

Defining Dual-Use:

An international assessment of the discourses around technology

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Good afternoon everyone. I'm sorry that I am not able to be here in person to give this presentation, but due to the benefits of modern technology, I can at least be here in some form. And if you're hearing this, I assume that all's going well so far!

[If it isn't going so well, then I suspect these words are being read to you right now by someone else. Alas, another case of modern technology not living up to all its hype]

I'd like to thank Daniel Feakes and the other organisers for giving me the opportunity to present today.

My topic looks at how debates over how technology should be used and distributed are also avenues through which different normative discourses can contend with one another. I am doing this by looking at how decisions are made on which technologies should get on and off of the Dual-Use list of the Wassenaar Arrangement – the international group that covers all technologies of possible military significance that are not related to weapons of mass destruction. I am currently in my initial phase of interviewing, and actually as I speak to you here am in Vienna meeting people at the Wassenaar's Secretariat.

In the next few minutes, I hope to give you a taste of my research, and an understanding of how it is part of this seminar series when it has an explicit focus on non-WMD.

I begin with some background. Export controls can be broken into two main categories. On the one hand you have fully functional weapons systems – an Aegis Cruiser or nuclear missile – and on the other you have technologies that are considered necessary to the development of these weapons systems or to military capabilities more generally. The second of these two categories are called 'dual-use' technologies. How technologies gain and lose the label of dual-use is the topic of my research.

You can see that I have broken down the dual-use category into two sections. The first section covers technologies that *contribute to the development of a particular weapons system*. These technologies are the main type found on the multilateral dual-use lists for WMD technologies.

The other section covers *technology that is not related to the development of any particular weapons system, but rather to the development of military capabilities more generally*. Technologies that fall under this type include super-computers and advanced telecommunications equipment, advanced materials such as bullet-proof vests, types of machining equipment, navigation equipment. . . in short, everything that countries think might give an adversary a military advantage. The multilateral group that maintains lists of most of these dual-use items is the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies.

I have decided to focus my research on the Wassenaar, and thus the second type of dual-use technology, because, of the multilateral export control regimes, I believe it is the one where the role of technical expertise is likely to be most limited. This is important because, if true, it would be an excellent arena to study how different types of discourse (political, social, economic, as well as technical) interact in determining which technologies gain and lose the dual-use label. I will now briefly describe the types of questions I will be investigating and my methodology for doing so.

Questions to find answers to

The first question, a rather obvious one, is 'What is a dual-use technology?' I skirted around defining it earlier in the presentation, saying only that they can be broken into two sections. This is a question that has, to my knowledge, received very little attention by researchers so

far. One of those who has looked at the nature of dual-use technologies is, I hope, currently sitting in the room. Catrina McLeish's doctorate looked at efforts to strengthen the Biological Weapons Convention by incorporating industry's perspective. Central to her thesis is that industry and government had different understandings of what technologies should be considered dual-use. The working definition that she used is as follows: dual-use technology is 'a technology that has, or has the potential to be, used for hostile and/or peaceful purposes.' While she was studying biological dual-use technologies, this definition is equally useful as a starting point for analysis of conventional technologies. I am quick to point out here that each of the terms in this definition is contested, and it is that contestation that I am hoping to draw out.

In order to analyse how people understand dual-use technologies, I will need to enquire into their understanding of the concept of technology as well. In doing so, I am pulling heavily from the academic work on Science and Technology Studies. In particular, I am developing on Brian Rappert's work on the use of non-lethal weapons. What constitutes a non-lethal weapon, according to Rappert, is as much a factor of how the technology is created as how it is used in society. Therefore, technical expertise should be no more (or less) privileged in the deliberation process than other types of arguments.

So what are those other types of arguments? This is my third question for analysis. Surely there are arguments presented on grounds of national security. The Wassenaar's *Initial Elements* lays out clearly that the Arrangement has been established to 'contribute to regional and international security and stability' by 'preventing destabilising accumulations' of technologies. It is not clear, however, what counts as a 'destabilising accumulation', and what regions we should be considered. What is to be secured and from what are questions that have received much attention in the Security Studies literature, such as the work done in Critical Security Studies and on Security Communities.

There are also likely to be arguments raised from industry, where the motive is perhaps to get technologies off of the control lists because of their economic value. Apple employed this argument beautifully a few years ago when it ran an ad campaign around the fact that its new top end computer was not allowed to be sold outside of the United States because it was classified as a super-computer (and thus a dual-use technology) on the US's export control lists.

Arguments are also likely to arise that have little to do with the actual technologies being debated over. The most prominent of these is likely to be similar to that raised by Amitav Mallik in his book *Technology and Security in the 21st Century: a Demand Side Perspective*. In this book, Mallik takes a nuanced version of the argument that countries who have these advanced technologies are perhaps controlling them because they wish to maintain an economic superiority over countries that do not have the technologies. This has an adverse effect, Mallik argues, on the overall ability of developing countries to develop.

Whether or not these arguments are 'right' is not an issue for me. What is an issue is that people feel justified in raising these arguments when debating dual-use technologies.

Methodology and Initial Findings

My two primary sources of data will be unclassified documents relating to dual-use labelling at the Wassenaar and interviews with individuals who play a part in the labelling process. This includes individuals in member state delegations, as well as others who help prepare for the meetings. Not all of these will be governmental employees. Already, for instance, I have found that some state delegations include individuals from industry. I will also be in contact with non-governmental organisations that have particular stances on the Wassenaar and export controls more generally. Finally, there are a number of academic institutions, such as

Bradford, the University of Georgia, and SIPRI, that will provide alternative academic perspectives on the Arrangement. My initial attempts at access have been very successful, with all parties taking a noted interest in my research.

Interviews will be conducted in the home countries if possible. I currently have a Visiting Research position at the Georgetown University's Center for Peace and Security Studies in Washington, DC, which will aid in my data collection in the US. I will also be spending time in Vienna around the dates of the key meetings. While I will not be able to gain access to the meetings themselves, it seems likely that I will be able to speak to representatives and others present around the meetings.

Initial findings suggest that there are widely different attitudes around the purpose of the Wassenaar Arrangement and its effectiveness. A lawyer I interviewed, for instance, suggests that export controls will not have much if any effect on stopping proliferation of dual-use technologies. A former member of a national delegation takes quite a different view, speaking about the great strides the Arrangement has made in the last ten years, not so much speaking about the lists as about the creation of a community of shared norms.

Relation to WMD Research

So how could my research be helpful for all of you who are working on WMD topics? Well, I think a valuable insight could be in understanding the interplay of technical and non-technical factors in determining which technologies should be controlled. Unlike chemical, biological, or nuclear technologies, there are no norms or international legal documents saying that the use of these technologies, even for hostile purposes, is something to be abhorred. Therefore, there is much more room for debate and discussion, and as a result, a deeper understanding of how these debates are structured, and how they are not only about the technology themselves, but are also arenas where different value and belief systems can

interact and develop ways of co-existing.

Questions for the audience

I would enjoy feedback on any of the points I raised above, but I would also like input from the older and younger generations present. For those who have been in this business since the Cold War, what is your perception of Wassenaar as the first post-Cold War multilateral export control regime? For the other students here, what connections do you see between my research and yours, both theoretically and empirically?

Thanks for your time!