jishu zhongdian shiyanshi 2020 niandu (2020).

distinguished expert in underwater acoustics with contributions to PLA Navy submarine design, both in shielding from and in detecting adversarial submarines (“Yang Desen”, [n.d.](#)).

MIASIIT is China’s most advanced platform for the research and development of marine information technology, with four main research directions: information transmission, big data and its application, sensors, and data protection. The development level of these research fields can support the transformation of China’s Navy into a blue water navy and China into a maritime power. Since its establishment in 2017, MIASIIT has undertaken 130 projects from the navy, provinces, and ministries with a total value of 150 million yuan (19.6 million euros) (“Haiyang xinxi huoqu yu anquan gongye”, [n.d.](#)).

It is evident from the above examples that China and Russia have been engaged for years in militarily highly sensitive research collaboration in dual-use fields including hydroacoustics and space that have direct relevance for nuclear deterrence and NATO’s northern flank defence.

3 Conclusion

To sum up, the espionage case of the Russian Professor Valery Mitko¹¹ can serve as a perfect example of the potential risks that academic cooperation with China entails for Russians engaged in Arctic research. Professor Valery Mitko was arrested in February 2020 by the Russian authorities and accused of having collected sensitive information about hydroacoustics, submarine design and submarine detection methods for Chinese intelligence since the spring of 2017 and handing it over during one of his bi-annual visits to China in the spring of 2018. The case was supposed to go to court in September 2021, but no new information has emerged. Valery Mitko, a leading Russian Arctic expert with decades-long military experience and an academic career in hydroacoustics, taught at Dalian Maritime University in China from 2016 onward as a visiting professor.¹²

Scientific expertise and academic credentials are not necessarily transferrable to expertise on China, which the Chinese side is eager to exploit for knowledge transfer and discourse management. Foreign scholars are valuable targets for capacity building that is necessary for the economic and military betterment of China, and for generating the positive sentiment that supports it by using foreign academic

¹¹ See also chapter “Russian-Chinese Military-Technological Cooperation and the Ukrainian Factor” by Sarah Kirchberger and chapter “Russia-China Naval Partnership and Its Significance” by Alexandre Sheldon-Duplaix.

¹² On the Mitko case, see Merzlikin (2020); “Prezidenta Arkticheskoy akademii” (2020); Kuznetsova (2020); Ampelonskaya (2021). More information about Dalian Maritime University and its links to the PLA can be found at “Dalian Maritime University” (2021); DMU is also member of the China-Nordic Arctic Research Centre (“Dalian Maritime University”, [n.d.](#)).

advocates with high social standing and an image of neutrality for promoting Chinese interests.

In 2017, Valery Mitko, then president of the Arctic Academy of Sciences, had explained in a co-authored article with Chinese colleagues from Dalian Maritime University that the Northern Sea Route is not only important for China to escape a Western siege, but also to Russia, as it is its only direct access point to blue water. The article suggested that China and Russia, united in their advocacy of multipolarity in international relations, should work together to counterbalance US maritime hegemony and resist its pressures from the sea to protect both countries' core maritime rights and interests from infringement. Russia and China should increase cooperation on the subnational level between local level leaders and between ports (Li et al., 2017).

People-to-people diplomacy's efficiency is explicit in Mitko's co-authored article, where he as a co-opted scholar advocates for personal relations on a subnational level, bypassing the central authorities who are more experienced in thinking in national security terms. This creates a vicious circle that represents Chinese interests in a way that is not always to the benefit of Russia, as was presented in this paper.

In the West, analysing Sino-Russian relations solely from a trust/distrust perspective threatens to misguide understanding of the extent and depth of the actual cooperation between the two main opponents of the rules-based world order that should be monitored closely due to its ramifications on the EU's and NATO's defence, especially in a geo-strategically important region like the Arctic.

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