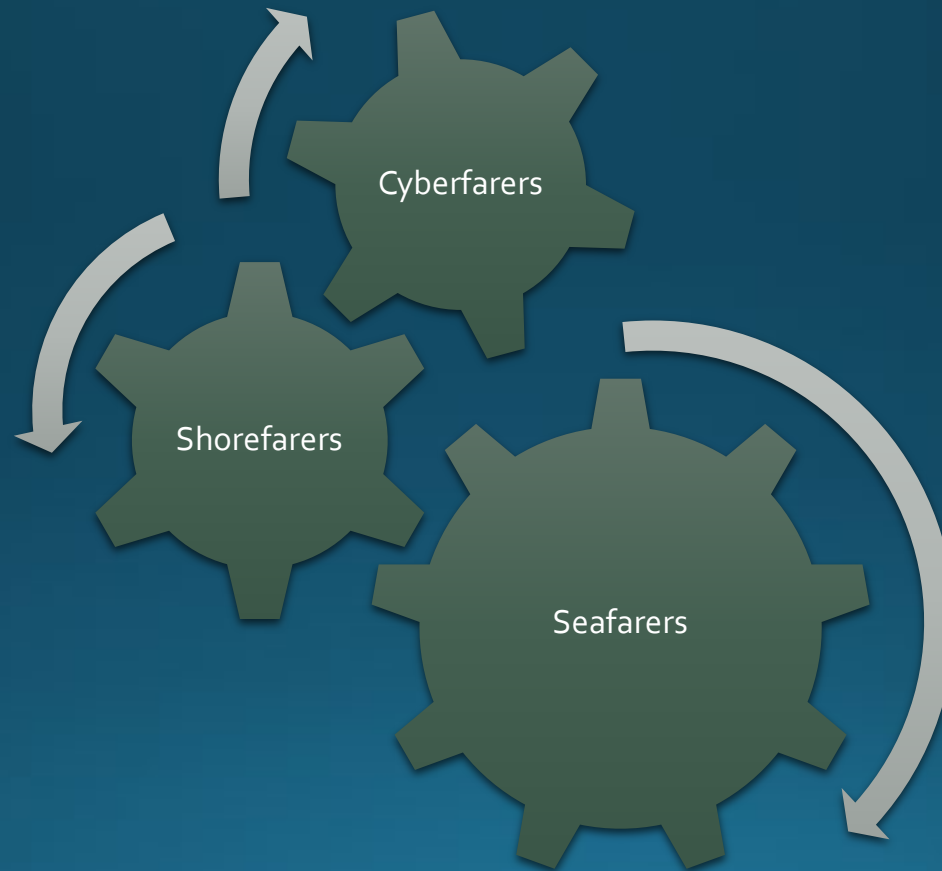


What we need to
successfully
coordinate with each
other in a new era of
ship navigation

Seafarers, shorefarers, and cyberfarers

A new era of ship navigation



Joint Activity theory

Common ground:

1. Goals
2. Participants
3. Roles
4. Timing
5. Location

Goals

- Main goal
- Sub goals
- Competing goals
- Changing goals

Participants

- Ratified participants
- Side participants
- Non-participants
- Entry and exit

Roles

- Ability
- Authority
- Changing roles

Timing and location

- Synchronisation
- Sequence
- Family
- Geographical location
- Non-geographical location?

What we need

Information available to all participants about:

- different goals and how those goals are valued in relation to each other
- what the status of each participant is in relation to their participation
- the abilities of each participant and the distribution of authority among them
- when, where, and how actions are expected to be performed to ensure coordination
- all information to be updated in 'near' real-time on an ongoing basis

Concluding remarks

- Shipping is more than just ships
- Coordination comes at a cost
- 'A wealth of information creates a poverty of attention'
- Is shipping ready to embrace transparency?