

No such thing as a free donation? Research funding and conflicts of interest in nuclear weapons policy analysis

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Abstract

Numerous scholars have in recent years concluded that the field of nuclear weapons policy analysis is plagued by widespread self-censorship, conformism, and enduring disconnects between accepted knowledge and available evidence. It has been hypothesized that this tendency is fostered in part by many analysts' reliance on funding from donors with interests in the perpetuation of the existing nuclear order. In this article, we probe this hypothesis by investigating the financial links between foreign policy think tanks, on the one hand, and nuclear defence contractors and governments that espouse nuclear deterrence strategies, on the other. Relying on semi-structured interviews and a survey of the funding sources of 45 of the world's top think tanks, we find, first, that effectively all think tanks in the sample accepted funding from nuclear vested interests and, second, that such 'stakeholder funding' has real effects on intellectual freedom. Given the widely-held view that democracy relies on intellectual independence, this finding calls for a serious debate about conflicts of interest in foreign policy analysis generally and nuclear policy analysis specifically.

Keywords

conflicts of interest, knowledge production, nuclear weapons, policy analysis, political economy of research, think tanks

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'It is difficult to get a man to understand something, when his salary depends upon his not understanding it!'¹

Introduction

Numerous analysts have in recent years concluded that the expert discourse on nuclear weapons and international security is beset by self-censorship, conformism, and enduring disconnects between available evidence and accepted theoretical orthodoxies.² In the new edition of the canonical intellectual history of nuclear strategy, Lawrence Freedman and Jeffrey Michaels ascertain that nuclear policy analysis continues to be locked in stasis; 'the fundamental ideas remain in place and tend to be recycled'.³ Carina Meyn maintains that the field is constricted by 'narrow confines' and 'lacks innovation'.⁴ For Campbell Craig and Jan Ruzicka, the prevailing expert discourse functions as a handmaiden to power, propagating 'a conservative ideology [. . .] that privileges a stable international order dominated by status-quo large nuclear powers'.⁵ Tellingly, would-be reformers of the prevailing nuclear order frequently treat mainstream foreign policy think tanks as constitutive elements of the nuclear status quo.⁶ In the words of Tom Collina and former US Secretary of Defense William Perry, US nuclear policy is insulated from change by a network of 'Pentagon planners, defense contractors, congressional champions, and think tank boosters'.⁷ As a case in point, many if not most of the world's top foreign policy think tanks have in recent years treated reformist diplomatic initiatives such as the promotion of nuclear no-first-use postures and the 2017 Treaty on the Prohibition of Nuclear Weapons (TPNW) with either indifference or hostility, supporting instead the pursuit of nuclear supremacy or the maintenance of the existing nuclear order.⁸ More radical solutions to the nuclear predicament barely get a hearing. For example, the idea that long-term nuclear security can only be properly secured by some form of world government, a mainstream argument in the early nuclear age, now appears 'fanciful at best, if not eccentric and dangerous'.⁹

What accounts for the 'narrow confines' of mainstream nuclear policy discourse? Some analysts have pointed to underlying 'colonial' or 'patriarchal' structures.¹⁰ Others have highlighted conceptual factors; the field's central concepts – 'strategic stability', 'non-proliferation', 'deterrence', 'order' – have been argued to reflect a panglossian worldview that frames change as dangerous and the status quo as the best of all possible worlds.¹¹ In Meyn's view, analytical innovation and critique of predominant nuclear practices and power structures are discouraged by theoretical biases and 'social-aesthetic norms' upheld by the expert community. Drawing on interviews with nuclear policy analysts, Meyn confirms that there is broad acceptance within the community 'of what constitutes "serious nuclear scholarship and political theorizing," and what, conversely, does not'.¹² Questions remain, however, about how and why these norms and concepts took hold in the first place, and why they have been so difficult to upend.

Could it be that, in the final analysis, the stasis, self-censorship, and 'conservatism' ostensibly plaguing the nuclear policy community are linked to material factors? It has been persuasively argued that many ideas prevail in the marketplace of ideas not because they are particularly good but because they are promoted by people with deep pockets and connections.¹³ According to Craig and Ruzicka, the cause of the expert community's

conformism is quite straightforward; institutions that support the extant nuclear order ‘enjoy funding, political support, and “policy relevance”’; those who deviate from it do not’.¹⁴ Numerous analysts have made similar claims.¹⁵ Yet the hypothesis that nuclear policy analysis suffers under material conflicts of interest – that the expert community’s intellectual freedom and ability to innovate is to some degree impaired by financial reliance on stakeholders invested in the prevailing nuclear order – has not yet been subject to systematic empirical investigation.¹⁶ With this paper, we aim to begin filling this void.

Our intention with this article is not to reduce nuclear knowledge production to an epiphenomenon of material factors – professional norms, revolving doors, and political sociology should certainly be further studied.¹⁷ Our intention is rather to open an investigation into whether and how funding patterns impact knowledge production in the field of foreign policy analysis generally and nuclear policy analysis specifically. As such, the critique advanced here applies not to individual analysts or think tanks – which may do good work irrespective of their unique funding arrangements – but the wider ecosystem of nuclear policy analysis in the aggregate. The topic seems to us particularly timely given ongoing shifts in the field’s overall funding landscape. Citing a lack of impact, the MacArthur Foundation announced in 2021 its decision to stop funding research and analysis on nuclear policy issues.¹⁸ Given MacArthur’s position as one of only two large foundations active in the field, this development is likely to increase the relative influence within the field of more aggressively partisan funders, including arms contractors and governments.

We aim to make three contributions to the scholarship on knowledge production and foreign policy. Firstly, we make a simple case for the need to gauge the scale and impact of stakeholder funding in nuclear policy analysis. While the biasing effect of stakeholder funding has been demonstrated in several other fields – climate science, ocean research, public health, nutrition, journalism¹⁹ – the presence and consequences of conflicts of interest in nuclear weapons policy analysis have not yet been subject to systematic investigation. Nevertheless, most scholars and analysts in the field write as if they knew that such funding was unproblematic, to wit, as if the material conditions in which research is produced have no bearing on the output. We believe this assumption to be unwarranted. Secondly, we make a first effort at scoping funding by vested interests in nuclear weapons policy analysis. Although a precise quantitative assessment of the field’s overall funding dependencies remains impossible – many think tanks and university programmes withhold information about the size and origins of the grants they receive – a rudimentary assessment can be made on the basis of available information. Finally, we delineate three mechanisms through which the provision of research funding by actors with political interest in the continued production and maintenance of nuclear weapons influences knowledge production and intellectual freedom: censorship, self-censorship, and perspective filtering. In so doing, we aim to contribute, firstly, to the international political sociology of nuclear techno-politics and, secondly, the critical study of nuclear order and its underpinnings.²⁰ More broadly, we are interested in the political economy of foreign policy discourse and expertise. Our findings speak to and overlap with studies of stasis in foreign policy thinking generally and in specific cases such as US tobacco policy and US policy vis-à-vis the war in Afghanistan.²¹

The findings reported below are consistent with Craig and Ruzicka’s hypothesis that the field’s conformist bent owes at least in part to material factors. All 45 think tanks in

our sample acknowledged funding from nuclear defence contractors and/or governments that espouse nuclear deterrence strategies, that is, actors with interests in the continued development and deployment of nuclear weapons. The relevant donations were in some cases admittedly quite small. In others, however, the donations were large in both absolute and relative terms. Moreover, multiple epistemic actors in the field cultivate formal connections to nuclear vested interests, for example at board level. Many think tanks also maintain informal ties to industry and government, including by functioning as *de facto* holding pens for officials out of office. It should be noted, however, that stakeholder influence likely varies significantly across institutions, depending on factors such as the respective funder's relative weight in the research institution's budget, political and strategic culture, the ability of the given epistemic actor to secure funding from alternative sources, and the average duration and revocability of the relevant grants. Future scholarship should consider these factors in greater detail to estimate differences in donor influence and funding dependence across research institutions and circumstances.

A full appraisal of how vested interests influence each of the myriad of institutions engaged in nuclear policy analysis is well beyond the scope of this paper. In this article, we document the more general point that acceptance of stakeholder funding (1) is pervasive and (2) can and does foster both direct censorship and, more often, self-censorship. However, we concluded that stakeholder influence is most significant in terms of 'perspective filtering', that is, the systematic platforming or elevation of certain ways of viewing the world over others. Indeed, the most generous funders exercise significant influence on the evolution of the foreign policy marketplace of ideas by affecting which questions are asked and which expert milieus are enabled to thrive. The trouble with stakeholder funding is thus not first and foremost that donors might pressure analysts to change their conclusions – by all accounts a relatively rare phenomenon – but that certain views, questions, and discourses are artificially elevated or normalized because they are attractive to vested interests. In other words, funders may not have much say over what individual think tanks or analysts write or say in specific circumstances, but they largely get to determine who gets funded to write or say something in the first place.

The article proceeds in three steps. In the first part, we operationalize key terms, explain the methodology, and present key findings about nuclear vested interests' funding of foreign policy analysis. In the second part, we move on to the question of how funding influences analytical output. In the conclusion, we reflect on the implications of our findings for research and education in security studies. Rather than proving anything definitively, the evidence presented in this article should be viewed as a substantiation of the plausibility of 'the Craig and Ruzicka hypothesis' that nuclear expert discourse is shaped by the field's political economy.

Funding of epistemic actors by nuclear vested interests

Operationalizations and method

To probe the connections between the foreign policy expert community and actors with interests in the nuclear weapons enterprise, this study relies on a cross-sectional investigation of the funding sources of some of the most influential expert milieus in the field

of foreign policy (See the Supplemental Appendix at <https://journals.sagepub.com/doi/suppl/10.1177/00471178221140000>). The foreign policy expert community is operationalized as the top-ranked think tanks in the fields of international affairs and security. The reason we focus on think tanks and not universities (or research centers generally) is that think tanks are, by design, involved in the production of policy-relevant analysis for consumption by policymakers, mass media, and the public.²² Think tanks are also generally more transparent about their funding sources than are universities, meaning that data was more readily available for the former. Finally, the reason we focus on general foreign policy think tanks and not think tanks specialized in nuclear policy analysis is that the phenomenon to be investigated here is not just the active production of the existing nuclear discourse, but also the apparent lack of interest in creating an alternative.

To select specific think tanks without introducing selection bias, we used the University of Pennsylvania's *Global Go To Think Tank Index Report* for 2017 (the most recent such report available in early 2019), a survey designed to capture the quality, reputation, and media impact of the world's think tanks. We picked the 40 highest ranked think tanks in the two *prima facie* most relevant categories, 'Foreign Policy and International Affairs' and 'Defense and National Security'.²³ There was significant overlap between the two categories – many think tanks appeared in the top 40 of both categories. The Brookings Institution, for example, was ranked as number one in the category of 'Foreign Policy and International Affairs' and number four in the category of 'Defense and National Security'. The result of combining the top 40s of both categories was therefore a selection of 53 think tanks in total. In seven cases, however, we were unable to find adequate information about funding arrangements and donors on the respective think tanks' websites.²⁴ These seven are consequently not included in the sample. While a full set would of course have been preferable, there is no obvious reason to suspect that the inclusion of the seven missing cases would substantially alter the overall finding. One think tank, Transparency International, was excluded from the sample due to its narrow thematic focus on corruption and economic transparency. What remained was a selection of 45 think tanks²⁵ with nuclear and foreign policy within their natural purview (see the Supplemental Appendix). While the majority of the think tanks in the sample are based in Europe and the United States, the sample also includes a number of think tanks from China, India, Japan, Russia, and South Korea.

Actors with vested interests in the continued retention of nuclear weapons – that is, actors invested in what William Walker has referred to as a 'managed system of [nuclear] deterrence'²⁶ – are operationalized as (1) companies involved in the development, manufacture, or maintenance of nuclear-weapon systems and (2) governments that explicitly base their security strategies on nuclear deterrence. Companies involved in the nuclear weapons industry have an obvious economic interest in maintaining demand for, and the legitimacy of, nuclear weapons and their means of delivery.²⁷ The companies with involvement in the production and maintenance of nuclear weapon systems include some of the world's largest companies, including Airbus, BAE Systems, Boeing, Lockheed Martin, Raytheon, Roscosmos, and Safran. Governments that expressly base their security strategies on the practice of nuclear deterrence also have obvious interests in the perpetuation of their or their allies' nuclear arsenals. Thirty-nine states are identified as being engaged in such practices: Australia, Belarus, China, India, Israel, Japan, North

Korea, Pakistan, South Korea, Russia, and the as of 2019 29 members of NATO.²⁸ These states have all offered varying degrees of support for nuclear disarmament as a long-term vision, but routinely oppose nuclear disarmament initiatives in practice and insist on approaches that have not resulted in progress for more than half a century (e.g. the negotiation of a fissile material treaty in the Conference on Disarmament).²⁹ While it could be argued that only funding from the defence establishments of nuclear-armed governments should be included in the analysis, our interviews suggest that also funding from so-called nuclear umbrella states can dissuade analysts from criticizing nuclear deterrence policies. We recorded donations provided directly from the relevant governments' embassies, armed forces, and ministries of foreign affairs or defence, not funding provided through academic research councils or foreign aid agencies.

Finally, this article is focused on funding provided by actors with interests in the maintenance of nuclear weapons and the prevailing nuclear order. Our assumption is that acceptance of such funding – irrespective of whether donations from actors eager to advance nuclear abolition is also accepted – are likely to incentivize the development of safe, status quo-oriented policy recommendations within the discursive ‘narrow confines’ identified by Meyn. Accordingly, our study leaves the investigation of funding by actors eager to advance nuclear zero or disrupt the nuclear order to future research. That being said, our overall understanding – informed by the interviews, existing literature,³⁰ and from scanning the donor lists – is that such funding is comparatively miniscule.

Limitations to the data

There are several limitations to the data. While think tanks are generally more transparent about funding sources than universities, mapping the financial links between think tanks and actors with stakes in the nuclear weapons enterprise is still a difficult task. Occasionally, information about large and previously unknown corporate donations to think tanks has surfaced only upon the bankruptcy of the donor,³¹ and certain funding arrangements have been deliberately kept secret.³² Many think tanks disclose only a selection of donors and donation sizes, and some do not provide any information about their sources of income whatsoever. Others list all donors, but without specifying the size of donations. Yet others disclose rough information about the size of grants and donations received, but list many donors as ‘anonymous’. Only a small minority of the think tanks included in the sample, such as the Stockholm International Peace Research Institute (SIPRI), publish complete information about the origins and size of all grants and donations received.

Given these constraints on the availability of data, it is difficult to measure both the absolute and relative volume of nuclear stakeholder funding in the field of foreign policy analysis, both for each individual institution and at the macro level. That said, the data does suggest that the amount of stakeholder funding varies significantly across think tanks, with some institutions deriving virtually all funding from nuclear vested interests and others only a small fraction.³³ Further, our data does not allow us to differentiate whether a given donation was made directly to the programme/research team involved in nuclear policy analysis or some other part of the think tank (or to the institution as a whole). It could be argued, for example, that stakeholder funding is only problematic if

the donations in question are directed at the individuals working specifically on the questions most relevant to the stakeholder. The evidence discussed below, however, suggests that institutional-level funding may also have significant downsides for intellectual freedom.

Results

As discussed above, data scarcity renders it impossible to measure the precise extent of the think tank ecosystem's financial dependence on nuclear vested interests. That said, the existence of significant material ties between nuclear vested interests and the foreign policy think tank community can hardly be disputed. In fact, all think tanks in our sample listed donations either from companies involved in the production or maintenance of nuclear-weapon systems (58% of the think tanks surveyed), governments that explicitly base their security on nuclear deterrence (91% of the think tanks surveyed), or both (56% of the think tanks surveyed). For the top 10 think tanks in both the field of foreign policy and the field of defence, the corresponding percentages were even higher, at 80%, 90%, and 70%, respectively (identically for both categories). As far as we could identify, none of the think tanks surveyed have adopted a policy of strict avoidance of conflict of interests with regards to nuclear weapons policy analysis. These results, as well as those discussed below, were derived through scanning the lists of donors or annual reports published on the various think tanks' websites. When possible, we used the most recent calendar or fiscal year. In some instances, the think tank did not disclose the date range for the relevant donations. Nine of the 45 think tanks (20%) were formally linked to, or subdivisions of, governments that espouse nuclear deterrence strategies. This was the case, for example, for all five Russian and Chinese think tanks included in the sample (with the partial exception of the Shanghai Institutes for International Studies, which is formally affiliated with the Shanghai municipal government rather than the Chinese central government). Academic, press, and intellectual freedoms are heavily circumscribed in both countries, with serious criticism of government policy virtually impossible.³⁴

Zooming in on the very elite of foreign policy and defence think tanks, as of 2019, the most prestigious institutions all listed large donations from nuclear vested interests. The world's top-ranked think tank in the category of 'Defense and National Security' – Washington-based CSIS – listed funding for fiscal year 2018 from several governments reliant on nuclear deterrence and 11 corporations involved in the production or maintenance of nuclear-weapon systems (Airbus, BAE Systems, Bechtel, Boeing, General Dynamics, Huntington Ingalls Industries, Leonardo, Lockheed Martin, Northrop Grumman, Raytheon, and Safran). In total, publically disclosed donations to CSIS from such corporations in fiscal year 2018 amounted to somewhere between \$1,570,000 and 3,564,986.³⁵ Number two on the ranking of defence think tanks – London-headquartered IISS – received in fiscal year 2018 somewhere between \$732,000 and 1,079,000 in publically disclosed donations from 10 corporations involved in the manufacture or maintenance of nuclear-weapon systems (Airbus, BAE Systems, Boeing, Leonardo, Lockheed Martin, Los Alamos National Laboratories, MBDA Missile Systems, Northrop Grumman, Raytheon, and Textron). The third-ranked think tank in the category of defence – the RAND Corporation – received well over \$250 million in 2018 from the US government,

with the military constituting by far the largest donor. RAND initially emerged in the 1960s as the think tank of the US Air Force.

The top-ranked think tank in the *Global Go To Think Tank Index Report's* category of 'Foreign Policy and International Affairs' – Washington-based Brookings – received donations from Boeing, Lockheed Martin, Northrop Grumman, and Raytheon worth somewhere between \$310,000 and 624,996. Brookings also received donations from the governments of Australia, Denmark, France, Germany, Japan, the Netherlands, Norway, the United Kingdom, and the United States, all of which have explicitly based their security strategies on nuclear deterrence. The second-ranked foreign policy think tank – Paris-based IFRI – listed funds from Airbus, MBDA Missile Systems, Naval Group, and Thales, as well as a large number of governments reliant on nuclear deterrence, including China, France, India, Israel, Russia, Turkey, the United Kingdom, and the United States. London-based Chatham House, ranking third in the category of foreign policy and international affairs, listed between \$223,000 and 467,000 from Airbus, BAE Systems, Bechtel, Boeing, Leonardo, Lockheed Martin, Sandia National Laboratories, Rolls Royce, and Thales, and between \$1,992,000 and 4,450,000 from governments that base their security strategies on nuclear deterrence. Providing funding for 14 of the 45 think tanks surveyed, Lockheed Martin stands out as the company that provides funding for the greatest number of think tanks. Northrop Grumman comes in second at 12, Airbus and Raytheon at 11, Boeing at 10, Leonardo and Thales at 9, and BAE Systems at 7.

Beyond the think tanks included in the sample outlined above, many smaller think tanks specialized in or heavily involved in nuclear weapons policy analysis are also funded, fully or in part, by corporations involved in the production of nuclear weapons or governments reliant on nuclear deterrence. For instance, the London-based Centre for European Reform received funding in 2019 from Airbus, BAE Systems, and Boeing.³⁶ The Munich Security Conference, the organization convening the transatlantic defence policy community's main annual convention, received funding in 2019 from Airbus, Lockheed Martin, MBDA, and Raytheon,³⁷ and a representative of Airbus sat on its Advisory Council.³⁸ The British American Security Information Council listed funds from nuclear-armed United Kingdom and nuclear umbrella states Canada and the Netherlands.³⁹ The Nuclear Threat Initiative cooperates closely with the US government, and receives funding from nuclear umbrella states Canada and the Netherlands.⁴⁰ There are notable exceptions to the rule, however, such as *The Bulletin of the Atomic Scientists*, which does not accept funding from either governments or corporations involved in the development or deployment of nuclear weapons. That said, *The Bulletin* and other institutions that do not accept funding from actors with stakes in the nuclear weapons enterprise operate in a discursive sphere that appears to have been deeply affected by actors that do. In this view, even think tanks that do not accept funding from vested interests are influenced by such donors by virtue of existing in a discursive environment shaped by stakeholder funding. As Carina Meyn points out, analysts that veer off from the mainstream 'risk decreasing their social and political efficacy in the broader competitive field of nuclear-policy argumentation'.⁴¹

In summary, all the think tanks surveyed listed donations from actors with interests in the perpetuation of the extant nuclear order. That said, the size of the relevant donations varied significantly across actors. Yet while it is difficult to gauge the field's

degree of dependence on such funding, it is clear that the total sums involved are considerable, in particular with respect to the very elite of think tanks, such as CSIS, IISS, Brookings, and IFRI.

How stakeholder funding influences nuclear expert discourse: three mechanisms

To begin probing the ways in which stakeholder funding shapes nuclear weapons policy analysis we rely on in-depth interviews with grant managers and former and current think tank employees. Interviewees were chosen through a combination of random selection, non-random selection, and ‘snowball sampling’, the latter meaning that interviewees were prompted to suggest other potential interviewees.⁴² The sample was not intended to be representative of mainstream opinion in the think tank sector as a whole, but rather to help identify mechanisms of relevance to the research question.

All interviews were carried out in 2020 and 2021. The nine think tank analysts interviewed were all current or former staff members, fellows, or directors of one or more of the think tanks in the sample. The four grant managers interviewed all worked for organizations (two governments that espouses nuclear deterrence strategies, one [nuclear] defence contractor, and one foundation) that have provided several of the think tanks in the sample with funding. In this section, we discuss the impact of grant- and donation-based funding models on think tank outputs. The interviews conducted for this study, as well as secondary literature from the field of communication studies, suggest the existence of three main forms of donor influence: censorship, self-censorship, and the systematic platforming of certain voices and topics over others. However, before moving on to the question of how stakeholder funding affects intellectual freedom, it may be useful to briefly consider the motivations of funders.

Clearly, many funders are interested in sponsoring objective analysis. However, our interviews suggest a range of additional motives. Firstly, funders are often interested in gaining access to informal networks and arenas where policy is formed and regulations discussed.⁴³ In addition to providing research, analysis, and opinion, think tanks typically provide spaces for casual meetings and workshops where various stakeholders get to meet. In the words of one interviewee, ‘the funders are sometimes almost totally disinterested in research outputs and articles. What they want is a meeting place or networking hub’.⁴⁴

Secondly, certain donors are eager to enhance their reputations by associating with prestigious policy or research centers. A sponsorship manager for a company involved in the production of nuclear weapon systems asserted that one of the main reasons their company provided funding for think tanks was to enhance the ‘brand’ of the company – to associate the company with respectable strategic studies and intellectual engagement.⁴⁵ Some of the interviewees on the other side of the table had felt this acutely. According to one interviewee, some donors were primarily interested in the ‘aesthetics’ of maintaining relationships with esteemed research institutes.⁴⁶ Another former think tank employee argued that ‘branding’ was one of the main things think tanks had to sell:

I think it’s also important to realise that think tanks are not just selling expertise, but also their own brand – they allow companies and states to be associated with a prestigious academic

institution. This is why so much of the work revolves around public meetings and events. These think tanks, broadly speaking, are associated with ‘liberal’ values. That means that they can help actors that are involved in morally questionable practices such as arms manufacturing, possessing nuclear weapons, fracking, etc. look better. Therefore, think tanks have no incentive to actually produce knowledge – they are just selling their own brand.⁴⁷

A third motivation for at least some donors is to project particular narratives or policy ideas. A former grant manager for the foreign ministry of a nuclear umbrella state explained that the ministry would support think tanks to promote its interests and ‘a certain way of thinking’. For the last several years, the government in question had focused on ‘pushing conservative “step-by-step” arms control thinkers and trying to avoid ban treaty [TPNW] stuff’.⁴⁸ In other words, the government had sought to elevate a cautious arms control narrative, which was deemed less offensive to major allies, over that of the TPNW and humanitarian initiative. According to one set of scholars, think tanks ‘can play an important legitimating role in the declaratory foreign policy of a given government’.⁴⁹ Indeed, in the words of an analyst with years of experience from both government and several think tanks, what you get from think tanks, generally, ‘is good research to back up funders’ existing policies and positions. You get stuff to support the status quo’.⁵⁰

Lastly, some donors may be interested not so much in actively projecting a particular narrative as in controlling the discourse by fostering dependence and, by extension, self-censorship.⁵¹ The grant manager for a defence contractor referenced above explained that, in addition to the branding motive, grants were provided in the hope that the recipients would think twice about saying or writing anything that would contradict the interests of the contractor.⁵² The interviewee in question was clear that they were not funding think tanks because they provided useful analysis: ‘To be honest, I’m not that interested in the research and analysis they produce. If I wanted substantial, solid analysis I would go elsewhere. [. . .] If I wanted serious research I would read peer reviewed articles and books’. A former grant manager for the ministry of defence of a nuclear-armed government confirmed that funding could be used to co-opt critics and shape the marketplace of ideas: ‘If you don’t want to have a debate’, funding potential critics ‘is a good option’.⁵³ The former grant manager for the ministry of foreign affairs of a nuclear umbrella state explained that ‘[t]he main deterrent we have is the ability to deny opportunities for funding in the future’. In other words, the government would leverage the promise of future funding to dissuade criticism and undesirable analysis. ‘The recipient knows they might not be funded next time around if they’re very disloyal’.⁵⁴

Efforts to prevent critical information from surfacing has also been documented in historical scholarship. For example, it has been demonstrated that in the 1980s NATO administrators ‘agreed to stall the funding of studies on the predicted global [climate] catastrophe to be derived from nuclear exchange, and that they removed nuclear winter from the list of scientific subjects worth sponsoring to avoid giving greater resonance to this notion’.⁵⁵ This was the case at a time when the question was not settled scientifically, so the imperatives of advancing knowledge and avoiding illusions of knowledge and overconfidence would have benefitted from more research. However, instead of new findings leading to policy changes or further research, vested interests sought to repress information that might be politically inexpedient. In the Soviet Union and, later, Russia,

freedom of expression has been and remains under enormous strain, with critics of government policy and corruption risking their life and freedom.⁵⁶

Censorship

The most direct form of donor influence is censorship. There have been sporadic reports in recent years of direct censorship and even donor-influenced sackings of think tank employees.⁵⁷ The interviews undertaken for this study indicate that direct censorship, in various forms, is relatively rare but not unheard of in the world of foreign policy analysis. Sometimes, censorship is exercised directly by the donor. Other times, censorship may be exercised by think tank managers on behalf of donors or with the interests of existing or potential donors in mind. One interviewee – a former senior researcher at one of the top think tanks investigated in this article – relayed that, at one point, their research project had been canceled in its entirety, leading the researcher to resign and leave their position at the think tank. According to the researcher's account, the director responsible for discontinuing of the project had explained that the decision had been made owing to pressure from the project's main funder.⁵⁸ In a previous incident, a long-planned event was canceled on the request of the same donor. 'I think the donor feared that the speakers would raise issues they were uncomfortable with'.

Another interviewee recounted that a think tank they had previously worked for had been bankrupted and shut down following a sudden cancellation of funding by the think tank's biggest donor, a 'nuclear umbrella state'. The interviewee maintained that the cancellation of grants was 'unquestionably done for political reasons', a reaction to the fact that the think tank 'had been doing a lot of critical work on nuclear deterrence and security, questioning orthodox thinking'. In the interviewee's words: 'As I understand it, and I've since talked to people who worked inside the ministry at the time, the government felt we were embarrassing it or putting pressure on it to make policy changes'.⁵⁹ Yet another interviewee described an incident wherein several people invited to an event organized by the think tank were disinvited and prevented from taking part following the direct intervention of the event's main funder.⁶⁰ The same interviewee also reported that colleagues and in-house editors would occasionally try to rephrase the interviewee's writing in a more conservative direction, that their work on a topic that was sensitive to the project's main funder had been quietly buried, and that senior colleagues had frequently attempted to direct their research 'away from controversial or critical analysis'. 'Don't talk about government militarism', colleagues would suggest, 'talk about what the terrorists are doing instead'. Such suggestions arguably do not constitute direct censorship under strict definitions of the term, but go beyond self-censorship in that alterations or redactions were externally requested. A fourth interviewee said censorship was unusual but not totally abnormal either. They testified that, early on in their career, they had been plainly instructed by management not to work on their actual area of expertise, as that field was controversial in the eyes of a big funder.⁶¹

Self-censorship

As discussed above, direct censorship is relatively rare. Self-censorship, on the other hand, is more common. One of the interviewees cited above mused that 'the level of

editorship varies from place to place, probably depending on the culture of the think tank, the culture of the country, and the nature of the funders'. The main problem at think tanks is not direct censorship, they claimed, as the discourse can be controlled in other, less direct ways.⁶² Knowing that existing and potential donors will have strong interests in certain topics or findings, analysts often adjust their language or conclusions or, more commonly, avoid certain topics altogether. While most think tanks are at pains to point out that their financial situation is not dependent on any one donor, even quite small donations could make up the difference between producing or not producing a report or between retaining or having to let go a member of staff. Speaking to *The New York Times* in 2014, a Brookings analyst acknowledged that the consumers of think tank reports should be aware that '[t]hey may not be getting a false story, but they are not getting the full story'.⁶³

The interviews conducted for this study confirm existing accounts of how knowledge of donors' interests shape research activities and outputs.⁶⁴ All but one or two of the analysts interviewed admitted to having engaged in self-censorship and all regarded self-censorship as a problem for the field. One interviewee argued: 'As I see it, self-censorship is the greatest threat to our democracies in the West. A lot of think tank experts posture as experts with complete academic freedom – this is absolutely not the case'.⁶⁵ In the words of another, 'you would of course never propose [to analyse or comment on] something that was antithetical to the funder's interests or worldview'.⁶⁶ Indeed, '[a]s someone who studies nuclear disarmament in a nuclear-armed state, I tend to avoid the most controversial topics'. On the question of whether they had ever refrained from picking up a topic because donors or think tank managers would not like it, a third think tank analyst immediately responded: 'all the time'.⁶⁷ 'At the end of the day', said a fourth, 'you work for the funders'.⁶⁸ In this researcher's perspective, 'what we were producing was not research, it was a kind of propaganda'. That said, 'good propaganda is based on good knowledge. It needs to be believable'. The fact that the think tank received donations from multiple sources did not mean that it was 'independent', they suggested, but, on the contrary, that multiple and often contradictory donor interests obliged the analyst to water down their argument to a banal consensus statement. 'I think this is one of the reasons why think tanks often do not produce anything new or interesting', they maintained. Another interviewee, however, maintained that a plurality of donors enhanced intellectual freedom as well as the external optics.⁶⁹ Yet another stated that 'it was impossible for me to talk about the role of capitalism and political economy in security affairs. If I wanted to do that it would have to be within strict parameters – after all the think tank wants to attract funding from corporate donors'.⁷⁰ Another interviewee said they enjoyed a significant degree of intellectual freedom, but within 'certain boundaries', especially when it came to sensitive issues such as nuclear deterrence and disarmament.⁷¹ The think tank in question maintains close institutional ties with its main funder. At the same time, the funding could not easily be pulled, which according to the analyst provided a certain degree of assurance.

Filtering: platforming and agenda setting

The final and arguably most significant way in which funders shape foreign policy analysis is by helping to determine which milieus prosper and which topics and agendas

are given attention. A large proportion of most think tanks' budget for research, analysis, and events comes from contracts with clearly defined deliverables. It stands to reason, then, that think tanks will spend most of their time on questions and topics that are of interest to the most generous donors. This is confirmed by our interviews with both think tank employees and grant managers. In the case of nuclear weapons, the biggest donors tend to be states that base their security strategies on the doctrine of nuclear deterrence, weapons contractors, and large foundations that are wary of being perceived to have partisan or controversial agendas.⁷² 'The think tanks I worked for were totally un-ideological', said one interviewee. In this researcher's view, think tanks merely 'go where the money is. If they [think tanks] could get lots of money to defend peace and disarmament, they would. But there's very little money in that'.⁷³ Another interviewee reported that they believed the think tank they had worked for 'would accept funding from just about anyone so long as the interests and identity of the new donor did not conflict too much with those of the biggest existing funders'.⁷⁴ Yet another asserted: 'If you can control which questions are asked, you also control the discourse – you don't need to provide the answers as well'.⁷⁵ According to James McGann, think tank funding has in recent years become increasingly short-term and project specific. This trend has served to challenge 'the independence and innovation of think tanks, as donors specify research projects and inhibit these institutions from exploring new research areas and thinking outside the box'.⁷⁶

In the words of one interviewee, an individual with more than 15 years of leadership experience in the field, 'the funding is really skewed'. When it comes to nuclear policy analysis, 'the amount of money you can get from states that are in favour of nuclear disarmament and the TPNW is absolutely dwarfed by the amount of money you can get from states that are eager to promote the idea that peace depends on nuclear weapons'.⁷⁷ For governments that subscribe to nuclear deterrence policies, they argued, the easy option when deciding which think tanks to fund would always be to 'send money to strategic studies think tanks that are populated by former military and government officials and that are going to help them justify their existing positions. There's clearly a conservative bias to the way governments fund research on arms control and disarmament issues'. This interviewee maintained that, while there is clearly 'a risk that you end up producing the research your funders want', they had, on the whole, been able to maintain intellectual integrity, something that in turn had probably 'led us to miss out on some potential donors – some potential funders have been afraid that we wouldn't necessarily be loyal to them or their interests'. As put by another interviewee, 'on my topic, all the funders have broadly the same view. You will not find any funding, for example, for questioning nuclear deterrence'.⁷⁸ A grant manager for a progressive foundation described sponsorship of nuclear policy analysis as a struggle between opponents and supporters of nuclear armament about the broader culture in which nuclear policy is embedded. In this struggle, they argued, the forces of arms control and disarmament were 'out-gunned and out-funded'.⁷⁹ In the words of former US Secretary of Defense William Perry and Ploughshares Fund Director of Policy Tom Collina, funding for policy work provided by organizations seeking to limit nuclear weapons 'pales in comparison' with the amount spent by pro-nuclear actors.⁸⁰

Be it for specific projects or unspecified activities, donors are unlikely to offer significant economic support to think tanks and individuals they know to propagate views that fundamentally challenge their own. They may, however, provide limited funding to such actors ‘to avoid a perception of partisan bias’.⁸¹ The former grant manager for the defence ministry of a nuclear-armed state suggested that funding of think tanks was often used to buttress particular views or policies. In the relatively rare cases where there were diverging political views within the executive – for example with regards to how the Iranian nuclear programme should be dealt with – rival factions within the government had been known to fund different think tanks as parts of struggles over intellectual hegemony.⁸² The sponsorship manager for a nuclear defence company explained that companies like theirs sometimes also approached experts via PR agencies. That way, the PR agency would quietly pay an expert to take a particular stance in public, allowing the company to maintain some distance.⁸³ However, as Daniel Drezner points out with regards to the United States, for some corporate donors, funding of think tanks ‘can be as valuable as spending on lobbyists. Think tank funding is less heavily regulated [in the United States] than more traditional forms of political spending, such as campaign contributions and lobbying members of Congress’.⁸⁴

As discussed above, two of the researchers interviewed for this study had experienced their project or think tank being canceled in response to objections by donors. Others reported that they had left their positions due to a sense of lacking intellectual freedom. Big donors thus shape the discourse not just or primarily through influencing analysts’ views, but rather through determining who gets to offer their views in the first place. This platforming mechanism appears to work on several levels, including the level of individual analysts (e.g. analysts who hold particular views are more likely to be hired or stay in the field), the level of research groups within institutions (certain focus areas are more likely to be funded than others), and/or the level of whole institutions (think tanks that propagate worldviews similar to those of the wealthiest donors will be offered ample funding while those that do not will be starved).⁸⁵ Thus, analysts supporting orthodox nuclear policies are not necessarily self-censoring or actively tailoring their views to suit the preferences of their donors – they may well believe everything they say – but simply would not have received funding and access had they not held those views to begin with.⁸⁶ It also stands to reason that many nuclear analysts developed their expertise in epistemic milieus dominated by funding from vested interests, filtering their exposure to critical voices during their intellectual development. A related factor – not discussed here but nevertheless of significance for the topic of investigation – is the existence of enduring ‘revolving doors’ between government, industry, and think tanks.

Most of the think tanks investigated in this study tend to take relatively inconspicuous positions on nuclear disarmament and modernization. The filtering mechanism thus works primarily by filtering out critique of prevailing power structures and practices rather than elevating nuclear cheerleaders. However, some of the think tanks investigated routinely take aggressively pro-nuclear armament positions, advocating for increased nuclear defence spending and against nuclear arms control and disarmament. For example, analysts at the Raytheon-funded Heritage Foundation have consistently argued that there is a ‘tremendous need to modernize all components of our strategic nuclear arsenal’.⁸⁷ Raytheon is currently a key developer of the US Air Force’s

next nuclear-armed air-launched cruise missile. Prior to the US withdrawal from the INF Treaty – an agreement prohibiting land-based intermediate-range missiles – Heritage analysts argued that withdrawal from that treaty would send a ‘signal of U.S. resolve’.⁸⁸ Then, upon the demise of the agreement, Raytheon reportedly received ‘an anomalous 44 separate missile contracts worth more than \$500 million’.⁸⁹ Similar stories have been uncovered by reporters at *The New York Times*.⁹⁰ As another example, one of the analysts interviewed for this study recounted how the think tank they had worked for had organized a series of seminars in collaboration with a major weapons manufacturer. The interviewee, who at that point was new to the think tank world and had been ‘a bit shocked’ by the apparent closeness between the think tank and the defence contractor in question, had asked their manager ‘what the deal was – what the contractor was getting out of it’, to which the boss had ostensibly been unwilling to provide a clear answer. However, as the seminars unfolded and the think tank published a report on the issue, it became clear to the interviewee that the donor – the weapons contractor – had been in the market for ‘an expertise angle’ to a particular ‘sales pitch’. In the end, the contractor ‘got exactly what it wanted’. As the project concluded, the think tank published a report recommending the acquisition of a military hardware sold by the contractor.⁹¹

Conclusions and implications

Discussions of nuclear weapons and security often emphasize material vulnerabilities, such as the dangers of escalation or the intricacies of missile defence. In this article, we have investigated another dimension of nuclear vulnerability, namely the vulnerability of public discourse and policy processes to undue influence by vested interests, what we call ‘epistemic vulnerability’.⁹² It is the responsibility of scholars and educators to illuminate these vulnerabilities in all their forms. The quality and credibility of knowledge production and analysis matters. Think tanks and research institutes play important roles in influencing government policy, mass media, and the public. And there are arguably few fields in which objective, unbiased analysis is as important as in the field of nuclear security. After all, along with global warming, the nuclear predicament remains arguably the gravest threat to human civilization that is in the hands of humans to roll back.⁹³ It is of crucial importance that transparency, fairness, and accuracy triumph over profit motives, political spin, and vested interests.

Additional research should be carried out to fill out and assess the robustness of the findings discussed above. Pending that, we make four recommendations. First, think tanks, university programmes, and other institutions involved in foreign policy analysis should be obliged – legally or otherwise – to be more transparent about their funding.⁹⁴ The fact that many of the participants in the intellectual debate on nuclear security are opaque about their funding sources should be a cause for asking further questions – not the opposite. We suggest that research institutions should disclose all donors, as well as the size of the donations they receive. According to the Guiding Principles for Nonprofit Newsrooms developed by the American Press Institute, news organizations should develop and spell out their ‘ethics policies, mission statements, conflict of interest policies and fundraising policies on their websites’.⁹⁵ The same

could be applied to research institutions. Yet transparency alone is not enough to avoid bias; in fact, disclosure of conflicts of interests has been shown to have perverse effects in some circumstances.⁹⁶ Transparency can also be ‘lost in dissemination’. For example, when news organizations use or publish material developed by external think tank researchers, they seldom report the respective research institute’s sources of funding, let alone the potential conflicts of interest involved.⁹⁷ Notwithstanding these limitations, however, we would regard increased transparency as an improvement on the current state of affairs. Citizens should have a right to know who pays for the reports, op-eds, and articles that shape their world.

Second, IR scholars with tenured jobs at universities should not surrender the policy debate to actors with partisan alignments or financial stakes in the game. Scholars in the social sciences and humanities have a particular responsibility to take part in public debate and education. Likewise, national and regional research councils with no independent interests beyond the pursuit of knowledge should provide funds for policy relevant work. High quality policy analysis is important not only to inform specific political choices and proposals, but also to ensure a healthy intellectual environment and public discussion more broadly. The militarization of the intellectual debate on foreign policy has been described as a serious challenge to public enlightenment.⁹⁸

Third, scholars, media organizations, and members of the public should be sensitized to the conflicts of interest shaping foreign policy analysis generally and nuclear policy analysis specifically. Arguably, responsible scholars, journalists, and other members of the public should stop treating think tanks and university programmes that accept large donations from vested interests as research entities and instead think of them as communications or public relations operations. Material produced by research institutes funded by vested interests should be approached as primary literature to be contextualized and interpreted in light of their authors’ material circumstances. Similarly, educators and curricula designers might arguably exercise greater source criticism when assigning readings.

Lastly, given the evidence that stakeholder funding routinely biases research and constrains intellectual debate, fundraisers at think tanks and universities should apply the precautionary principle. The precautionary principle would dictate that research institutions should endeavor to minimize financial conflicts of interest by rejecting or limiting funding from actors with political or monetary stakes in research outputs. At universities, the precautionary principle would also dictate that receiving such funding should not necessarily be treated as a scholarly achievement similar to securing funding from a body practicing blind peer-review of scholarly work. This is all the more important as the three modes of influence we identify above are likely to be amplified by non-financial institutional mechanisms, including the revolving doors that shape think tanks’ boards, management, and staff. While these other types of links fall outside the scope of this paper, they are potentially important and should be subject to further investigation elsewhere. Given what we know from a number of other fields and studies, the onus should be on those willing to accept funding from vested interests to demonstrate how and why the resulting intellectual or journalistic output does not suffer from bias – not the other way around.

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Supplemental material

Supplemental material for this article is available online.

Notes

1. Upton Sinclair, *I, Candidate for Governor: And How I Got Licked* (Berkeley, CA: University of California Press, 1994 [1935]), p. 109.
2. Nick Ritchie, 'A Hegemonic Nuclear Order', *Contemporary Security Policy*, 40(4), 2019, pp. 409–34, p. 423; Richard Ned Lebow, *A Democratic Foreign Policy* (London: Palgrave Macmillan, 2020), p. 10; Anne I. Harrington, 'Power, Violence, and Nuclear Weapons', *Critical Studies on Security*, 4(1), 2016, pp. 91–112; Benoît Pelopidas, 'The Unbearable Lightness of Luck: Three Sources of Overconfidence in the Controllability of Nuclear Crises', *European Journal of International Security*, 2(2), 2017, pp. 240–62; Benoît Pelopidas, 'Nuclear Weapons Scholarship as a Case of Self-Censorship in Security Studies', *Journal of Global Security*, 1(4), 2016, pp. 326–36, p. 326; Kjølv Egeland, 'The Ideology of Nuclear Order', *New Political Science*, 43(2), 2021, pp. 208–30; Neil Cooper, 'Putting Disarmament Back in the Frame', *Review of International Studies*, 32(2), 2006, pp. 353–76, p. 353; Emma Belcher, 'Transforming Our Nuclear Future With Ridiculous Ideas', *Bulletin of the Atomic Scientists*, 76(6), 2020, pp. 325–30, p. 327; Anthony Burke, 'Nuclear Reason', *International Relations*, 23(4), 2009, pp. 506–29.
3. Lawrence Freedman and Jeffrey Michaels, *The Evolution of Nuclear Strategy*, 4th ed. (London: Palgrave Macmillan, 2019), p. 672.
4. Carina Meyn, 'Realism for Nuclear-Policy Wonks', *Nonproliferation Review*, 25(1–2), 2018, pp. 111–28, pp. 116, 118.
5. Campbell Craig and Jan Ruzicka, 'The Nonproliferation Complex', *Ethics & International Affairs*, 27(3), 2013, pp. 329–48, p. 336.
6. See, e.g., Alicia Sanders-Zakre and Susi Snyder, *Complicit: 2020 Global Nuclear Weapons Spending* (Geneva: International Campaign to Abolish Nuclear Weapons, 2020).
7. William J. Perry and Tom Collina, *The Button: The New Nuclear Arms Race and Presidential Power From Truman to Trump* (Dallas, TX: Ben Bella, 2020), p. 215.
8. Nick Ritchie and Kjølv Egeland, 'The Diplomacy of Resistance: Power, Hegemony and Nuclear Disarmament', *Global Change, Peace & Security*, 30(2), 2018, pp. 121–41, p. 131; Ray Acheson, *Banning the Bomb, Smashing the Patriarchy* (Lanham, MD: Rowman & Littlefield, 2021), pp. 19, 185. See also Stephen M. Walt, 'It's Time to Fold America's

- Nuclear Umbrella', *Foreign Policy*, 23 March 2021, available at: <https://foreignpolicy.com/2021/03/23/its-time-to-fold-americas-nuclear-umbrella/> (accessed 19 April 2022); Nick Ritchie, 'A Contestation of Nuclear Ontologies: Resisting Nuclearism and Reimagining the Politics of Nuclear Disarmament', *International Relations*. Epub ahead of print 28 September 2022. DOI: 10.1177/00471178221122959.
9. Tiziana Stella and Campbell Craig, 'Is International Cooperation Possible?', *The Washington Post*, 19 April 2022, available at: <https://www.washingtonpost.com/outlook/2022/04/18/is-international-cooperation-possible/> (accessed 19 April 2022). See also Campbell Craig, 'Solving the Nuclear Dilemma', *Journal of International Political Theory*, 15(3), 2019, pp. 349–66.
 10. Carol Cohn, 'Sex and Death in the Rational World of Defense Intellectuals', *Signs*, 12(4), 1987, pp. 687–718; Acheson, *Banning the Bomb*; Shampa Biswas, *Nuclear Desire* (Minneapolis, MN: University of Minnesota Press, 2014).
 11. Pelopidas, 'Nuclear Weapons Scholarship as a Case of Self-Censorship in Security Studies'; Benoît Pelopidas, 'The Oracles of Proliferation', *Nonproliferation Review*, 18(1), 2011, pp. 297–314; Benoît Pelopidas, *Repenser les choix nucléaires* (Paris: Presses de Sciences Po, 2022); Cooper, 'Putting Disarmament Back in the Frame'; David Mutimer, 'Reimagining Security', in Keith Krause and Michael C. Williams (eds), *Critical Security Studies* (London: ULC Press, 1997), pp. 187–221, p. 211; Egeland, 'The Ideology of Nuclear Order'.
 12. Meyn, 'Realism for Nuclear-Policy Wonks', p. 115.
 13. Daniel W. Drezner, *The Ideas Industry* (Oxford: Oxford University Press, 2019); Daniel Bessner, 'What are Intellectuals Good for?', *Perspectives on Politics*, 17(4), 2019, pp. 1109–14, p. 1112.
 14. Craig and Ruzicka, 'The Nonproliferation Complex', p. 341.
 15. Richard Ned Lebow, similarly, claims that US government funding has 'undeniably' shaped the intellectual history of foreign policy. Government funding 'encouraged self-censorship, and most who succumbed to it had no idea that they were practicing it'. Richard Ned Lebow, 'Self-Censorship in International Relations and Security Studies', *Journal of Global Security Studies*, 1(4), 2016, pp. 356–60, p. 359. In the 1980s, Henry Kissinger concluded that 'almost all the breakthroughs that were made in thinking about arms control happened before a lot of resources were devoted to its study. [. . .] I had an uneasy feeling the same papers were written over and over again as research funds became available'. Henry Kissinger, 'Viewpoint: The Day After', TV debate on *ABC News*, 20 November 1983, available at: <https://www.youtube.com/watch?v=p3CLeA2bOKU>, from 1h08'53s to 1h09' (accessed 11 August 2021). Writing in 2007, Richard Price argued that: 'it is all but politically impossible to even mention disarmament as a serious possibility in contemporary American political discourse unless one wants to commit career suicide'. Richard Price, 'Nuclear Weapons Don't Kill People, Rogues Do', *International Politics*, 44(2–3), 2007, pp. 232–49, p. 237. See also Joe Cirincione, 'Why the US Wastes Billions on Nuclear Weapons It Doesn't Need', *Responsible Statecraft*, 6 January 2021, available at: <https://responsiblestatecraft.org/2021/01/06/why-the-us-wastes-billions-on-nuclear-weapons-it-doesnt-need/> (accessed 20 May 2021); Marianne Hanson, 'Nuclear Weapons as Obstacles to International Security', *International Relations*, 16(3), 2002, pp. 361–79, p. 373; Stephen M. Walt, 'The Search for a Science of Strategy', *International Security*, 12(1), 1987, pp. 140–65, p. 157.
 16. Barry Buzan and Lene Hansen, *The Evolution of International Security Studies* (Cambridge: Cambridge University Press, 2009), pp. 60–6; Richard D. Lambert, 'DoD, Social Science, and International Studies', *AAAPSS*, 502(1), 1989, pp. 94–107; Ole Wæver, 'The History and Social Structure of Security Studies as a Practice-Academic Field', in Trine V. Berling and Christian Bueger (eds), *Security Expertise* (London: Routledge, 2015), pp. 76–106; Thibaud

- Boncourt, Marielle Debos, Mathias Delori, Benoît Pelopidas and Christophe Wasinski, 'Que Faire des Interventions Militaires dans le Champ Académique?', *20 & 21. Revue d'histoire*, 145(1), 2020, pp. 135–50. See also POGO's reporting on the revolving door between the Pentagon and the US defence industry: Project On Government Oversight (POGO), *Brass Parachutes* (Washington, DC: November 2018).
17. Didier Bigo, 'Sociology of Transnational Guilds', *International Political Sociology*, 10(4), 2016, pp. 398–416.
 18. Bryan Bender, "'A Big Blow': Washington's Arms Controllers Brace for Loss of Their Biggest Backer", *Politico*, 19 July 2021, available at: <https://www.politico.com/news/2021/07/19/washington-arms-controllers-nuclear-weapons-500126> (accessed 20 August 2021).
 19. On drug effectiveness and medical prescriptions, see Joel Lexchin, Lisa A. Bero, Benjamin Djulbegovic, et al., 'Pharmaceutical Industry Sponsorship and Research Outcome and Quality: Systematic Review', *BMJ*, 326(7400), 2003, pp. 1167–70; Sébastien Dalgarrondo, 'Savoir Thérapeutique et Logique Commerciale', *Annales*, 62(2), 2007, pp. 299–326; Colette de Jong, Thomas Aguilar, Chien-Wen Tseng, et al., 'Pharmaceutical Industry–Sponsored Meals and Physician Prescribing Patterns for Medicare Beneficiaries', *JAMA Internal Medicine*, 176(8), 2016, pp. 1114–22. On tobacco, see Yogi H. Hendlin, Manali Vora, Jesse Elias, et al., 'Financial Conflicts of Interest and Stance on Tobacco Harm Reduction', *American Journal of Public Health*, 109(7), 2019, pp. 1–8; Deborah E. Barnes and Lisa A. Bero, 'Why Review Articles on the Health Effects of Passive Smoking Reach Different Conclusions', *JAMA*, 279(19), 1998, pp. 1566–70. On fossil fuels, see Naomi Oreskes and Erik Conway, *Merchants of Doubt* (New York, NY: Bloomsbury, 2010); Benjamin Franta, 'Weaponizing Economics', *Environmental Politics*, 31, 2022, pp. 555–75; Douglas Almond, Xinming Du and Anna Papp, 'Favourability Towards Natural Gas Relates to Funding Source of University Energy Centres', *Nature Climate Change*, published online 10 November 2022. On nutrition, see Lenard I. Lesser, Cara B. Ebbeling, Merrill Goozner, et al., 'Relationship Between Funding Source and Conclusion Among Nutrition-Related Scientific Articles', *PLoS Medicine*, 4(1), 2007, pp. 41–6. On ocean science, finance and economics, indoor tanning and news coverage, see Naomi Oreskes, *Science on a Mission* (Chicago, IL: University of Chicago Press, 2020); Charles Ferguson, *Inside Job* (Oxford: One World, 2012), chap. 8; Zachary D. Carter, *The Price of Peace* (New York, NY: Random House, 2020), p. 385; Lola Adekunle, Rebecca Chen, Lily Morrison, et al., 'Association Between Financial Links to Indoor Tanning Industry and Conclusions of Published Studies on Indoor Tanning', *BMJ*, 2020, p. 368 m7; Emanuele Bajo, Marco Bigelli and Carlo Raimondo, 'Ownership Ties, Conflict of Interest, and the Tone of News', *European Financial Management*, 26(3), 2020, pp. 560–78; Julia Cagé and Benoît Huet, *L'information Est un Bien Public* (Paris: Seuil, 2021). In the field of nuclear security studies, an authoritative contribution published in 1998 highlights the profound conflict of interest at play when scientists funded by the nuclear complex appears as 'dispassionate experts' before the US Congress and other government entities. See Stephen I. Schwartz, *Atomic Audit* (Washington, DC: Brookings, 1998), p. 13 fn 22. The author sticks to this assessment 23 years after the work was published and regards it as still accurate as a descriptor of the situation in the 2020s. Interview with Stephen I. Schwartz, 25 August 2021. While Schwartz' statement applies to scientists, the present study focuses on policy analysts at foreign affairs think tanks.
 20. On the former strand of literature, see, in particular, Joseph Masco, *The Nuclear Borderlands* (Princeton, NJ: Princeton University Press, 2006); Hugh Gusterson, *Nuclear Rites* (Berkeley, CA: University of California Press, 1996). On the latter, see, in particular, William Walker, *A Perpetual Menace* (London: Routledge, 2012); Ritchie, 'A Hegemonic Nuclear Order'; Biswas, *Nuclear Desire*.

21. See, e.g., Stephen M. Walt, *The Hell of Good Intentions* (New York, NY: Farrar, Straus and Giroux, 2018); Oreskes and Conway, *Merchants of Doubt*; Michael J. Glennon, *National Security and Double Government* (Oxford: Oxford University Press, 2014).
22. On the political and cultural function and significance of think tanks, see Tom Medvetz, *Think Tanks in America* (Chicago, IL: University of Chicago Press, 2012); Joy Rhode, *Armed With Expertise* (Ithaca, NY: Cornell University Press, 2013).
23. James G. McGann, *2017 Global Go To Think Tank Index Report* (Philadelphia, PA: University of Pennsylvania, 2018), available at: https://repository.upenn.edu/cgi/viewcontent.cgi?article=1012&context=think_tanks (accessed 16 June 2020).
24. Al-Ahram Center for Political and Strategic Studies (Egypt), the American Enterprise Institute for Public Policy Research (United States), the Belfer Center for Science and International Affairs (United States), the Cato Institute (United States), the Centre for Economics and Foreign Policy Studies (Turkey), EGDMONT – Royal Institute for International Relations (Belgium), and the Japan Institute of International Affairs (Japan).
25. The 45 think tanks are the following: Australian Strategic Policy Institute (Australia); Atlantic Council (US); Brookings (US); Carnegie Endowment for International Peace (US); Center for American Progress (US); Center for a New American Security (US); Center for Strategic and International Studies (US); Center for Strategic and Budgetary Assessments (US); Centre for Military Studies (Denmark); Chatham House/Royal Institute of International Affairs (UK); China Institute of International Studies (China); China Institutes of Contemporary International Relations (China); Clingendael Institute (Netherlands); Council on Foreign Relations (US); Danish Institute for International Affairs (Denmark); European Council on Foreign Relations (UK); European Union Institute for Security Studies (France); Fondation pour la recherche stratégique (France); Geneva Centre for the Democratic Control of Armed Forces (Switzerland); German Council on Foreign Relations (Germany); German Institute for International and Security Affairs (Germany); Heritage Foundation (US); Hoover Institution (US); Hudson Institute (US); Institut de relations internationales et stratégiques (France); *Institut français des relations internationales* (France); *Istituto Affari Internazionali* (Italy); *International Institute for Strategic Studies* (UK); *Institute for Defence Studies and Analyses* (India); *Institute for US and Canadian Studies* (Russia); *Institute of Foreign Affairs and National Security* (South Korea); *Institute of World Economy and International Relations* (Russia); *International Crisis Group* (Belgium); *Italian Institute for International Political Studies* (Italy); *National Institute for Defense Studies* (Japan); *Norwegian Institute of International Affairs* (Norway); *Observer Research Foundation* (India); *Polish Institute of International Affairs* (Poland); *RAND Corporation* (US); *Real Instituto Elcano* (Spain); *Royal United Services Institute* (UK); *Shanghai Institutes for International Studies* (China); *Stockholm International Peace Research Institute* (Sweden); *Stimson Center* (US); *Wilson Center* (US).
26. William Walker, 'Nuclear Order and Disorder', *International Affairs*, 76(4), 2000, pp. 703–24, p. 706.
27. To identify the relevant companies, we relied on Keith Hartley and Jean Belin (eds), *The Economics of the Global Defence Industry* (London: Routledge, 2018).
28. Norwegian People's Aid, *Nuclear Weapons Ban Monitor* (Oslo: Norwegian People's Aid, 2019).
29. See Ritchie, 'A Hegemonic Nuclear Order', pp. 409–34; Norwegian People's Aid, *Nuclear Weapons Ban Monitor*; Kjøløv Egeland, 'Nuclear Weapons and Adversarial Politics', *Journal for Peace and Nuclear Disarmament*, 1(4), 2021, pp. 107–15; Benoît Pelopidas, 'The Birth of Nuclear Eternity', in Jenny Andersson and Sandra Kemp (eds), *Futures* (Oxford: Oxford University Press, 2021), pp. 485–500.
30. Perry and Collina, *The Button*, p. 128.

31. Lee Fang, 'Emails Show Close Ties Between Heritage Foundation and Lockheed Martin', *The Intercept*, 15 September 2015, available at: <https://theintercept.com/2015/09/15/heritage-foundation/> (accessed 1 June 2019).
32. Rob Evans, 'British Think Tank Received £25m from Bahraini Royals, Documents Reveal', *The Guardian*, 6 December 2016, available at: <https://www.theguardian.com/world/2016/dec/06/british-think-tank-iiss-received-25m-from-bahraini-royals-documents-reveal> (accessed 1 June 2019).
33. The appendix catalogues all financial entities and governments with interests in the nuclear-weapon modernisation and maintenance (as operationalised above) found on the respective think tanks' donor list in June 2019 (sourced either from the respective think tank's website or annual report, whichever provided more information).
34. See, e.g., Beina Xu and Eleanor Albert, 'Media Censorship in China', Council on Foreign Relations, 2017, available at: <https://www.cfr.org/backgrounder/media-censorship-china> (accessed 1 June 2022); Amnesty International, 'Russia: Educators Fired, Students Indoctrinated', available at: <https://www.amnesty.org/en/latest/news/2022/05/russia-educators-fired-students-indoctrinated-academia-is-the-latest-victim-of-the-ongoing-crackdown/> (accessed 1 June 2022).
35. The imprecision of the estimate owes to the fact that donation sums are reported in broad brackets.
36. Centre for European Reform, 'Corporate Donors', available at: <https://www.cer.eu/corporate-donors#tabs> (accessed 28 June 2019).
37. Munich Security Conference, 'Supporters', available at: <https://www.securityconference.de/en/about/supporters/> (accessed 2 July 2019).
38. Munich Security Conference, 'Advisory Council', available at: <https://www.securityconference.de/en/about/advisory-council/> (accessed 3 July 2019).
39. BASIC, 'Our Funders', available at: <https://www.basicint.org/our-funding/> (accessed 28 June 2019).
40. Nuclear Threat Initiative, '2018 Annual Report', 2018, available at: https://media.nti.org/documents/NTI_2018AnnualReport_online-FINAL.pdf (accessed 4 July 2019).
41. Meyn, 'Realism for Nuclear-Policy Wonks', p. 115.
42. Osin Tansey, 'Process Tracing and Elite Interviewing', *Political Science & Politics*, 40(4), 2007, pp. 765–72.
43. Interview with sponsorship manager for a company involved in the production of nuclear weapons (interview 10), 2 October 2020; Interview with a former grant manager for the ministry of defence of a nuclear-armed state (interview 09), 28 September 2020; Interview with former think tank employee (interview 12), 4 August 2021.
44. Interview with former think tank employee (interview 01), 20 May 2020.
45. Interview 10.
46. Interview with former think tank employee (interview 02), 2 June 2020.
47. Interview 01.
48. Interview with former grant manager (interview 07), 4 August 2020.
49. Richard Higgot and Diane Stone, 'The Limits of Influence', *Review of International Studies*, 20(1), 1994, pp. 15–34, p. 30.
50. Interview with think tank employee (interview 08), 5 August 2020.
51. Interview 08. See also Thomas F. Babor, 'Diageo, University College Dublin and the Integrity of Alcohol Science', *Addiction*, 101(10), 2006, pp. 1375–77, p. 1377.
52. Interview 10.
53. Interview 09.
54. Interview 07.
55. Simone Turchetti, 'Trading Global Catastrophes', *Journal of Contemporary History*, 56(3), 2021, pp. 543–62, p. 545.

56. See, e.g., 'Censorship and Self-Censorship in Russia', Wilson Center, 18 February 2020, available at: <https://www.wilsoncenter.org/event/censorship-and-self-censorship-russia> (accessed 19 April 2022).
57. E.g. Ali Breland, 'Google Faces Blowback After Think Tank Fires Critic', *The Hill*, 9 April 2017, available at: <https://thehill.com/policy/technology/348947-google-faces-blowback-after-think-tank-fires-critic> (accessed 1 July 2019).
58. Interview with former think tank employee (interview 03), 9 June 2020.
59. Interview 08.
60. Interview 02.
61. Interview 01.
62. Interview 01.
63. Eric Lipton, Brooke Williams and Nicholas Confessore, 'Foreign Powers Buy Influence at Think Tanks', *New York Times*, September 6, 2014, p. A1.
64. See fn 25 above.
65. Interview 03.
66. Interview with think tank employee (interview 05), 29 July 2020.
67. Interview 08.
68. Interview 01.
69. Interview with think tank employee (interview 04), 19 June 2020.
70. Interview 02.
71. Interview with think tank employee (interview 11), 6 October 2020.
72. Interview with grant manager (interview 06), 31 July 2020.
73. Interview 01.
74. Interview 02.
75. Interview 08.
76. James G. McGann, *Think Tanks and Policy Advice in the US* (Philadelphia, PA: Foreign Policy Research Institute, 2005), p. 23.
77. Interview 04.
78. Interview 05.
79. Interview 06.
80. Perry and Collina, *The Button*, p. 128.
81. Interview 07.
82. Interview 09.
83. Interview 10.
84. Drezner, *The Ideas Industry*, p. 139.
85. Interview 01; Interview 02; Interview 03.
86. Such insights are in line with the findings of Noam Chomsky and Edward Hermann on self-censorship without coercion in the mass media, developed in *Manufacturing Consent: The Political Economy of the Mass Media* (New York, NY: Pantheon, 2002). On the clash of interest between the media and the elite funders, pp. 3 and 14.
87. Michaela Dodge, 'Trump's Nuclear Posture Review Must Keep Us Safe', Heritage Foundation, 22 January 2018, available at: <https://www.heritage.org/missile-defense/commentary/trumps-nuclear-posture-review-must-keep-us-safe> (accessed 1 July 2019).
88. Megan Rohn and Tom Callender, 'Exiting the INF Treaty Over Russian Violations Would Send a Signal of U.S. Resolve', *The Daily Signal*, 5 February 2019, available at: <https://www.dailysignal.com/2019/02/05/exiting-the-inf-treaty-over-russian-violations-would-send-a-signal-of-us-resolve/> (accessed 30 June 2019).
89. Jon Schwarz, 'How to Dismantle the Absurd Profitability of Nuclear Weapons', *The Intercept*, 4 May 2019, available at: <https://theintercept.com/2019/05/04/nuclear-weapons-profits/> (accessed 16 June 2020).

90. Eric Lipton, 'Scholarship or Business? Think Tanks Blur the Line', *The New York Times*, 8 August 2016.
91. Interview 02.
92. For a definition and analysis of three of its sources, see Pelopidas, *Repenser les choix nucléaires*, chap. 6.
93. Matthew Rendall, 'Nuclear War as a Predictable Surprise', *Global Policy*, 13(5), 2022, pp. 782–91.
94. This trend is visible in medicine. In 1993, the *International Committee of Medical Journal Editors* adopted a first common declaration on the crucial importance of the management of conflicts of interests for the credibility of scientific publications. Boris Hauray, 'Conflits d'intérêts et Santé Publique', *Sciences Sociales et Santé*, 38(3), 2020, pp. 5–19, pp. 6, 10. Charles Ferguson shows how his award-winning documentary *The Inside Job* did not suffice to generalize the practice of disclosure requirements. *The Inside Job*, pp. 255, 273.
95. American Press Institute, 'Guiding Principles for Nonprofit Newsrooms', 12 January 2017, available at: <https://www.americanpressinstitute.org/publications/nonprofit-newsrooms-guiding-principles/> (accessed 17 June 2020).
96. Daylian M. Cain, George Loewenstein and Don A. Moore, 'The Dirt on Coming Clean: Perverse Effects of Disclosing Conflicts of Interest', *The Journal of Legal Studies*, 34(1), 2005, pp. 1–25.
97. For example, within a week of the INF Treaty's demise, *The New York Times* published an op-ed by a research fellow of the CSBA warning that America 'could lose a real war against Russia' and recommending the US government to 'level the playing field' with China and Russia by developing and fielding new intermediate range missiles. Timothy A. Walton, 'America Could Lose a Real War against Russia', *The New York Times*, 5 August 2019, available at: <https://www.nytimes.com/2019/08/05/opinion/inf-treaty-putin-trump.html> (accessed 16 June 2020). The analyst in question worked for 'an independent policy institute in Washington', the newspaper informed its readers. *The New York Times* thus neglected to mention that CBSA receives large donations from many of the companies most likely to profit from the manufacture of the weapons the author recommended built, including Aerojet Rocketdyne, BAE Systems, Boeing, Lockheed Martin, Northrop Grumman, and Raytheon.
98. Boncourt et al. 'Que Faire'.

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