File 20111201.0915: Notes from Skype call with Dr Fléchais this morning:

Problems getting Skype going; it would not recognise the camera and I had to reboot. Call started about ten minutes late because of it. I apologised for the delay, saying Skype does this, but *always* when I have an important call.

I met with Dr Fléchais for an hour via Skype. I first briefly updated him on my work finishing the probabilistic redaction project for the Air Force and the effect it had on my thesis progress. Then we got down to work.

It is time to get started on the one thing stopping me from finishing my dissertation, he said.

I understood Anne Adams' dissertation less well than Shamal's or Dr Fléchais's, I confessed. He said Anne Adams went a little too far, using Grounded Theory to structure her whole thesis—she went overboard. It worked for her, which is fine. The reason Marina and Ivan suggested GT to me at confirmation was because it seems very flexible. Unfortunately, I have large amounts of data—very large, and that's a bit of a problem for GT, as it tends to blow up on large amounts of data. I have to find a version of GT that works for me.

It is incredibly time consuming to code every word, sentence, paragraph—whatever your particular version comes down to—but for Ivan, the the act of transcribing is enough to give him a sense of the data.

Sense making is the goal. 'Why' this answer is going where it is. Impossible to generalise, because it is.

It takes everybody a while, he said, to come up with good models. It took him a while, it took Shamal a while. It is also not reasonable to expect anyone to come up with models in isolation.

Codes are for evidence linking data with concepts. He saw promising stuff in my colour coding at confirmation.

Three things to validate:

- First, check your models for internal consistency. The great thing about using ATLAS.ti is that it makes this a one-click operation.
- Next, show the model to someone else. See if they agree it's valid. They will ask questions about it, poke holes in it for you, help make it watertight. This is important before going up against the examiners.
- Thirdly, go back to your informants and show them the model. This is a very important part of the validation. Don't just verbally do it, *keep records of every interaction.* You need quotations, evidence that you can show the examiners later to *prove* you validated your model with the actual practitioners.

I remarked that I have done some of that already, informally; that I showed my early model of accreditor interaction (the springs and trajectory model) to Paul Ozura and Tom Marso and they both allowed as how it seemed reasonable. Dr Fléchais called this *'gold dust'* and told me to document it. I said all my notes are documented with timestamps in my notes file. What I need are quotes and transcripts of these meetings, though. For evidence before the examiners. It should all appear in the dissertation. Not just verbally.

He asked me about backups. I said I have backups. He said the worst thing ever is to lose five hours of coding. Have good backups.

I interrupted at this point to ask permission to backtrack and re-code all of CS-1 in ATLAS.ti. Dr Fléchais concurred and I believe he was pleased that I suggested it.

It seemed in my confirmation, he said, that I had good insight on these things, but we need to see a model for validation. I claimed that the cost and time of certification and accreditation of cross domain systems are too high. What are the reasons I think why this occurs? Is it due to:

- Technical complexity?
- Breakdown in communication?
- Over-regulation?
- Inefficient processes?

I interrupted to say I thought it was obstructive personalities in some cases; at least that's what some of my informants say—but that's hard to write about; how do I say it in a dissertation? I thought some of it was feuds, turf wars. (Paul Ozura called it turf wars, as I recall; Kevin Miller complained about abrasive personalities.)

Call it 'cultural disparities' or 'culture clash', said Dr Fléchais; that is the more politically acceptable terminology.

How can I get inside someone else's head, I complained, when I can't read minds. All I can draw inferences from is what people do, write, and say. I can't read minds.

I must make interpretations, he said. Be very, very neutral. Step back and focus on the factors affecting accreditation. What will help it proceed and what won't.

I remarked at this point that that's how I always conduct myself in daily life—I think of it as building models in my head of other people's behaviour—I do it on cats and dogs as well as on people; I try to build a model of their internal mental state so as to predict their behaviour and determine if they are angry at me for lack of progress or pleased with my work. I can't read minds; everyone else seems to be able to read minds, they say they know what others are thinking; I can't do that, so I build models of other people and try to predict their next action based on that. I never thought of it before as doing grounded theory, but that's what I am doing. Interesting...

Back to the dissertation, in Chapter 1, we don't even know what those factors are. All we know is the process isn't working.

Recommendation: code all three case studies in ATLAS.ti. You can only do an analysis if you've recently coded it. I have permission to backtrack this much.

From here on out, I have to be extremely mercenary. I have to do this to the exclusion of everything else that is not life-essential. He will drive me hard. I will hate him by the end of this, but it's for my own good. Dr Fléchais wants results, he wants works in progress, he wants models as they evolve.

I suggested maybe dealing with the overwhelming amount of data by only coding one phase of it to start, as the process is nicely broken down into phases already: Alpha, Beta I, Beta II.

Don't do that, he said. Do it the other way around. It is crucial to code *everything*. Don't second-guess and constrain the anslysis accidentally. It is a trap. Painful, really painful, but it has to be done. Code absolutely everything because you never know what the important stuff is until you're done. It has to be done.

ATLAS.ti is a very easy tool to use but you must do the coding first.

Dr Fléchais wants to know first how many documents I have. I have three case studies. He wants to know, to keep track of my progress, how many pieces of data there are. So first, do a count and report that. Each time I report, report $x$ done out of $y$. I noted that the evidence in CS-1 is primarily my time-stamped notes; CS-2 is documents and draft documents, and CS-3 is I don't know.

There must be three distinct case studies. If I had gone before the examiners with one coded by hand and two done with ATLAS.ti, that would have raised a red flag. 'Why did I do it that way?' Better to do all three case studies the same way. But they must be distinct.

Do the coding of CS1 as quickly as I can. Dr Fléchais wants particularly to be involved in the categories step.

Also, keep notes as I go along—memoranda. I related that I have been doing that all along, and I hope I can effectively separate them out. Code them as such, he told me. It's all right.

We talked about what hours Lockheed will need from me during the next four weeks. My first priority now is to code, code, code. No interpretation, just get it done as quickly as possible. That will take me a while. I should ignore the colour coding that I already did and go back to the original data, the 'appendix' I brought with me at confirmation.

For a regular meeting, 3pm is a good time for him. If I ever want to talk, just email.

Send a report at close of play every day. Don't ever hesitate to get in touch if I get stuck. Don't waste days ruminating over problems. Sometimes, the effort of articulating your problem to describe it to someone else helps to solve it.

Dr Fléchais realises it's more difficult for me because I am remote. Doing research in isolation is harder. It would be better if I were in Oxford—I told him I'd be there in a second if I had the money to travel—but I can do it by keeping the lines of communication open. It is worth it to finish, he said. The doctorate is worth it.

Duration of call: 52 minutes.

## References