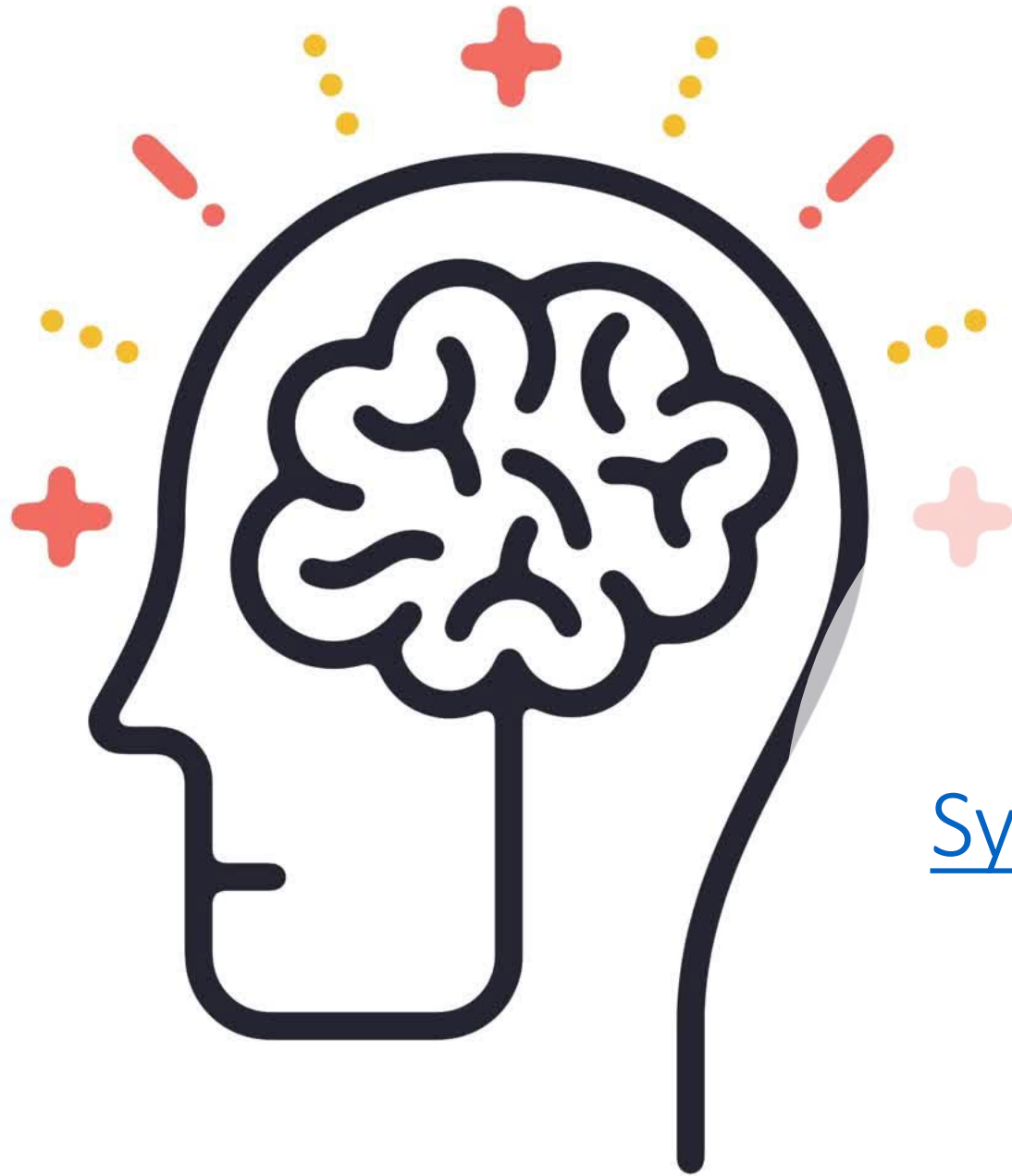


Planetary Health

Systems thinking & research gaps

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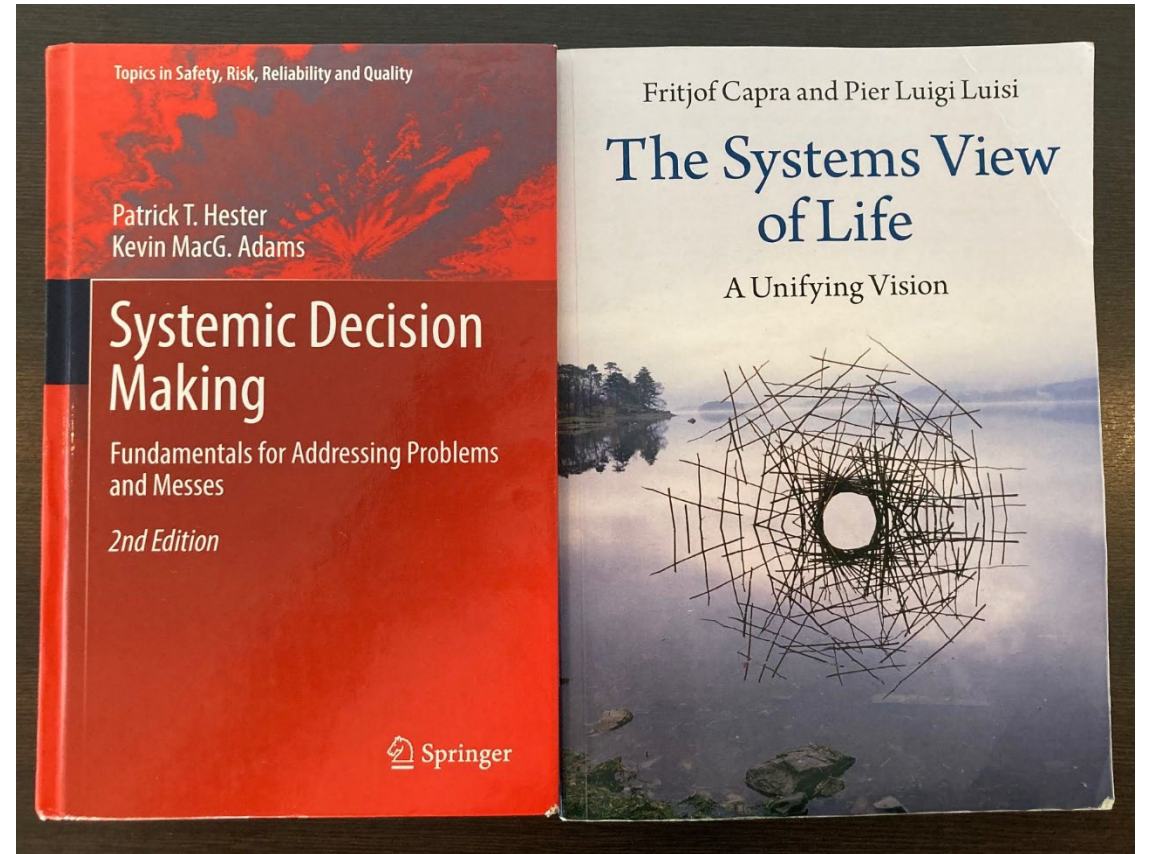
Systems thinking

«Wicked problems»

- What are wicked problems?
- What did you perceive as the main message in the video?

My take....

- Linear thinking
- Systems thinking

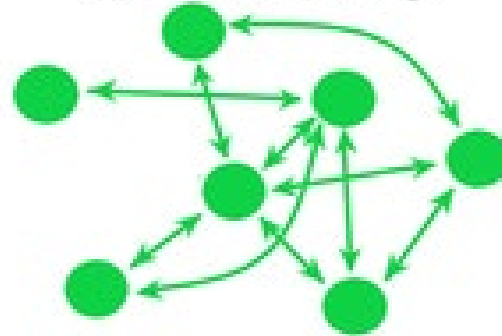


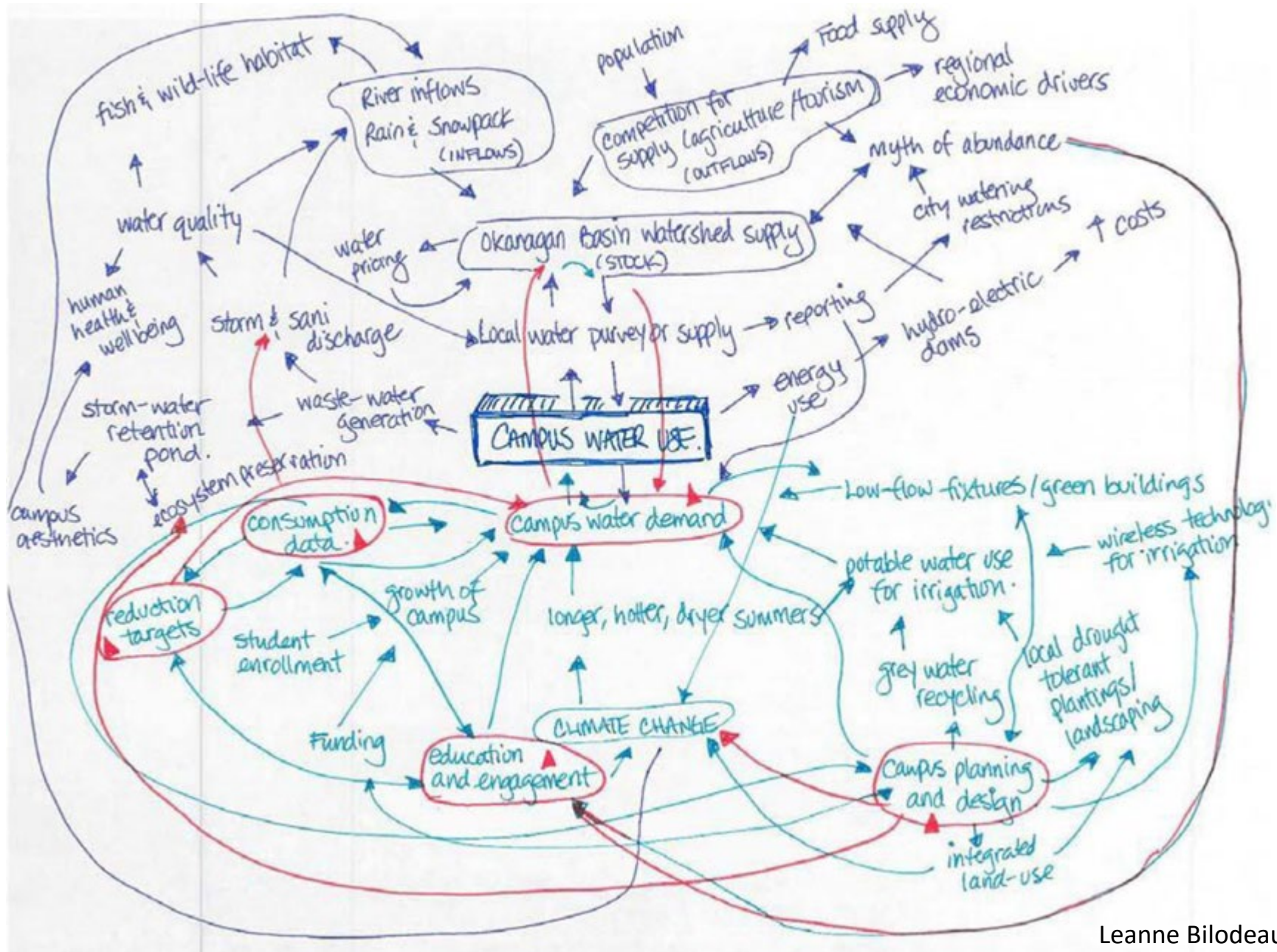
Linear thinking vs. systems thinking

Linear Thinking



Systems Thinking





Planetary Health – Research gaps

- Human-caused changes to global fisheries affect human health
- Researchers from many disciplines, i.e:
 - Ecosystem services
 - Nutritional epidemiology
 - Fisheries ecology
 - Etc
- 845 million people (11% of the global population) risk becoming undernourished



The screenshot shows the Nature journal website interface. At the top, the 'nature' logo is displayed with the tagline 'International weekly journal of science'. A search bar is located in the top right corner. Below the logo, a navigation menu includes links for Home, News & Comment, Research, Careers & Jobs, Current Issue, Archive, Audio & Video, and For Authors. A secondary navigation bar shows the current page path: Archive > Volume 534 > Issue 7607 > Comment > Article. The article title is 'Nutrition: Fall in fish catch threatens human health', with authors listed as Christopher D. Golden, Edward H. Allison, William W. L. Cheung, Madan M. Dey, Benjamin S. Halpern, Douglas J. McCauley, Matthew Smith, Babu Vaitla, Dirk Zeller, and Samuel S. Myers. The date is 15 June 2016. A short summary states: 'Christopher Golden and colleagues calculate that declining numbers of marine fish will spell more malnutrition in many developing nations.' Below the summary are buttons for 'PDF' and 'Rights & Permissions'. 'Subject terms' are listed as 'Conservation biology · Health care · Policy'. On the right side, there is a 'nature briefing' advertisement with a 'Sign up' button and an 'Ads by Google' section with a 'Stop seeing this ad' button and a 'Why this ad?' link. At the bottom right, there is a 'Listen' button.

Planetary Health – Research gaps

- Declines are due to the usual suspects
 - Overfishing
 - Pollution
 - Human population growth
 - Etc
- But also: migration of native species due to rising sea-water temperatures



The screenshot shows the Nature journal website interface. At the top, the 'nature' logo is displayed in white on a dark red background, with the tagline 'International weekly journal of science'. A search bar is located in the top right corner. Below the logo, a navigation menu includes links for Home, News & Comment, Research, Careers & Jobs, Current Issue, Archive, Audio & Video, and For Authors. A secondary navigation bar shows the current page path: Archive > Volume 534 > Issue 7607 > Comment > Article. Social media sharing options for E-alert, RSS, Facebook, and Twitter are visible on the right. The article title is 'Nutrition: Fall in fish catch threatens human health', followed by the authors' names: Christopher D. Golden, Edward H. Allison, William W. L. Cheung, Madan M. Dey, Benjamin S. Halpern, Douglas J. McCauley, Matthew Smith, Babu Vaitla, Dirk Zeller & Samuel S. Myers. The publication date is 15 June 2016. A short summary states: 'Christopher Golden and colleagues calculate that declining numbers of marine fish will spell more malnutrition in many developing nations.' Below the summary are links for 'PDF' and 'Rights & Permissions'. 'Subject terms' are listed as 'Conservation biology · Health care · Policy'. A large photograph at the bottom shows several people on a beach pulling a large green fishing net. On the right side of the page, there is a 'nature briefing' advertisement with a 'Sign up' button, and a 'Ads by Google' section with a 'Stop seeing this ad' button and a 'Why this ad?' link. A 'Listen' button is located at the bottom right of the page.

Planetary Health Research

- Complex
- Multidisciplinary
- Address how different entities/niches are interconnected
- Funding-challenges



Thank you!