

Beyond metier analysis: Using Fishing Styles to understand social heterogeneity in the Dutch demersal fleet

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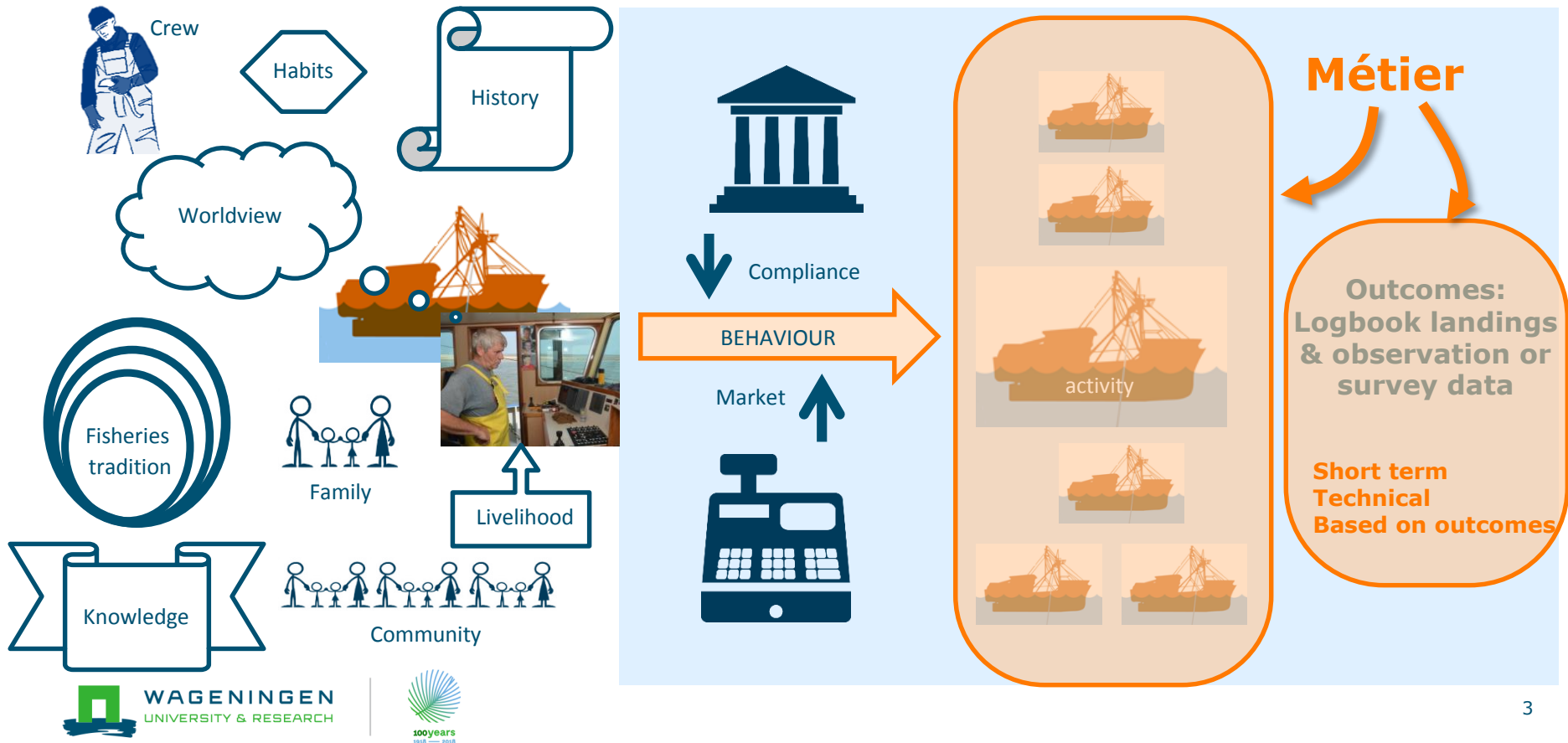


What has the greatest influence on fishing activity?

- Vessel length
- Mesh size
- Weather
- Gear type
- Market price
- Season
- Engine size
- Regulations



What do we know about fisher behaviour?



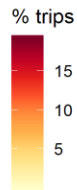
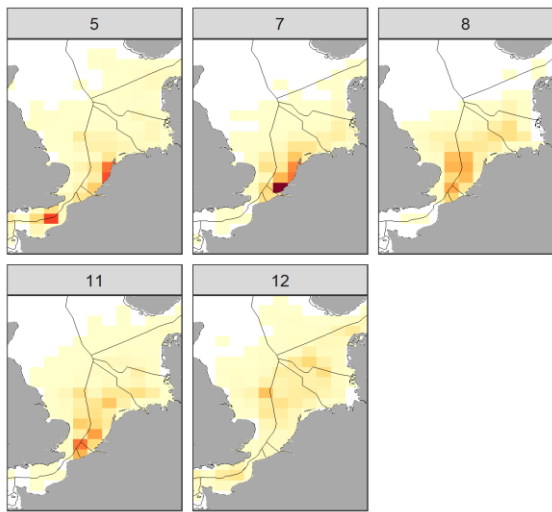
Fishing Styles offer an approach

A combination of quantitative and qualitative methods to identify:

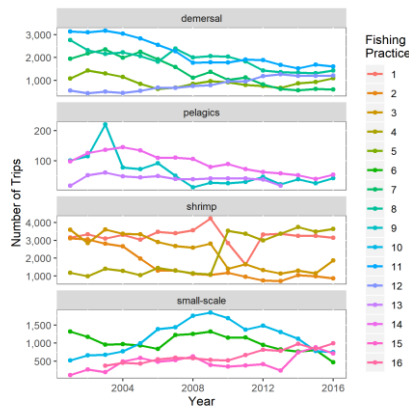
Patterns of actions, which aim to create congruence between normative notions about how fishing should be practiced, and fishers' dependence on different social and ecological contexts

What the fisherman himself thinks of his behaviour

The external factors that motivate fisher behaviour

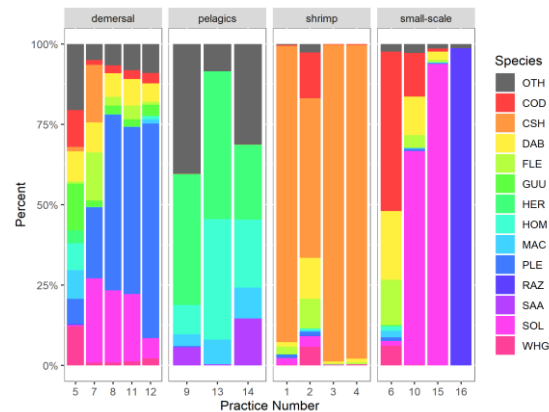


Number of Trips per Practice per Year
Dutch Fleet 2001-2016



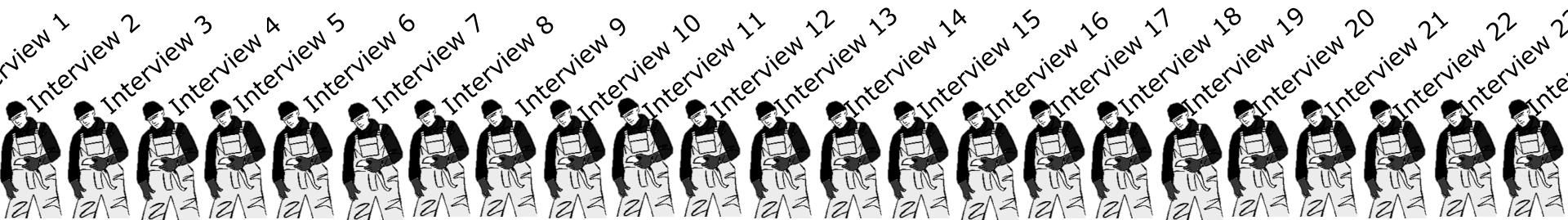
Source: Logbook data 2001-2016
Data for top 25 species by volume and gear used in more than 1% of trips

Species per Practice
Dutch Fleet 2001-2016



Source: Logbook data 2001-2016
Data for top 25 species by volume and gear used in more than 1% of trips

320,000 logbook observations over 15 years **AND** 28 fisher interviews (60 hours audio= 430,000 words)

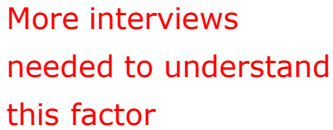


Qualitative analysis – MCA and inductive grouping



So much to say, so little time...

- Village
- Entry to fishery
- Motivation
- Crew relationships
- Outlook on the future
- Tradition and history
- Religion
- Farmer or hunter?
- Succession
- What they think of other fishers
- What they think of regulations
- What they think of science
- Age
- Connection to place at sea
- Quota status
- Where they usually fish
- Discards
- Target species
- Gear
- Financial position
- Adaptive/reactive
- Work-life balance
- Identity-fishery entanglement
- Business structure
- EMK membership (Fisher's NGO/lobby)



Same metier ≠ same fisher

Metier: TBB_70-90_DEF

Beam trawl 70-90mm mesh

Plaice/sole catch composition

Netherlands EEZ

Low seasonal variability

- **Fishes Monday to Thursday**
- Owns the vessel
- Family business for five generations
- Owns and operates the business along with his father and his son
- **Specialised fishing technique**
- **Historic fishing grounds**
- Worried about the future



Klaas



Jan

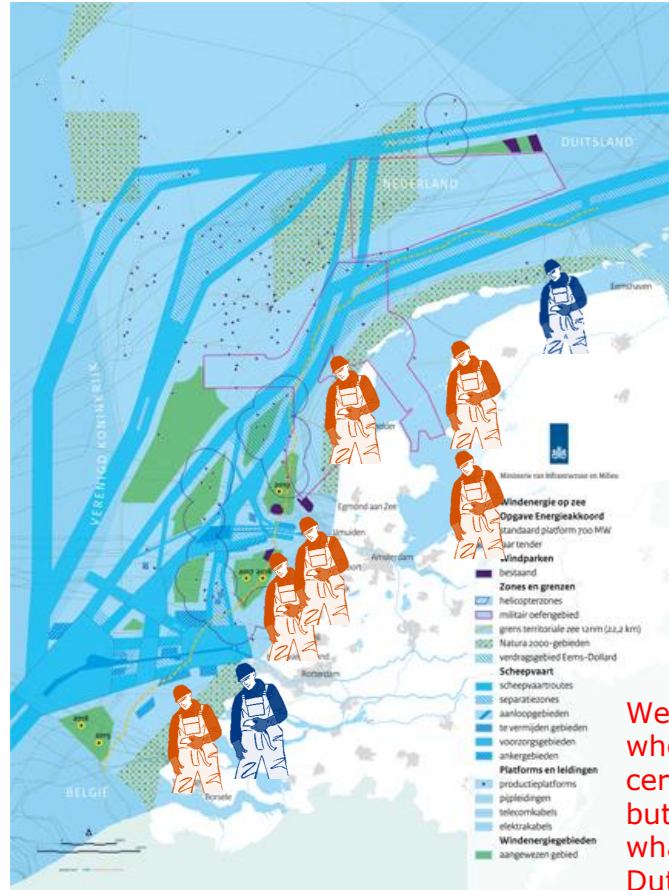
- **Fishes 7 days on and 7 days off**
- Fishing company owns the vessel
- First-generation fisher
- Company decides crew, gear investment, quota acquisition
- **Flexible technique**
- **No connection to fishing grounds**
- Relaxed about the future

Knowing fishers avoids unintended consequences

- Fixed grounds
- Predictable patterns
- High personal stakes
- Relies on producer organisations for representation to gov.
- Business management kept in the family
- Large barrier for reskilling



Klaas



- Agile
- Unpredictable patterns
- Lower personal stakes
- Company will lobby on his behalf
- Team of people helping with long-term strategy
- Possibilities to reskill (e.g. move from demersal to pelagic fishery or from skipper to processor)

We provide evidence about who will win and lose from certain policy interventions, but managers have to choose what they want the future of Dutch fishing to look like



Jan

These insights are a toolbox, not a hammer

- It depends on your objectives:
 - **Continuous fishers** might have more efficient vessel utilisation
 - **Weekday fishers** might offer better working conditions to crew
 - **Fishing companies** consolidate and make the industry more uniform
 - **Skipper-owner businesses** contribute to cultural heritage and identity and keep a community intact
 - **Specialists** might flourish in single-stock management regimes
 - **Switchers** take advantage of the whole 'basket' of species
 - **Connection to fishing grounds** might determine how a fisher reacts to a busier North Sea

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Appendix: Mixing methods

