Getting Started

Do you want to rule the earth? (As dinosaurs ruled the earth, that is.) Take SI 523 to learn how social control affects human enterprise, engages power and social justice, and depends on information. SI 523 also considers engineering and production management control that is increasingly complementary to social control. The class started in 2008. It was “flipped” in 2013, meaning materials are on-line and lecture is used for discussion. It is emergent, a “work in progress.”

In SI 523 control is paramount, but information is always in the story. The class is divided. About .75 is canon, how to think about control. About .25 is tricky topics not explained by the canon that surprise us. The four elements of the canon are: power; inheritance; sociotechnical; and system. Think backwards: see things systematically as sociotechnical, understood by inheritance, ending up at power. This is a way, but not the only way, to consider control. See control everywhere and change your point of view (POV) to analyze things and guess where they are headed. It’s functionalism, itself subject to analysis. It embodies the old saying, “It’s all how you look at it.” Not all ways of looking at things are equal. Some are better. We like better. SI 523 extends the 310 motto cheap/fast/good.

We kick off with inheritance in transportation and communication. These have always tightly coupled, and if anything, have become more tightly coupled in recent decades. They are important for private-sector commerce and public policy. The first class foreshadows the Illinois Central Railroad (the IC), featured in JoAnne Yates’ book and in the Canvas document “City of New Orleans.”. The IC was the first U.S. “land grant” railroad to “open” the west (cf. the Northwest Ordinance of 1787 from the Treasure Hunt). Railroads reach back to pre-combustion and forward to the dawn of the “information age.” The higher education land grant tradition was instrumental in the history of the University of Michigan, which was a precursor to the Morrill Act of 1862 creating the land grant colleges. U-M was not Michigan’s Land Grant College under the Morrill Act – that was Michigan Agricultural College, now Michigan State University. Old stories tell us a lot about the present.

Little is purely “private sector” or “public sector.” Most important infrastructure is both, and all private sector or all public sector approaches usually fail. We will discuss this, and yes, for Star Trek fans, this has to do with whether the needs of the many

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1 This document is not a contract. It represents how things are supposed to go. Report errors.
2 Undergraduates need SI 310 and an override.
3 jlkingsumich.edu, gazdgbbrumich.edu
4 Videos taken in 2008 were up until recently. They might still be: See here.
5 Power means social power, and sociotechnical is the union of social and technology.
outweigh the needs of the one. It also has some important theoretical dimensions. Diagnostically, when you spot important infrastructure, look for both the private and public dimensions. As a general rule, when things work right the private makes it happen and makes it better, but is enabled and sustained by the public. This reveals control factors, as we will discuss.

Do you want to take this class? Find out by reading this syllabus, including the Treasure Hunt (below), Julian Dibbell’s “A Rape in Cyberspace” (on-line; not in Canvas; see also Wikipedia’s article rape in cyberspace), and the readings in the Canvas Getting Started folder. If that seems interesting, take the class. The fact that SI 523 has no prerequisites and is not a prerequisite for anything else should tell you something. You know more about information and control than you realize. Most people are like Monsieur Jourdain in Act 2, Scene 4 of Molière’s comedy, The Bourgeois Gentleman. He is delighted to learn that all his life he has been speaking prose. You probably speak prose. Living teaches about information and social control. You learn more if you engage in reflective practice. We discuss this, too.

SI 523 requires attention to details and connections in innocuous things. Like air, which we discuss. We don’t think about air unless we don’t have it. We get oxygen from the air, which is about 78% nitrogen, 21% oxygen, 1% argon, .04% carbon dioxide, and some other gases including water. Although free, our demand for air is inelastic. Combustion needs air, big in climate change that we discuss – the “effective atmosphere,” the theoretical Kalman limit, etc. We connect air and climate change through the <carbon cycle>. Spot details and connections. To bring it back to SI, ask me why computerized workflow control systems usually fail.

Understanding comes from the past. We pay homage to George Santyana’s line, “Those who cannot remember the past are condemned to repeat it.” William Faulkner has that beat. He wrote, “The past is never dead. It’s not even past.” Search details and connections for <“information and control”>. Surprise me.

Treasure Hunt

For the Treasure Hunt work alone or in groups (groups are more fun). The Treasure Hunt sets the tone for the class but is not graded. The slides in Canvas provide answers, but try to do the hunt first. Go beyond what is provided. Learn.

1. Jethro in the Pentateuch helps someone famous by describing hierarchy, an important social control mechanism. Where is this and what does it say?
2. Where do the words inscribed over the entrance to Angell Hall on Central Campus (on State Street) come from, and so what?

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6 Is Wikipedia good enough? “Wikipedia is not considered a credible source.” Really?
7 Search the string between < and >. Include quotation marks if present.
8 If you find words you haven’t heard, look them up. The Pentateuch is the Torah, also known as the first five books of the Old Testament of the Bible.
3. On State Street just north of South University there’s a crosswalk. Would pedestrians be safer if that crosswalk was removed?
4. What controls entry to North Quad’s perimeter doors? How does this work?
5. Rooms in buildings often have simple cybernetic control devices sticking out from the walls. You have used them. What are they and how do they work?
6. Around campus there are gizmos with blue lights on top of them (e.g., by the NQ doors on Washington near State.) What are these?

The General Scheme

Parts 1-3 are the canon, a functionalist view of information and control. The Treasure Hunt sets up the canon. Slides, audio, and discussion carry us. The canon meets the world in Tricky topics (Part 4). In the background is “open,” as in software, courseware, educational resources, etc. Flipped courses are part of this as are MOOCs and so on. Open has been the “next big thing” (the world is full of “next big things”). Millions of hits await if you search <open source software>, <sourceforge>, <github>, <open educational resources>, <moocs>, <coursera>, <udacity>, <edx>, <ocw>. Creative Commons and other organizations use copyright to protect “open” against “closed.” (Next big things are often ironic.)

SI 523’s learning objective: graduates can examine control mechanisms like the University of Michigan’s Institutional Review Boards, or IRBs, provide quick and accurate assessment of information issues at work, ground that analysis, explain the issues theoretically (e.g., adverse selection), suggest alternative strategies for information support, and present on these topics. Do you read everything word-for-word? Not in SI 523: you use kinda reading. Slides, audio files and class discussion tell how to kinda read Ross, while really reading Machiavelli and Yates. Social power makes some uncomfortable. Be honest about discomforts. “Smoothing” doesn’t help. Confrontation might. We’ll discuss this cartoon ...

[Image of a dinosaur with the text: Beitrice, over here! Peas the size of your brain! No exaggeration.]
Reading helps you get where you want to go. But where do you want to go? Start with this classic:


[![Alice](image)](image)

[Alice] began thinking over other children she knew, who might do very well as pigs, and was just saying to herself, 'if one only knew the right way to change them—' when she was a little startled by seeing the Cheshire Cat sitting on a bough of a tree a few yards off.

The Cat only grinned when it saw Alice. It looked good-natured, she thought: still it had very long claws and a great many teeth, so she felt that it ought to be treated with respect.

'Cheshire Puss,' she began, rather timidly, as she did not at all know whether it would like the name: however, it only grinned a little wider. 'Come, it's pleased so far,' thought Alice, and she went on. 'Would you tell me, please, which way I ought to go from here?'

'That depends a good deal on where you want to get to,' said the Cat.

'I don't much care where—' said Alice.

'Then it doesn't matter which way you go,' said the Cat.

'--so long as I get somewhere,' Alice added as an explanation.

'Oh, you're sure to do that,' said the Cat, 'if you only walk long enough.'

Where do you want to go? Surf these and look for others!

http://en.wikipedia.org/wiki/Social_order
http://en.wikipedia.org/wiki/Social_relations
http://en.wikipedia.org/wiki/Social_engineering_%28political_science%29
http://en.wikipedia.org/wiki/Social_control
http://en.wikipedia.org/wiki/Social_control_theory
Etymology (where words come from) tells a great deal about what words mean. Language evolves over time. Don’t use a cheap dictionary: use the Oxford English Dictionary, the OED, available from "inside" the U-M domain. Look up control on the OED (both noun and verb sections). Look up social and system. Read all of each entry. An on-line thesaurus provides synonyms (and maybe antonyms) that you can look up in the OED. You’ll soon know a lot if you use this technique.

After the Treasure Hunt, the canon moves through order and power, touching on structure. Kinda read Edward Alsworth Ross’ early book Social Control to get historical context. See how Ross organized his thinking. Use the PDF provided: the Preface, the bottom of page 3, and most of pages 7 and 8. Grounds, means, and system of control in the Table of Contents foreshadows. Chapter XXX tells what Ross thinks about the system of control. Chapters XXXI and XXXII describe limits and criteria. The Conclusion is helpful. Ross is good but there’s something weird about him. What is it?


To finish part 1 really read Nicolò Machiavelli’s 16th century blockbuster, The Prince on-line in full-text or in an annotated print version. Re-read it even if you already read it. The Prince has a cult following. See Wikipedia and eMachiavelli and search <machiavelli prince commentary>. This is an old issue – the latest reading is 1982. More contemporary work is available if you search, but it goes back to the old stuff. I will provide more involving Machiavelli and let you know by email.

The readings through Part 1 are the “Getting Started” papers in Canvas plus:


Edward Alsworth Ross (1904) Social Control, 1904. PDF on Canvas. Used to be free on the web but not anymore. Search <social control foundations ross>


Part 1 sets the base for Parts 2 and 3. Part 2 concentrates on JoAnne Yates’ book (Control Through Communication: the Rise of System in American Management) and
related readings. Yates explains social and technical change related to information and control, and gets us started on understanding systems. We learn how technology effects change, especially change in social control. Part 3 shifts the canon to technology and technique in information theory, cybernetics, etc. You need to know this in case someone asks. Readings will be provided.

**WATCHING & LISTENING**

Watch and listen for multiple points of view (POV). Everyone is a product of his or her time, whether the 16th Century of Machiavelli, the 19th Century of Ross, the 20th Century of Yates, Mechanic and Shannon, or the 21st Century of us. Sample different points of view. The things below scratch the surface of controversies. **WARNING:** images and language that follow might be offensive and/or disturbing.

Start with: [http://www.youtube.com/watch?v=UysRKY93ryA](http://www.youtube.com/watch?v=UysRKY93ryA); (lyrics: [http://www.azlyrics.com/lyrics/2pac/scaredstraight.html](http://www.azlyrics.com/lyrics/2pac/scaredstraight.html); for more on the artist [http://www.urbandictionary.com/define.php?term=makaveli](http://www.urbandictionary.com/define.php?term=makaveli). Consider this 1988 hit: [http://www.youtube.com/watch?v=Wix7GTeITPM&feature=related](http://www.youtube.com/watch?v=Wix7GTeITPM&feature=related) Four years later the “Rodney King Incident” occurred in LA (search <rodney king beating> and you’ll find it). Police officers prosecuted in state court were acquitted (King later won a civil suit), triggering the “Rodney King Riots” (search <rodney king riot>). King asked in a press conference, “Can’t we all get along?” (search <rodney king we all get along>) and later died. Listen to the song “Strange Fruit” [https://www.youtube.com/watch?v=Web007rzSOI](https://www.youtube.com/watch?v=Web007rzSOI). (Lyrics: [http://www.historyisaweapon.com/defcon1/fruitholiday.html](http://www.historyisaweapon.com/defcon1/fruitholiday.html); see also [http://en.wikipedia.org/wiki/Strange_Fruit](http://en.wikipedia.org/wiki/Strange_Fruit)). The song was written in 1937 and recorded by heroin addict Billie Holiday in 1939. The social context of the time was Jim Crow; is Jim Crow over?

The web has many points of view (POV) about social control. Try searching on <racial control>, <racial power>, <black lives matter>, <women control>, <women power>, <metoo>. Differences in adjectives change details. Look for POV. Trouble never sleeps. Race is powerful. So is gender. So are lots of things.

**TALKING**

Part of SI 523 is talking with other participants. For example:

1. What important things must be understood about social control?
2. What, if anything, has been surprising thus far?
3. Who or what is controlling the direction of this course?
4. What should be changed in the direction of this course?
5. What applications do these ideas have?
Tips

SI 523 parts correspond to folders under Files on Canvas. Canvas emails will cover issues that arise and/or point to additional readings. (You must have a working email address for Canvas.) Additional information will be provided. Materials should be on-line. You don’t need to buy anything. Configuration management problems can be a hassle. Try conversion between formats. Some products don’t work across platforms, claims to the contrary notwithstanding. Microsoft Word in for the Mac is different from Microsoft Word for the PC; ditto for PowerPoint. I use PDF when I can. You might have problems with audios and videos. Let me know of problems.

Employ clarity and charity when reading. Authors should make things clear, but writing for different people makes this hard. Readers have invested a lot, but investing a bit more to reveal what the author “must be saying” can be worthwhile. Expect clarity, but when things are unclear, try charity. Supervisors appreciate it when subordinates anticipate their orders. SI 523 also discusses judgment, authority, and process.

Grading

You are probably shocked, SHOCKED to hear that a class on information and control is graded! There are 100 points split between individual performance and group performance. Individual performance is 50 points on a take-home exam that is “open everything” and permits collaboration, but requires people to write up their own answers. Group performance is 50 points for “current events” reports and teaching case development tied to group projects/presentations. Groups are chosen early and used throughout. This will be explained.

I take grading seriously, but grades do not – and cannot – measure the real value of this class, which is too “squishy.” Figuring out others’ POV is squishy to begin with; changing POV rapidly and precisely is even squishier. Yet those who can do this learn a great deal about complicated issues in a short time. As strange as it sounds, grades are more important for the SI 523 instructor than for the students. SI 523 cannot be a “weeder.” It only “goes” to the rest of your life. Why weed you out of that?

Academic Integrity and Collaboration

Collaboration can be useful, and is specified for SI 523 assignments. Be careful about plagiarism. Assume in SI 523 that all written submissions must be your own, original work, and not merely paraphrasing of someone else’s work. It is safest to not share final written answers with other students. Any excerpts, statements, or phrases from the work of others must be clearly identified, and a proper citation provided. Copy-editing assistance is OK. Student handbooks (e.g., on the UMSI intranet) define plagiarism, set standards for academic and professional integrity, and point to resources.

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to help you avoid the consequences if caught doing bad things. Consequences impacting assignment or course grades are determined by the instructor; additional sanctions may be imposed by the assistant dean for academic and student affairs. Ask if in doubt.

**Accommodations for Students with Disabilities\(^\text{10}\)**

If you think you need an accommodation for a disability, please let me [instructor] know at your earliest convenience. Some aspects of this course, the assignments, the in-class activities, and the way we [instructor] teach may be modified to facilitate your participation and progress. As soon as you make me [instructor] aware of your needs, we [instructor and student] can work with the Office of Services for Students with Disabilities (SSD – 734-763-3000; ssd.umich.edu/) to help us [instructor and student] determine appropriate accommodations. SSD typically recommends accommodations through a Verified Individualized Services and Accommodations (VISA) form. I [instructor] will treat any information that you [student] provide in as confidential a manner as possible.

**Student Mental Health and Wellbeing**

The University of Michigan is committed to advancing the mental health and wellbeing of its students. If you [student] or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help, contact Counseling and Psychological Services (CAPS) at (734) 764-8312 and https://caps.umich.edu/ during and after hours, on weekends and holidays, or through its counselors physically located in schools on both North and Central Campus. You may also consult University Health Service (UHS) at (734) 764-8320 and https://www.uhs.umich.edu/mentalhealthsvcs, or for alcohol or drug concerns, see www.uhs.umich.edu/aodresources. For a listing of other mental health resources available on and off campus, visit: http://umich.edu/~mhealth/

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\(^{10}\) Excepting clarifications in [brackets] and very minor editing, this is taken verbatim from https://sites.google.com/a/umich.edu/umsi-policies/umsi-academic-programs/course-management-policies