

Global Challenges & Sustainable Futures

28th of October, 2014

Backcasting

Today's schedule:

- Why use Backcasting?
- Visions of the future
- How to work with the approach
- Creating visions in groups

Backcasting? Which method or approach?

- Robinson's backcasting approach?
- The Natural Step approach?
- Sustainable Technology Development approach?
- Participatory backcasting?
- Or...?

Why use Backcasting?

Based on the assigned readings, discuss in pairs why backcasting is appropriate to create sustainable futures

- Think of 2 – 3 important values



Forecasting vs. Backcasting?

Forecasting

- What is **likely** to happen?

Foresighting

- What is **possibly** going to happen?

Backcasting

- What is **desirable** to happen?



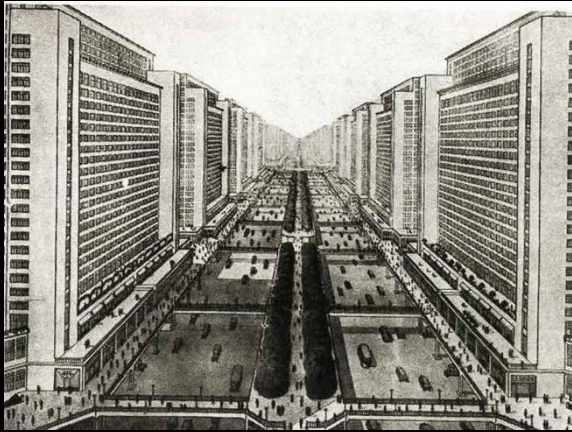
What will the future look like?

”The best way to predict the future is to design it” –
Buckminster Fuller

OR

”The best way to predict the future is to create it” –
Abraham Lincoln

Visions of the future



Le Corbusier (1925)



Buckminster Fuller (around 1960)

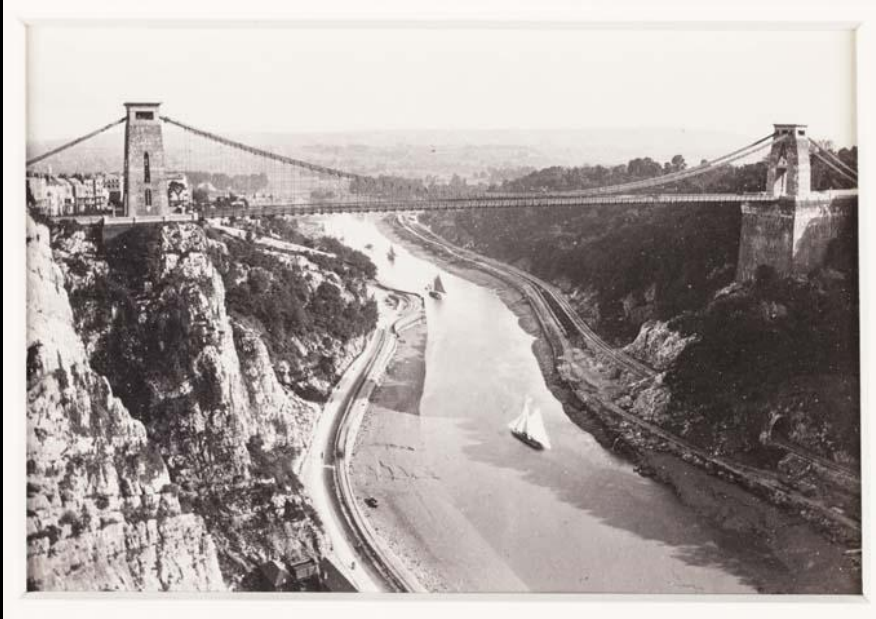


Wall-E (2008)



Koji Yamamura (2013)

Visions matter



Isambard Kingdom Brunel
(1806-1859)



Dr. Martin Luther King Jr.
(1929-1968)

How to work with the approach (roughly):

Discuss the different steps in the backcasting methodology in smaller groups, come up with 4 – 5 main steps

1. Set the goal: envision the future
2. Create different scenarios (or visions)
3. Assess and select scenarios
4. Compare with present state
5. Develop a pathway

All within system boundaries

System boundaries define:

- Geographical scale
- Time scale
- Different parts of the system – this includes people

1. Envision the future

- Think **BIG!**
- Broaden the scope of your problem definition
 - NOT: How can we live in a world without plastic bags?
 - BUT: How can we create a sustainable form of moving goods from A to B?
- Determine what the future plan must comply to (requirements, criteria, principles...)

Class Exercise:

Rephrase for a better definition: How can we eat less meat in Uppsala by 2030?

1a. Determine what a sustainable future is

- Combine facts with fiction
 - Include limitations set by natural science
 - Include values and needs
- Example for the Natural Step:



Class Exercise: Come up with 6 requirements for the re-defined problem

Source: <http://www.naturalstep.ca/four-system-conditions>

Tip: https://www.youtube.com/watch?v=BO9_hQO9nTo#t=215

2. Create different scenarios

- No limits to creativity
- Include weird, unrealistic & even undesirable scenarios



Postcard from around 1900



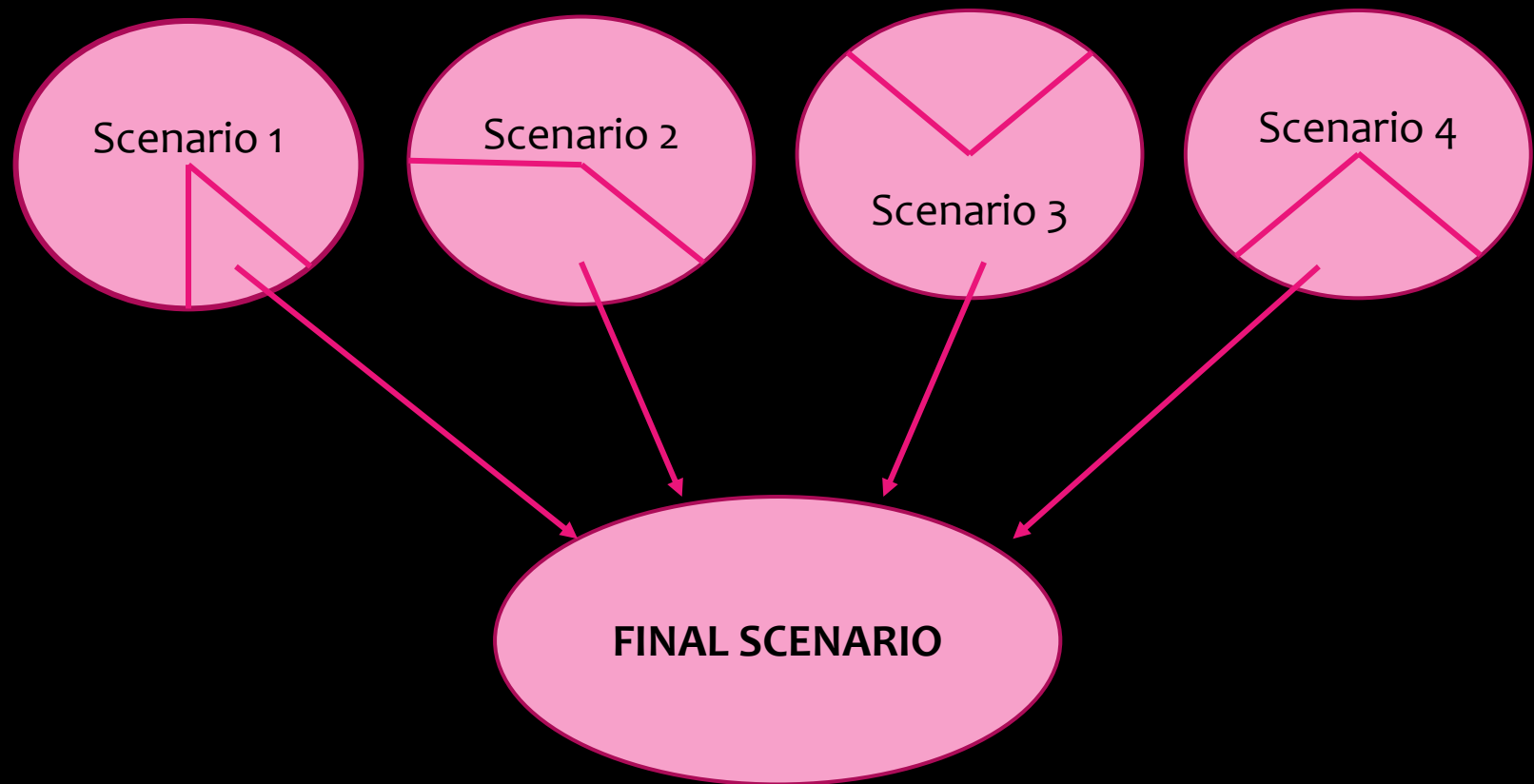
Today

Class Exercise: 6 different scenarios!

3. Assess and select different scenarios

- Test according to different criteria
 - Scoring could be included
 - Ranking of all scenarios in a matrix
 - Could add weighting to different criteria
- Critically review outcome
 - What scores well & why?
 - Could different parts of scenarios be combined?

3a. Develop final scenario

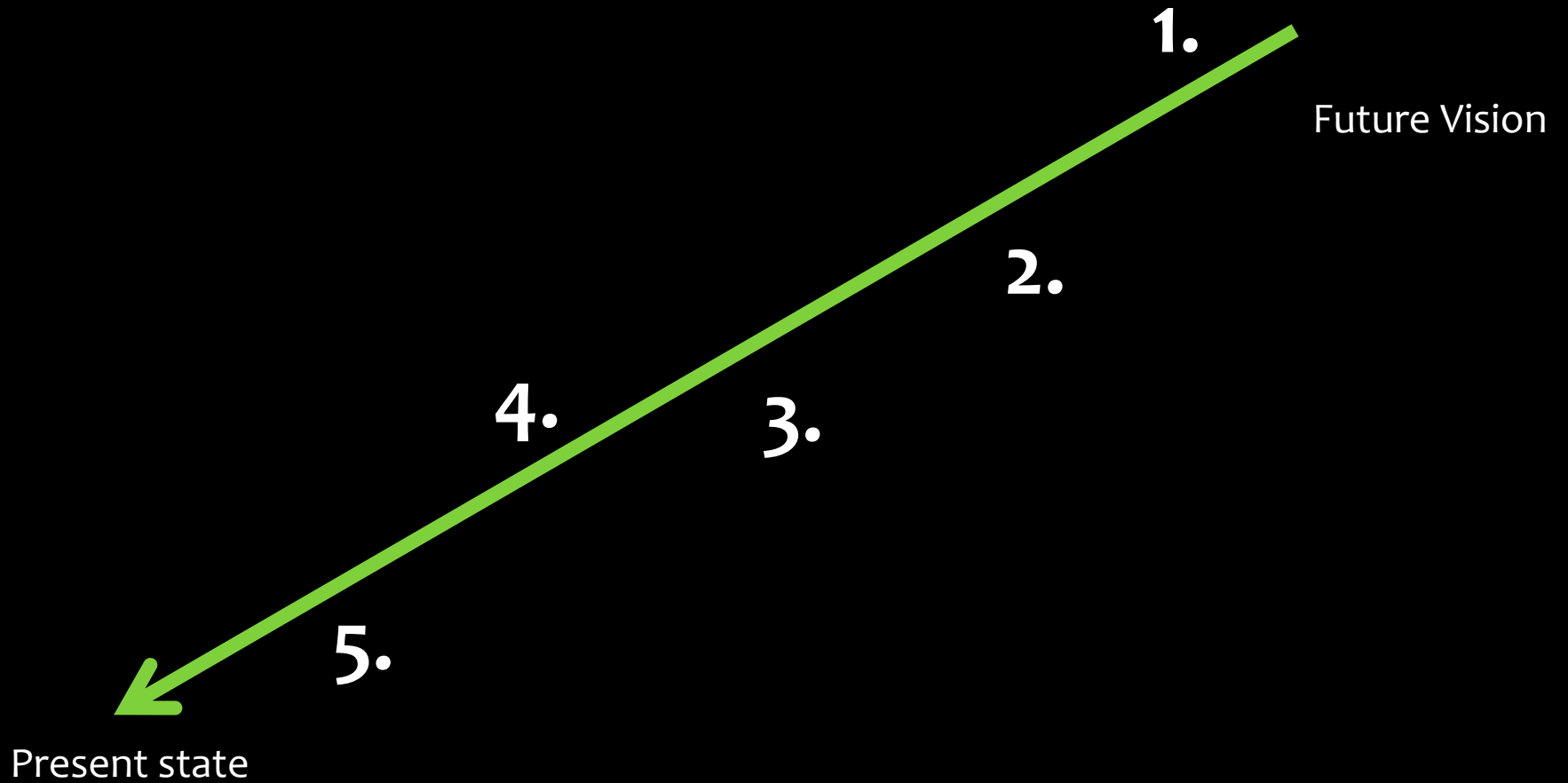


4. Compare with present state

- Where are we today?
- What is missing?
- What are the priorities?



5. Develop pathway



What are the challenges with backcasting?

Questions about backcasting?

Working in groups on creative projects

- Another challenge?
- Creating visions together?

What can be done about this?

- Set clear ambitions as a group
- Organize time to actually sit and work together
- Google Docs, Dropbox, Facebook: it is all **GREAT**, but **NOT** for creative projects
- Share ideas as clearly as possible
- Pictures and drawings work best
- Be willing and able to ‘kill your darling’

One trick...

- Pass along sketches – draw an idea for 30 seconds and pass your sketch along to the next person who continues drawing for 30 sec., etc.



