Information Security and the Problem of Evil

> All you need is love. - the Beatles

If you agree with Lennon and McCartney that love is all you need, feel free to skip the rest of this course. Everyone in the world only wants the best for you and no one is going to mess with your data.

Still reading? Then someone, somewhere, is out to steal your data, hack your files, impersonate you online, ruin your reputation, drain your financial accounts, or fry the circuits that control your grid. Any story of IT security needs villains. Bad actors. Those who mean you harm. But who are these bad actors and why are they "bad"? IT security assumes conflict. Us versus them. Generally speaking, "we" are out to protect "ours". "They" are out to take "ours" for themselves. A very interesting and useful question in today's globalizing society, though, is where do we draw the lines around "us" and "ours" and who exactly is the "we" who is drawing those lines?

In this course we will approach IT security challenges from a wide-angled philosophical view. To help this process, a while back I invited an actual philosopher to visit our campus:

https://www.lenerachelandersen.com/

Lene is a futurist, an ethicist, and an educator. Her movement is called "Bildung", which comes from the German, was adapted by the Danes, and in current English translates something like "well-rounded education for a democratic society". That's my point of view for this course. Another philosopher I admire, Jürgen Habermas, talks about the "view from nowhere", which is what many scientific thinkers aspire to have. Namely, an abstract view of how the world works, as if we were somehow standing outside the world looking in on it and not actually part of the world ourselves. My view is not from nowhere. It's from somewhere. It's from a time and a place and a set of life experiences. All of those life experiences make me value democracy, freedom, opportunity, human dignity, and species-level survival. My practice of IT security is a practice of all that. And more. The challenge, of course, is how to operationalize such values in a rapidly evolving technical context against the background of escalating global challenges and existential threats, known collectively by many as the "metacrisis"?

I got to know Lene by racksacking the Internet for books and theories I could use to sort out the massively complex challenges of today's global society and to find some way to align my IT practices with a convincing notion of human goodness. Let me

know by the end of the quarter how well you think all that is working out! But one thing I can say for sure about Lene's work is she has clear models with great graphics, and I want to borrow those graphics, so any of her content used in this course is with both her approval and permission.
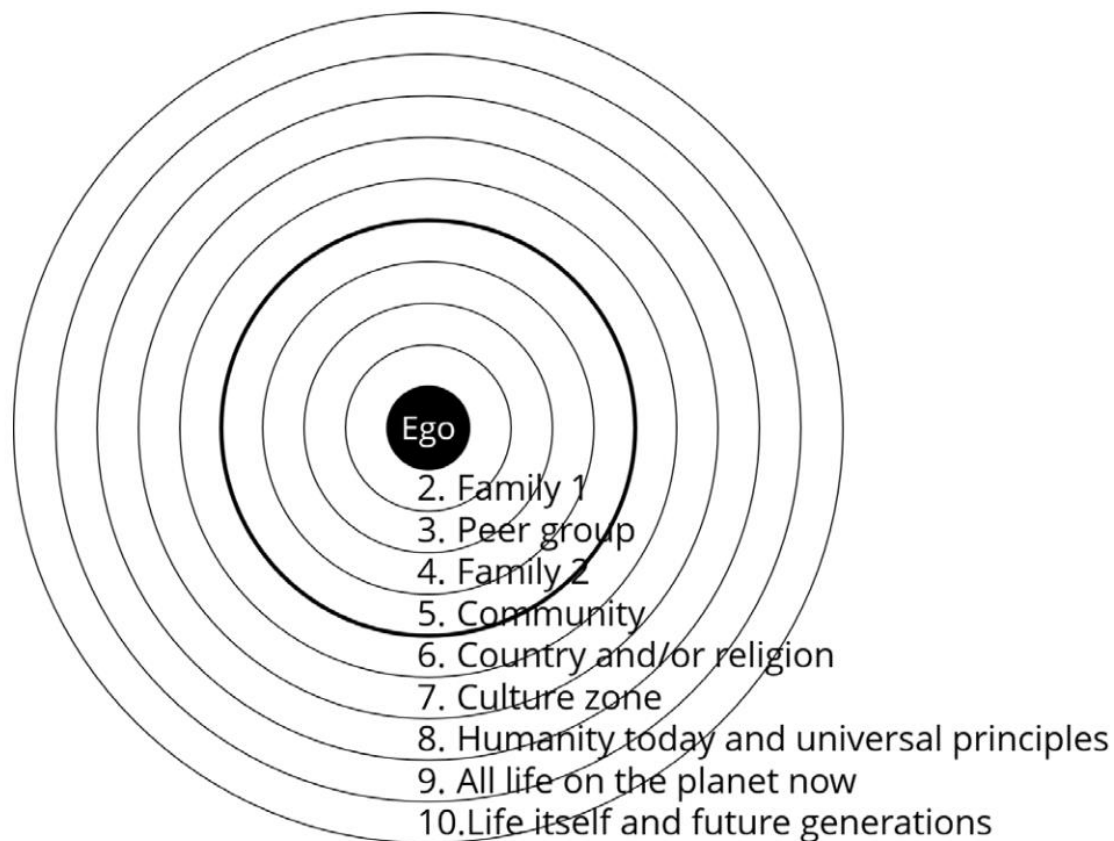
Let's start with the **Bildung Rose**, which is Lene's model for what I'm calling "well-rounded education for a democratic society".
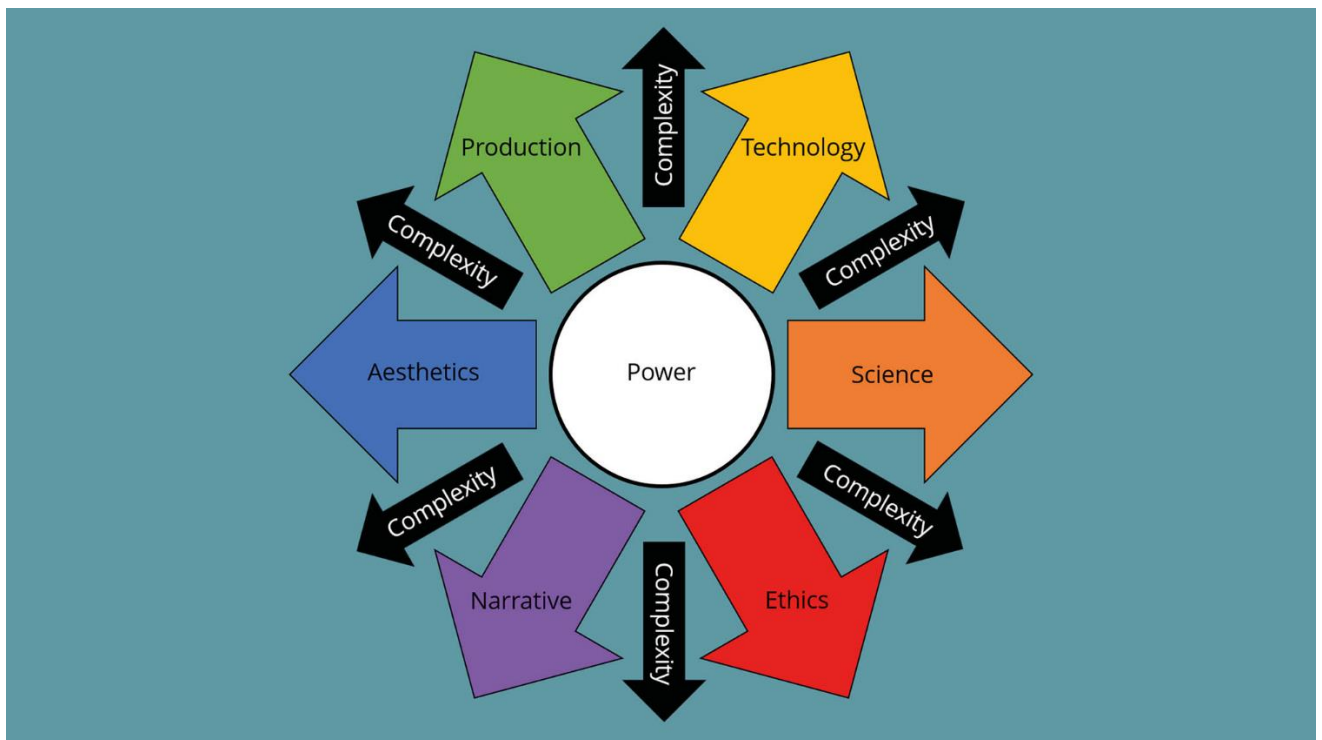
Source: https://www.nordicbildung.org/the-bildung-rose/

The main point for this class about the Bildung Rose is that technical problems can't be solved by technology alone, especially when it comes to IT security, because as soon as we introduce "bad actors" to our information security models, ethics has already entered the discussion. So too, I would argue, have all the other academic disciplines, but feel free to challenge that if you wish. In any case, as a bare minimum, IT security simply cannot be separated from science (how and why the technology works), production (jobs, money, capitalism), and power (the political question of who is "us" and who is "them"). I'm weaving those ideas into a narrative, and I hope you like the aesthetics.

Another key element of the Bildung philosophy is called **Circles of Belonging**. The Circles of Belonging model relates directly to the core definition of IT security, because it speaks to the issue of who is "us" and who is "them".

Ego
2. Family 1
3. Peer group
4. Family 2
5. Community
6. Country and/or religion
7. Culture zone
8. Humanity today and universal principles
9. All life on the planet now
10. Life itself and future generations

Source: https://eaea.org/wp-content/uploads/2021/02/What-is-Bildung-pdf-English.pdf

Lene's Bildung philosophy is articulated in several books. Among other things, it's an evolutionary philosophy. Over time, the typical human circles of belonging have mostly gotten bigger. In hunter/gather times, the typical circle of belonging was about 150 people in an extended family or tribe. That 150 is known as Dunbar's number, about the most people we can reasonably relate to in purely face-to-face communications. Somewhere in circle 5, we break out of face-to-face communities and begin viewing ourselves as participants in larger imaginal communities. Nation, religion, civilization are very large-scale imagined communities. More small- to mid-range imagined communities include schools. businesses, professions, clubs, fandoms - anything in which people share common interests, knowledge bases, processes, symbolism, value systems, holidays, rituals, or other markers of social membership. These cultural markers of social membership (like the ubiquitous ID badge you need to swipe when reporting for work at an IT company) are part of the boundary between "us" and "them". Unless you know the secret handshake so to speak, you are not one of "us".

The evolution of human society over the long term appears to be pointing to some species-level, globalized "us", in which love indeed is all we will need. Sadly, though, we're not there yet. The final chapter in the history of human conflict has yet to be written. Here, in the middle of somewhere, in a time and a place in which our circles of belonging include less than everyone, we need to figure out how to defend the data security of ourselves (ego) and those we care about the most. How big is the circle you personally care about? Only you can answer that for you. My loyalties are to what Habermas calls a "centered universalism". It starts right here, right now, but it wants to get bigger. But as in any epic tale, the triumphant happy ending needs to be earned. There will be trials and struggles along the way. I see good IT security as necessary to the process of beating swords into ploughshares. But until literally everybody signs on to the species-level global "us" plan, keep a couple of those swords sharpened and not too far out of reach.