

**CHALMERS**

University of Technology

CAS Seminar Series (FFR141)  
2016-2017

# Presentation

**Claes Andersson, Docent.**

**Main research:**

Cultural and societal evolution.

Innovation in complex adaptive systems.

Broad interest in complex systems in general.

**Office:**

Physical Resource Theory, in EDIT building

Floor 3V, Room 3447



# When and where

Once a week.

Classes are in **MC**, at **10:00** on Wednesdays, but when and where can change unexpectedly, keep an eye at the schedule in TimeEdit. Will most likely change every quarter.

Take down the URL of the web page of the course:  
[www.studycas.com/c/courses/css](http://www.studycas.com/c/courses/css)

# The aim of the course

- Getting and providing an overview over complexity science as an area: **the bigger picture**
- Provide opportunity for students to go deeper into specific subject areas in CAS: **an area of your own choice + the areas that your fellow students select**
- Practice dissemination by preparing, delivering and working with presentations.

# Course outline

**Period 1:** Lectures

**Period 2-4:** Your seminars and posters.

# Grades

Grade is only passed or not passed

Three requirements:

1. Holding your own presentations
2. Refereeing two other student presentations
3. Submitting an abstract for the presentation on time
4. Actively attending at least 80% of the presentations

*This is an advanced level course:*

- It's your responsibility to sign the attendance list and make sure you attend enough presentations.
- There are no reasons for not attending that will earn you attendance anyway – it's 80%, not 100% so you can be away a number of times at your own discretion.
- We won't guarantee to remind or warn you: keep track of your duties!

# A session

A session will look like this:

10:00-10:30	The Presentation Group delivers the presentation
10:30-10:35	The teacher(s) offer their reflections, reactions and contextualization
10:35-10:40	The Review Group presents the 3-5 questions/issues
10:40-11:10	Break and Discussion – The Discussion Groups move to locations of their choice (in the class room, cafeteria or elsewhere) to begin the Group Discussion sessions.
11:10-11:40	Each Discussion Group have 2-3 minutes to, in turn, present reflections/conclusions based on their discussions.  We open up for general discussion during the last 10-15 minutes.
11:40-11:45	Session ends, teacher and Presentation Group sit down together to de-brief.



# Lectures, LP 1

- 31/8 Welcome and information about the course
- 7/9 Complicated Systems
- 14/9 Complex and trans-complex systems
- 21/9 Trans-complicated and sub-wicked systems
- 28/9 Wicked systems
- 5/10 CAS and Overwhelming Systems
- 12/10 Oral presentation technique. Hans Malmström

# Seminars

You will be divided into two recursive sets of groups:

- 1) Presentation and Review Groups (PRG)
- 2) Discussion Groups (DG)

A PRG has ~3 members. This is the team that will prepare and deliver a seminar together **and** that will act as reviewers and discussion leaders in one other seminar.

A DG consists of ~3 PRG:s. This is the unit that will join in discussing the seminars together in class.

# Your seminars

## **Finding a topic**

Topic should be *clearly* related to CAS and of general interest. The lectures will hopefully bring some clarity to this.

Based on a research paper or a book – this works best!

Should be major/important articles - well-cited and in respected journals.

Help each other: put interesting articles in the StudyCAS paper repository!

Check past years' presentation for inspiration.

**Google Scholar is great for finding papers.**

Timeline

Time frame	Presentation Group	Review Group
By 4 weeks before	Meet, discuss and come up with a topic together. Clear it with Claes in class or via email ( <a href="mailto:claeand@chalmers.se">claeand@chalmers.se</a> ). Not clearing the topic invokes a risk of not getting to present (fail grade.) <b>It is advisable to discuss the topic well in advance of 4 weeks before.</b>	
2-4 weeks before	Work together on the presentation, producing a draft that can be presented to the Review Group in the Dry Run.  Contact your Review Group, decide on a place and time for the Dry Run and send over any relevant literature.	In consultation with the Presentation Group, decide on a place and time for the Dry Run.  Read preparatory literature indicated by the presentation Group; i.e. literature that the seminar seeks to introduce.
2 weeks before	Deliver the Dry Run presentation at the decided time and place.  Note and discuss the feedback provided by the Review Group and consider ways of refining the lecture in response.  Discuss also questions/issues that the Review Group will offer for discussion during the session: can the lecture be co-adapted with these questions/issues?	Participate in the Dry Run: critically evaluate the presentation and provide constructive feedback that helps the Presentation Group come up with the best possible lecture.  Begin the process of coming up with 3-5 questions/issues for the Discussion Groups during the session.  Mind closely the <i>Instructions for Review Groups</i> below!
1 week before	Send title and an abstract of maximally 200 words to <a href="mailto:claeand@chalmers.se">claeand@chalmers.se</a> to be posted on the course web page, and distributed to the class via email.	
0-2 weeks before	Led by the feedback and experience during the Dry Run, work on the Lecture and rehearse its components in preparation for the session day.  Discuss things that are unclear, or where you want a second opinion, with the Review Group over email or personal meetings.	Prepare the 3-5 questions/issues that the Discussion Groups will be presented with and decide on how to present them during the five minutes during which you will introduce them.  <b>Arrange with the Presentation Group to have them included as the last slide(s) of the Lecture! (to avoid loss of time from changing equipment)</b>
0 weeks before	Deliver the presentation	Deliver the questions/issues for discussion.

# Discussion leader

Twice during the course, you will act as a **discussion leader** and perform peer reviews. There will be a schedule also for this, presented next time.

You are asked to participate with the presenter in a dry run of the presentation at a draft stage. What is good? What is bad? How can the presentation and poster be improved? Help the presenter produce a good presentation and poster! *You must read the research paper!*

After the presentation, you will lead a 10 minutes discussion, engaging the audience: this is a seminar and you're the organizer. Your job is *not* simply to ask questions to the presenter, but to organize discussions.

Do this in planned collaboration with the second discussion leader.

After the discussion, the discussion leaders participate in a short talk with the teacher and the presenter to assess how the presenter has used the feedback that was given, and, reversed, how useful the feedback was.

# Schedule

The schedule will be set during the coming weeks. It will be posted on the website and distributed next meeting.

One Presentation Group each session

It's easiest by far if you bring your own laptop and plug it in to the projector. If you need a laptop, tell me in advance!

If you use a Mac, remember to bring a VGA-adaptor!

# Example schedule from last year

<u>Date</u>	<u>LP</u>	<u>Presentation Group</u>	<u>Reviewing PG</u>
04-nov	2	PG A	PG E
11-nov	2	PG B	PG T
18-nov	2	PG C	PG S
25-nov	2	PG D	PG R
02-dec	2	PG E	PG A
09-dec	2	PG F	PG B
16-dec	2	PG G	PG C
21-jan	3	PG I	PG Q
28-jan	3	PG J	PR P
04-feb	3	PG K	PG G
11-feb	3	PG L	PG N
18-feb	3		
25-feb	3	PG N	PG F
03-mar	3	PG P	PG D
10-mar	3	PG R	PG L
23-mar	4	PG Q	PG M
13-apr	4	PG S	PG K
20-apr	4	PG T	PG I
27-apr	4	PG U	PG J
04-maj	4	PG M	PG U

# Questions?

- Ask away!
- Or contact me ([pettert@chalmers.se](mailto:pettert@chalmers.se)) or Claes ([claeand@chalmers.se](mailto:claeand@chalmers.se))
- If you're unhappy with something during the course: tell us!



# The Lectures LP 1

## Disentangling the Complex

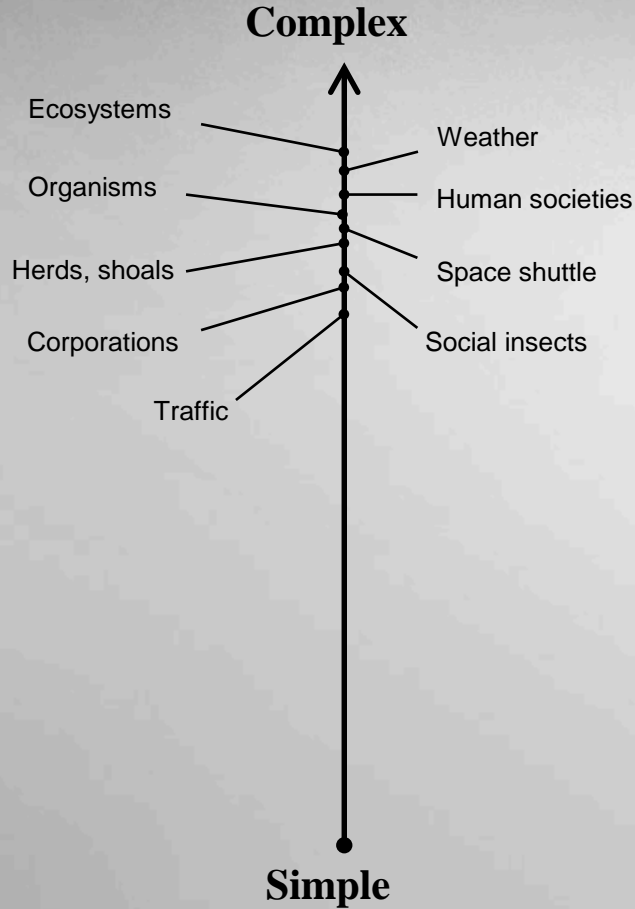
Based on:

Andersson, C., Törnberg, A., & Törnberg, P. (2014). Societal systems: complex or worse? *Futures*, 63, 145–157. <http://doi.org/10.1016/j.futures.2014.07.003>

Andersson, C., Törnberg, P. (2016). Innovation and wickedness. Under review with *Research Policy*.

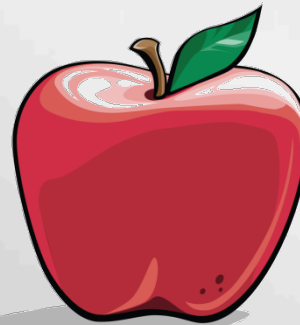
(Links will be distributed)

# Complex stuff

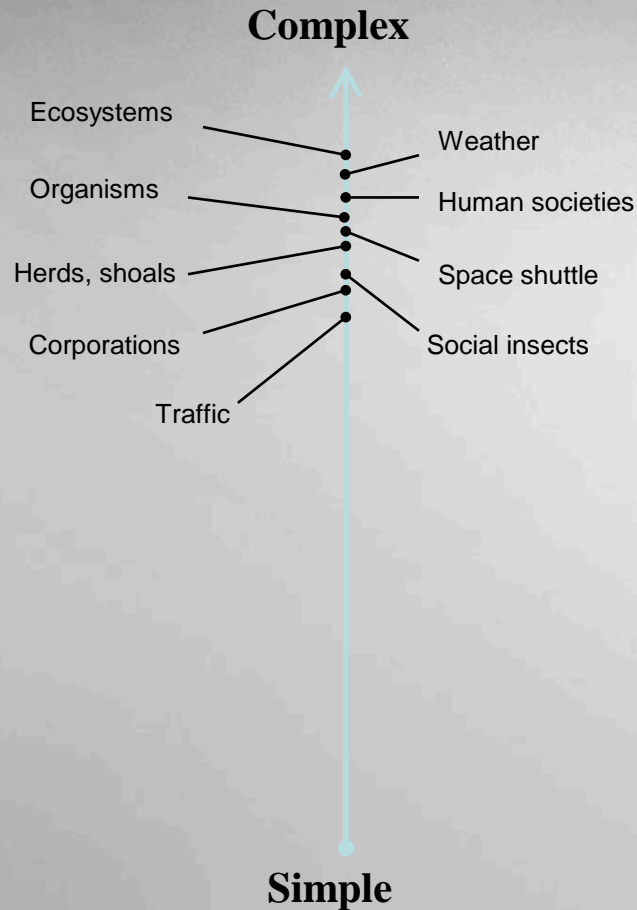


**Complex matters**

**This doesn't make very much sense!**



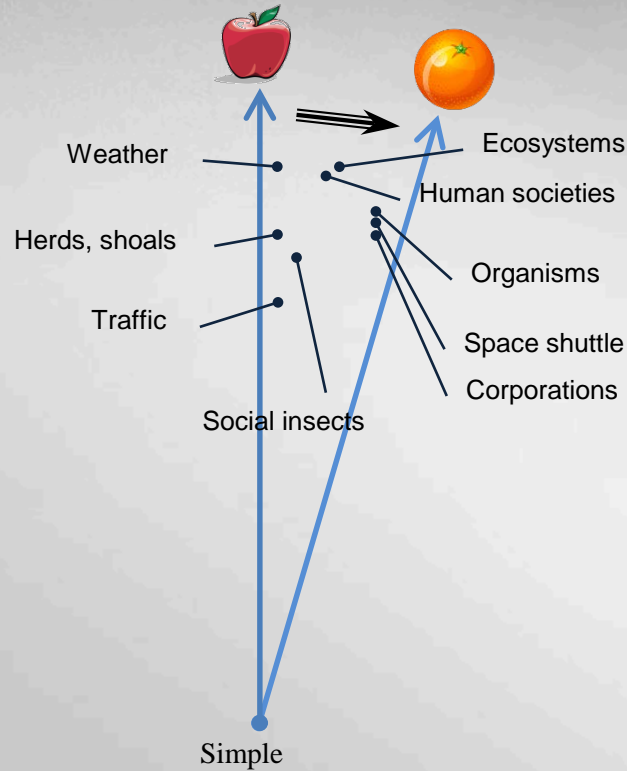
## Dichotomy between complex and complicated systems



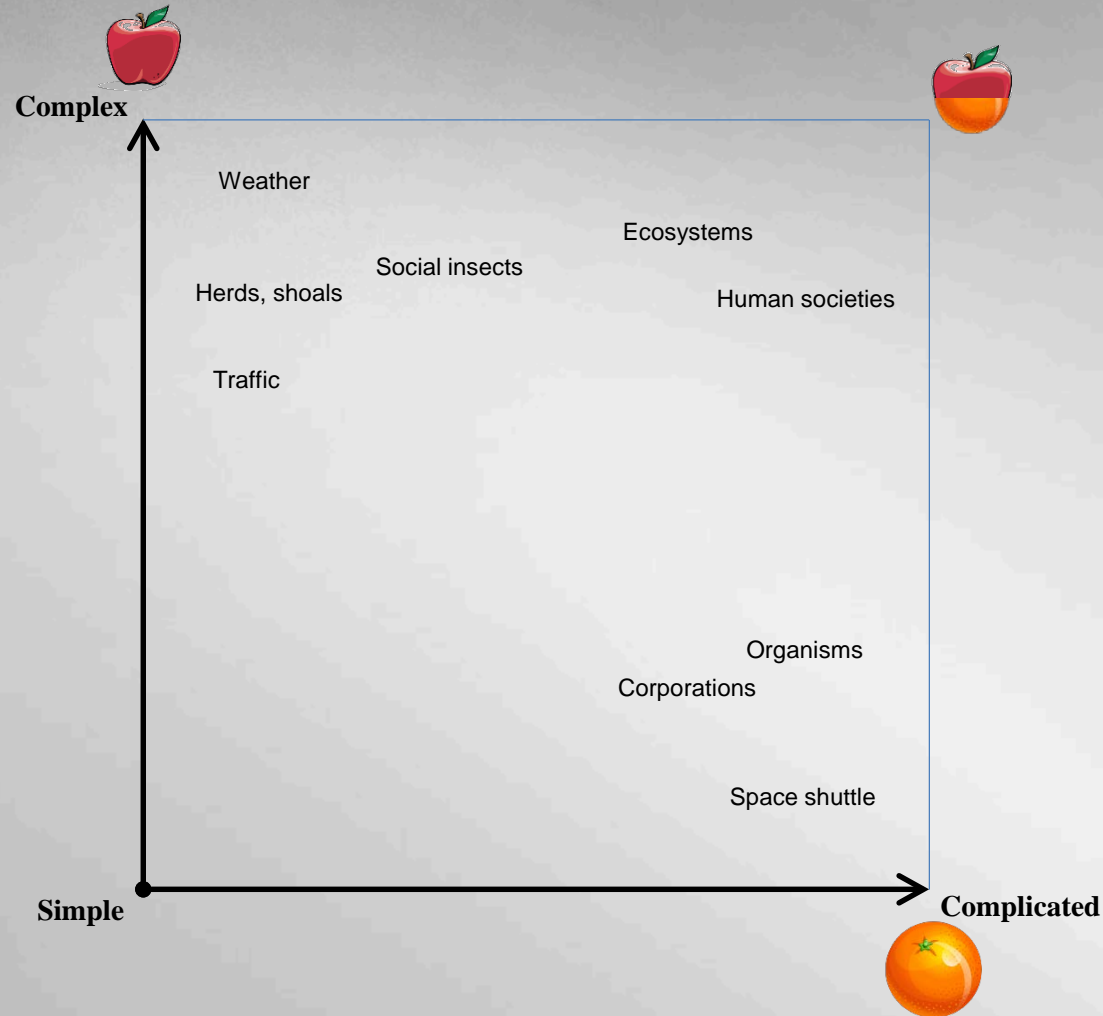
**Complexity and complicatedness represent two major hurdles to understanding**

**... as evidenced by the fact that they correspond to two major and distinct methodological scientific paradigms.**

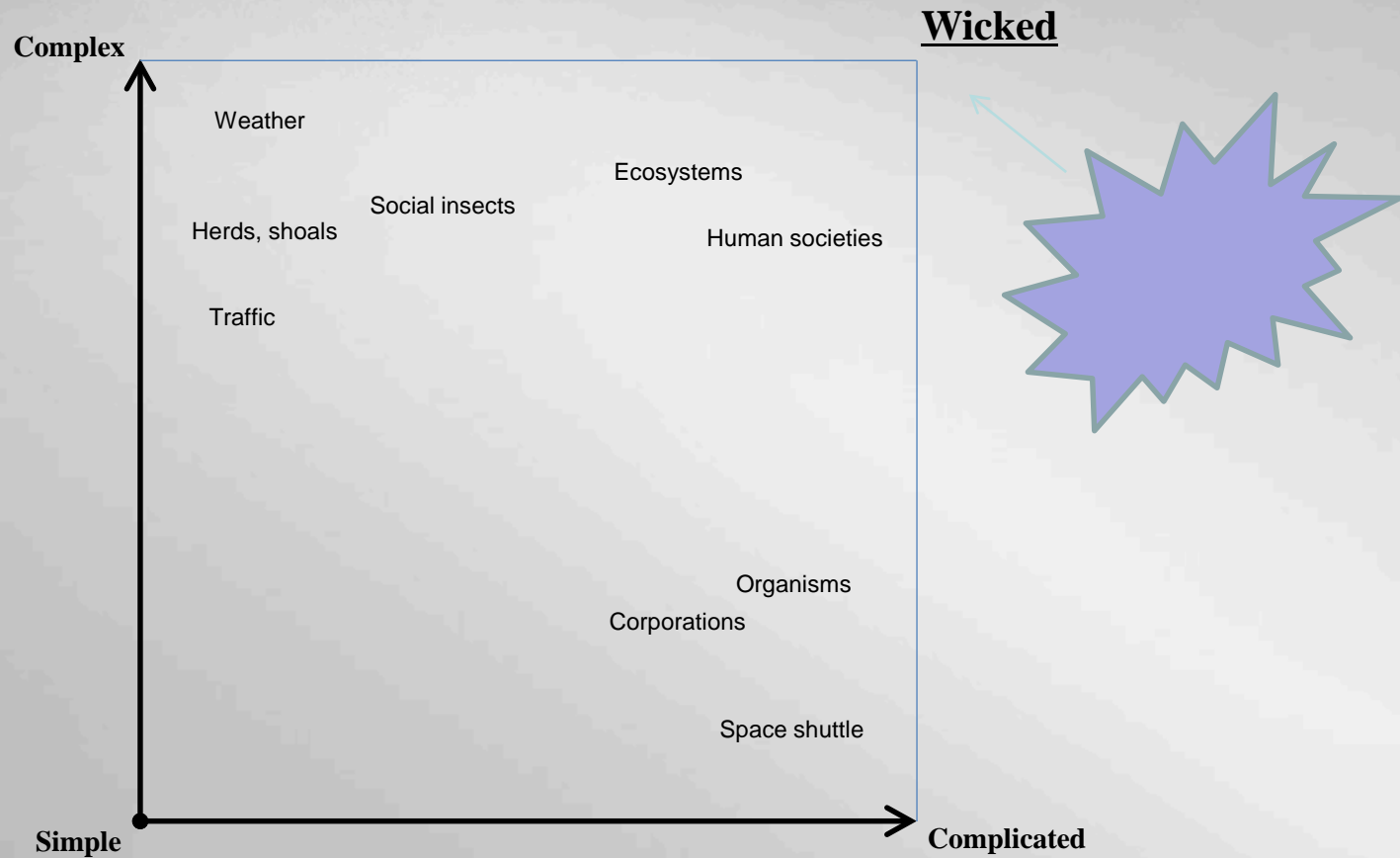
# Let's separate the apples from the oranges...



...to map our example systems into a plane instead.



# A new class of systems?



# Spectrum of Overwhelming Systems (SOS): Complex, Complicated and Wicked

