PRE-DEFENCE REPORT: EXTERNAL EXAMINER'S COMMENTS (FINAL)

Candidate: Nikola Schmidt

Title of thesis: The Birth of Cyber as a National Security Agenda

External examiner: Dr Tim Stevens (King's College London)

Comments provided <u>in confidence</u> ahead of oral examination, i.e. please do not share with student without my permission.

Initial comments

The student has improved the manuscript greatly since its first reading, particularly in terms of tone and structure (although still confusingly numbered). It is now a lot clearer what the thesis seeks to do and how this will be achieved. The new literature review (correctly, a very selective one) provides a conceptual grounding that was previously missing. Key terms have been better defined (except 'epistemic communities', to which a brief discussion and definition the student is strangely resistant) and there is evidence that the whole text has been re-read and in places re-written. These are all valuable amendments.

There are two areas that I feel still fall short of what is necessary.

Methods and analysis

This thesis has the potential to make a useful intervention in its field, specifically in its application of archaeological methods to the social construction of cybersecurity. The student – in his response to my initial review – appears to have missed one key point about method: once introduced as 'the way of doing things' in this thesis, this task needs to be followed through. The conceptual and theoretical framework is established firmly in the section, 'Archaeology, genealogy and the rules of discourse', and would seem to be an innovative approach to the problem at hand. However, it is only applied in uneven fashion throughout the subsequent 'empirical' chapters. If so much effort is expended on constructing such a framework, why not use it more rigorously? The student's suggestion that it is there only to 'attune the reader for the empirical part' rings hollow, as does his statement that he 'did not put attention on clarity of evidence'. This is confusing, as methods exist to provide rigour, and evidence exists to support argument. I am unconvinced that either pertains in much of this thesis.

Without asking for clear chains of causality – which I was not, and am not; after all, we are talking about discursive fields, etc – it is still necessary to be a little more careful with exposition, evidence and analysis. Richard Jackson's *Writing the War on Terrorism* (cited here) and David Campbell's *Writing Security* (not cited) are both good examples of how to pick apart discourse without losing clarity, objectivity or rigour. The point is that the reader (and any future reviewer) will need to know what the author is doing at any given place in the text. It is often unclear how the empirical chapters fit within the conceptual framework – which looks like a method – previously described. Yes, fields reappear in the conclusions to each chapter but the empirical sections need to be more firmly anchored and show precisely what the student is hoping to achieve in each section. It is only when we get to the penultimate section ('The birth of cyber...') that things get tied up a little better and the reader is reminded where we started this journey and why. Ideally, the methods and analysis sections would be a self-contained unit, tightly organised and argued; at present, they are not.

STS and archaeology/genealogy

There is a tension in this thesis that is not satisfactorily resolved. To start with, valuable ideas from STS are introduced to frame security politics and practices. These are then jettisoned to talk, essentially, about discourse analysis. This approach is then all but forgotten in the concluding chapter, at which point we pick up the STS story again. There is some attempt at the end to discuss the two approaches together, although Foucault and Latour are not entirely happy bedfellows. I wonder, though, where the thesis provides the 'completely new perspective for research in STS' (p. 59)? Or, indeed, how this cross-fertilisation opens up new avenues for critical analysis generally, as I agree it should?

It is also in this final section that the thesis needs to demonstrate how it has extended current security scholarship. This might involve going back to 'previously developed knowledge' (cf. student's comments), not to show the importance of the 'old' scholarship but to demonstrate the significance of the student's own work. There are plenty of insights in the concluding parts of the thesis but they could be strengthened by better organisation and with reference to how they extend and improve existing scholarship. If monograph publication is the ultimate aim a good editor and reviewer will demand all of these things and probably more.

Final comments

This is not the most original of theses but that needn't be an obstacle to a pass. What concerns me is that its most original aspect – the application of a Foucauldian archaeological method to a discursive

field of great contemporary salience – is not dealt with in sufficient detail or with appropriate rigour. What remains is therefore an under-cooked exploration of quite familiar territory. This can be rectified but it will take significant rewriting of, particularly, the empirical chapters to show how the archaeological method can be applied to the three fields of discourse identified. This might also help the student show how they differ, if they do, why that is so, and the political implications of those findings. The mutual interplay of STS and discourse analysis also needs to be handled better. With these two main tasks completed, the thesis stands a much better chance of a) being published, and b) making a valuable intervention in the field. At present, it lacks analytical or critical bite.

Suggested decision
Pass with corrections (3-6 months, at discretion of institution)

Signature of examiner:

Date: 6 September 2016

Appendix: Specific comments / observations / corrections

All page numbers refer to final pdf version of thesis.

- spelling and grammar should be addressed in the final draft

- on ANT: look up Dunn Cavelty and Balzacq's article, 'A theory of actor-network for cyber-security', *EJIS* 1, no. 2 (2016): 176-198.

- p. 61: 'these steps are conducted randomly' – no, they're not; the selection aspect of the methodology needs to be better explained

- p. 61: re the description of the methodological approach in layers – you need to insert a sentence that outlines what all the layers are. It is not until p. 65 that we find out what the second layer is, which is very confusing. This is a minor structural issue but a useful one to clarify.

- p. 61ff: It is probably too late for the final thesis but it might be useful to generate some form of diagram that shows how all these layers and flows articulate. There are so many terms in this section that all but the most hardened readers of Foucault and his adherents are likely to get very confused, including commissioning editors and book reviewers. [Apologies – you do perform a similar exercise at section 4.7]

- p. 65: 'conventional waring' – what word should sit where 'waring' currently does?

- p. 68: I think you are talking here of 'reproduction' as much as you are of 'production'

- p. 70: there is a potentially very interesting theoretical argument to be made here about the relations between epistemic authority, network assemblages and 'surfaces of emergence' – this doesn't seem to be expanded upon anywhere.

- Patrick Jagoda has a chapter on sci-fi and cybersecurity in the volume edited by Derek S. Reveron, *Cyberspace and National Security*.

- p. 99: 'All these cases share the same values – to alter the legitimacy of the real world in cyberspace.' Is 'cyberspace' not a 'real' world? Or is it hyperreal? Or something else? I always baulk when the 'virtual' is treated as un-real.

- pp. 100-101: I think the current jargon for these forms of services is 'peer-to-peer'... [you do mention this on p. 135]

- p. 101: do you not think there is something even remotely 'special' about the informationalisation of goods and services?

- p. 103: 'first ever use' – 'first recorded use'

- p. 103: 'Cybernetics is about the scientific enquiry of governance ...' – you've used this phrase twice in successive paragraphs; try and disentangle these.

- pp. 103-104: the discussion of cybernetics is under-developed here. The broad argument is correct but the reference only to Barnabas Johnson (who is he?) is insufficient. This needs to be expanded slightly and referenced properly.

- p. 104: I also don't know what 'the naturally-cultural world' means

- p. 104: the discussion of tyranny and virtue doesn't seem to lead anywhere; how does it link to the following section?

- p. 111: it's not necessary to consider it here but there's an interesting passage near the beginning of Chamayou's *Drone Theory* that looks at the early emergence of cyborg technologies like Clynes'.

- p. 135: 'digital recordings on plates' – what are these?

- p. 141: 'Questioning the manifesto as a radical left is usually appraised as a violation of crypto anarchist code that leads to exclusion from the movement.' Do you have any evidence of this that can be cited?

- p. 145: 'We should remind the reader that the governance of internet technologies is the instrumental power, but certainly not the structural power.' How so? Might the power relations instantiated by such governance not become truly structural? Particularly if corporations are involved?

- p. 159: Bauman is actually Bauman *et al* – this is a recurring error.

- p. 168 and many other places: discussions of the social construction of 'cyber terrorism' should refer to the work of Maura Conway at the very least, and to Stuart Macdonald and Lee Jarvis if possible.

- p. 169: 'The history of hacktivism can be dated to 1984 when the word was coined by Steven Levy in his work Hackers: Heroes of the Computer Revolution.' For a student of genealogy, this is an odd statement – history and etymology are not the same. Hacking and hacktivism date to the 1960s at least and the brief account here ignores not only the history of these dynamics (e.g. Jordan & Taylor) but their genealogy, and the literature on the social construction of hackers (e.g. Halbert).

- p. 176: 'Both groups are discursively depicted' – evidence? This is one of many similar assertions that is not supported by evidence. The statement might be correct but how were they represented and by whom? Who is doing the discursive work? What do they say?

- p. 179: discussion of deviance and cybercrime might benefit from looking at the work of Thomas Holt.

- p. 179: 'The policy against catastrophe constructs the catastrophe itself.' – yes; one of the key arguments in my own book, *Cyber Security and the Politics of Time*.

- pp. 180-182: it's just not normal to quote documents in their entirety; consider a single paragraph in which you summarise Barlow's argument in your own words. This is so well known that you really don't need to quote the whole thing anyway.

- p. 184: 'In particular children are natives, while the others are immigrants, authorities are immigrants.' The digital natives/immigrants thesis is tired and often rejected these days. There is plenty of commentary refuting it and even Marc Prensky doesn't use it very much. See, for example, http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8535.2007.00793.x/full.

- p. 186: 'the criminals are interested in development of global cyber-crime cartels' – this would seem an overstatement; most are petty, small-time opportunists, not global criminal masterminds.

- p. 187: 'Currently still in perspective of knowledge production, not body augmentation, yet.' This is a curious statement. Why is the issue of body augmentation *relevant at this point in the argument*?

- p. 192: 'Rid's article called Cyber War Will Not Come' – this is not the correct title.

- p. 194: 'I analyzed it on page 87' – yes, you did, but you need to remind the reader what the speech was about and why it was important

- p. 195: 'the blackout in 2003) – which blackout?

- the mention of citations of Clarke & Knake ignores the fact that many of these citations are less than complimentary – I have cited it several times, for instance, none of which is supportive of the book. Is this not a challenge to the 'church of knowledge'?

- p. 202: 'managers of unease' – this is Didier Bigo's term, is it not?

- p. 237: 'Only beliefs that are culturally bounded us together in the victim of the others who cause the situation.' – I have no idea what this means.