Social robots in Norway

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NTNU
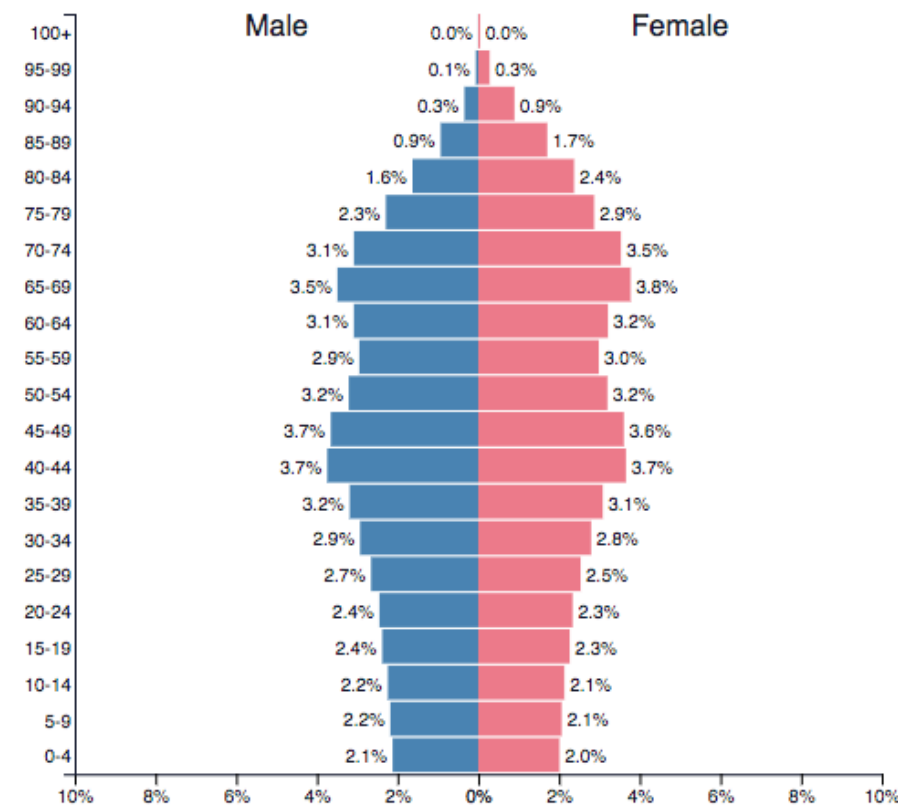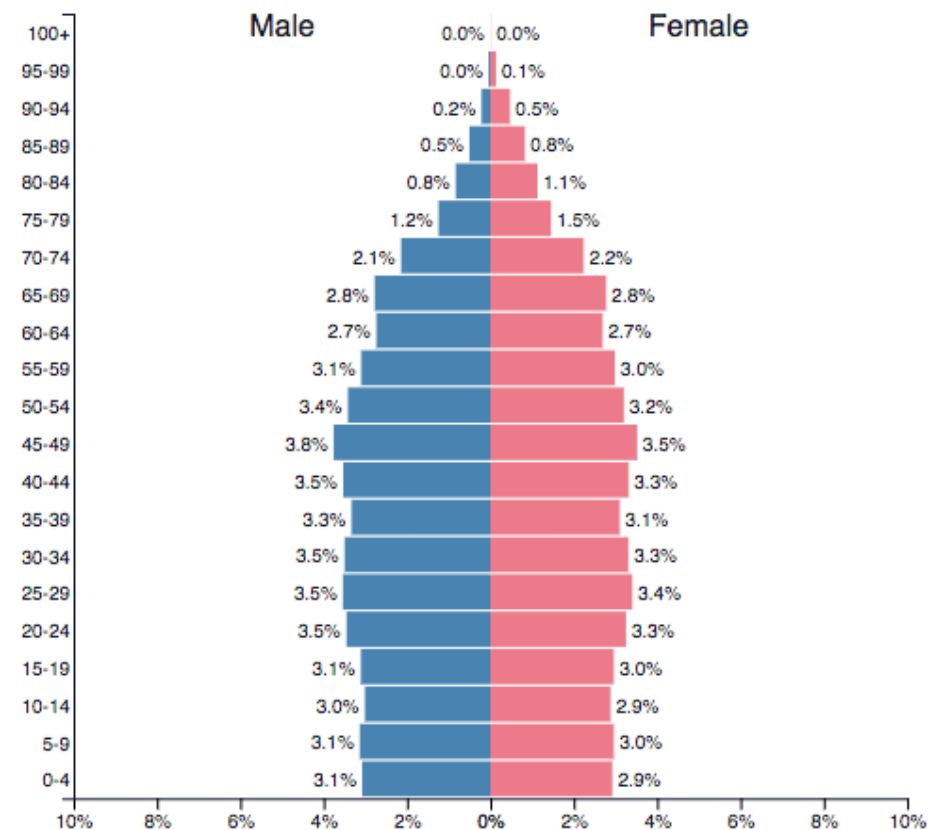Norwegian University of
Science and Technology

Trondheim, Norway

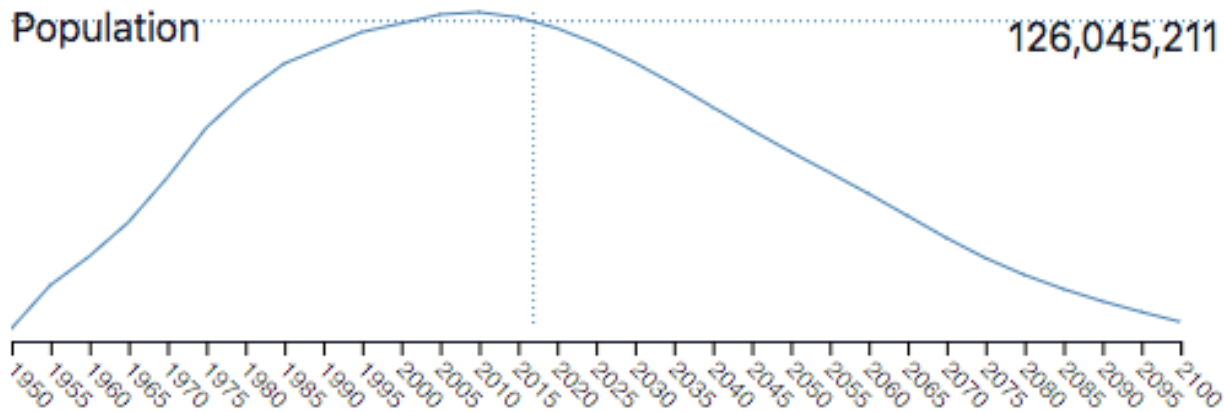# Population pyramids

Norway ▾
2017

Population: 5,330,800

	Male		Female
100+	0.0%		0.0%
95-99	0.0%		0.1%
90-94	0.2%		0.5%
85-89	0.5%		0.8%
80-84	0.8%		1.1%
75-79	1.2%		1.5%
70-74	2.1%		2.2%
65-69	2.8%		2.8%
60-64	2.7%		2.7%
55-59	3.1%		3.0%
50-54	3.4%		3.2%
45-49	3.8%		3.5%
40-44	3.5%		3.3%
35-39	3.3%		3.1%
30-34	3.5%		3.3%
25-29	3.5%		3.4%
20-24	3.5%		3.3%
15-19	3.1%		3.0%
10-14	3.0%		2.9%
5-9	3.1%		3.0%
0-4	3.1%		2.9%

Japan ▾
2017

Population: 126,045,211

	Male		Female
100+	0.0%		0.0%
95-99	0.1%		0.3%
90-94	0.3%		0.9%
85-89	0.9%		1.7%
80-84	1.6%		2.4%
75-79	2.3%		2.9%
70-74	3.1%		3.5%
65-69	3.5%		3.8%
60-64	3.1%		3.2%
55-59	2.9%		3.0%
50-54	3.2%		3.2%
45-49	3.7%		3.6%
40-44	3.7%		3.7%
35-39	3.2%		3.1%
30-34	2.9%		2.8%
25-29	2.7%		2.5%
20-24	2.4%		2.3%
15-19	2.4%		2.3%
10-14	2.2%		2.1%
5-9	2.2%		2.1%
0-4	2.1%		2.0%

Demographic projections

Population

5,330,800

Norway

Population

126,045,211
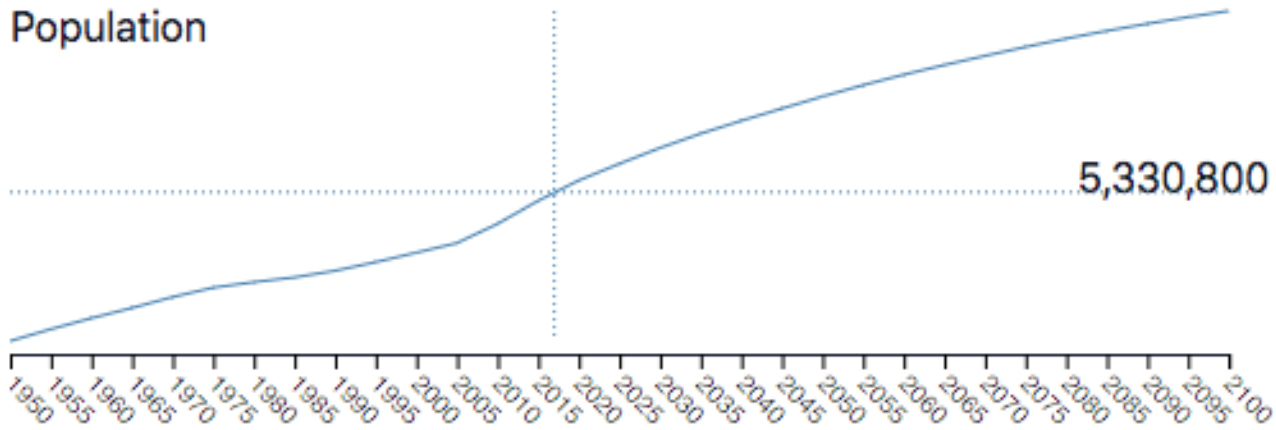
Japan

eWare – Early Warning Accompanies Robotics Excellence

How can we extend the healthy lifespan of the elderly in super-aging societies?

- – Socio-technical approach
- – User-centered approach

"My Robot Friend" project

Expectations

- What do elderly people and society expect from robots and AI?
  - We investigate this through *Future Scenario User Workshops*
- What types of robots could assist them?
  - In Scandinavia: "Welfare technology"

"The purpose of implementing welfare technology is to give people the opportunity to better cope with health, and strengthen their life through innovation and application of new technologies. It is a goal to make the welfare system better equipped to meet society's future challenges, including demographic trends towards an aging society."

- Our lab's vision

Technologies

- What technologies are necessary to achieving this objective?

  - Social robots

    - That "understands" people (e.g. Norwegian language needed)

    - That can be trusted (e.g. during bad weather)

    - That are safe

  - Virtual Reality spaces

  - Exoskeletons

International collaborations

- What are the strengths of the Japanese side vs. the European side?

  - Japan: Technological expertise

  - Norway: The world's most digital society

    / but with similar challenges for aging societies!

- What are the expectations for further improving Japanese-European partnership and cooperation?

  - Joint research project development

  - Experience and expertise exchange

ありがとうございます。
See you in Trondheim soon?

The 12th World Conference of Gerontechnology

ISG2020
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