



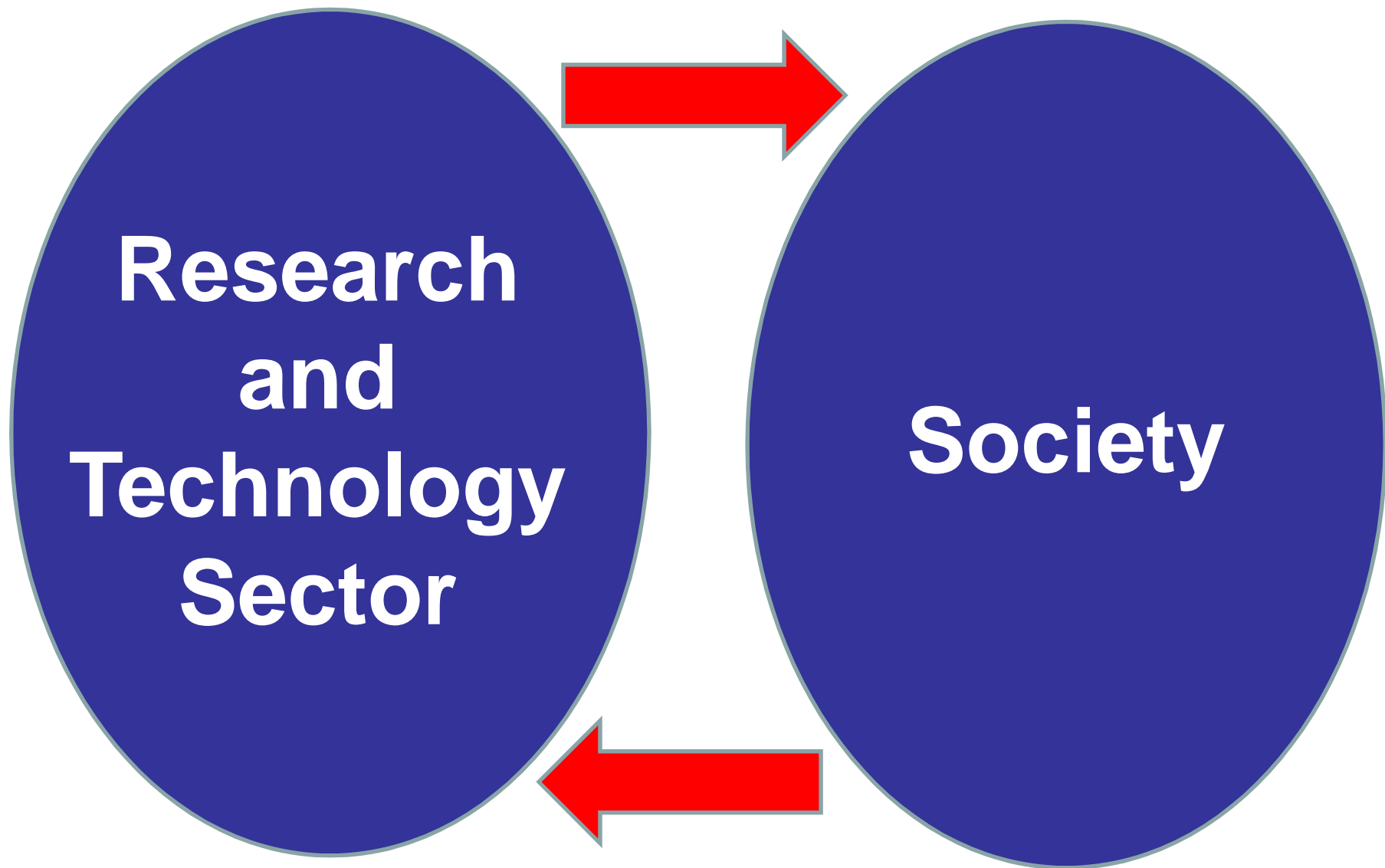
**Gregor Fitzi**

**Carl von Ossietzky University of Oldenburg**

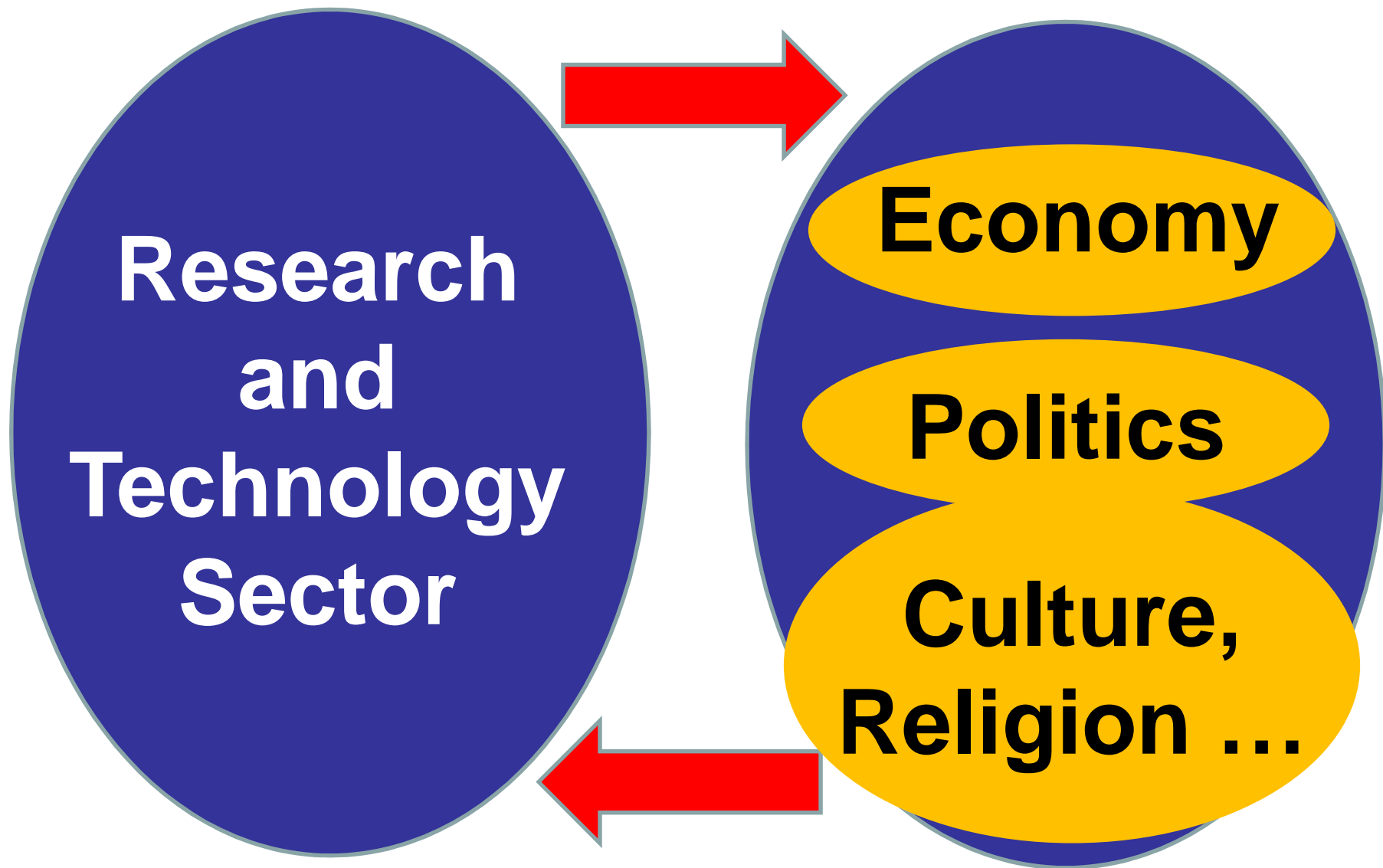
**Robots going beyond the laboratory?**

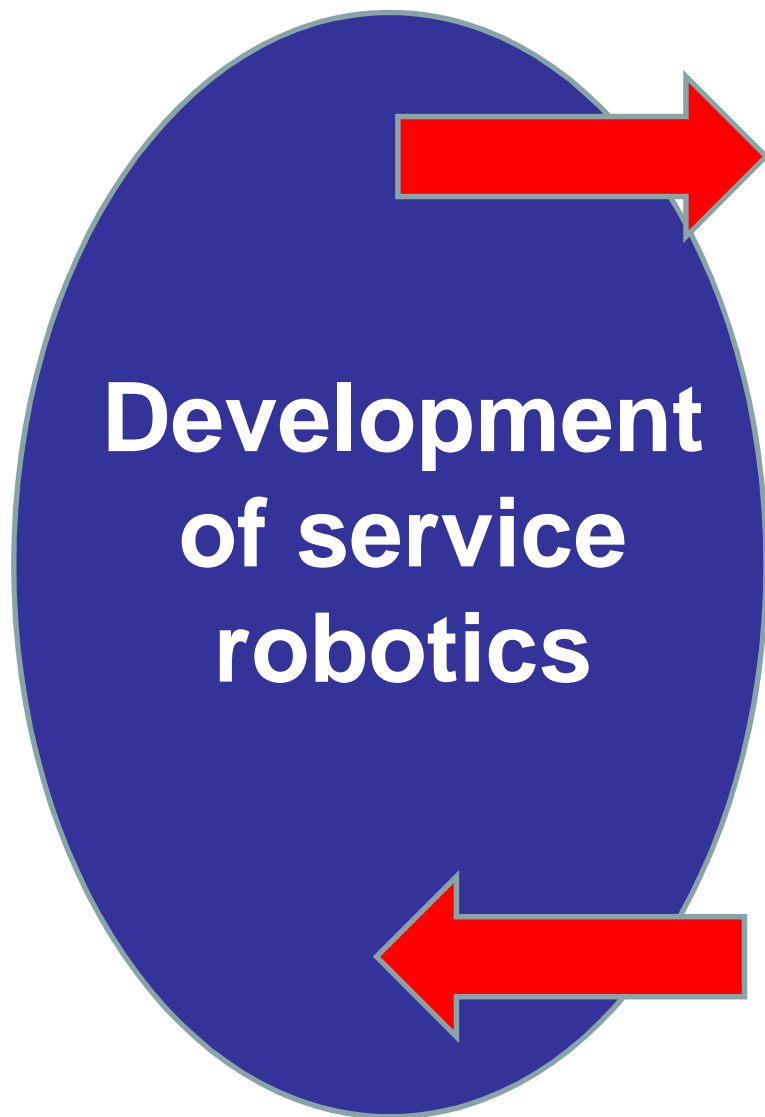
**Ways to frame the societal issues  
of future robotics**





PD Dr. Gregor Fitzi. Oldenburg





Issue	Concern
Population aging	To less care-givers for >65
Unemployment	Technology substitutes employees
Gender: majority of caregivers are women (p/-p)	- Women employment - Women condition
Environment	Increased pollution

## The top-down development model

### Step 1

- Research and technology sector:  
Development of new artifacts

### Step 2

- Cooperation with politics and media:  
endeavor to produce acceptance

### Step 3

- End-user and public reaction:  
Risk 1: blame of technocracy  
Risk 2: blame of robotics dystopia

# The bottom-up development model

## Step 1

- Cooperation with social research:  
Surveys on end-users needs (p/-p)

## Step 2

- Development of new artifacts

## Step 3

- Impact analysis of new artifacts:
  - > acceptance through cooperation
  - > benchmarking of the artifacts

**Thank you very much for your attention!**

**[gregor.fitzi@uni-oldenburg.de](mailto:gregor.fitzi@uni-oldenburg.de)**

