



## 2. Purposeful planning Dr Mike Yearworth & Kat Burger

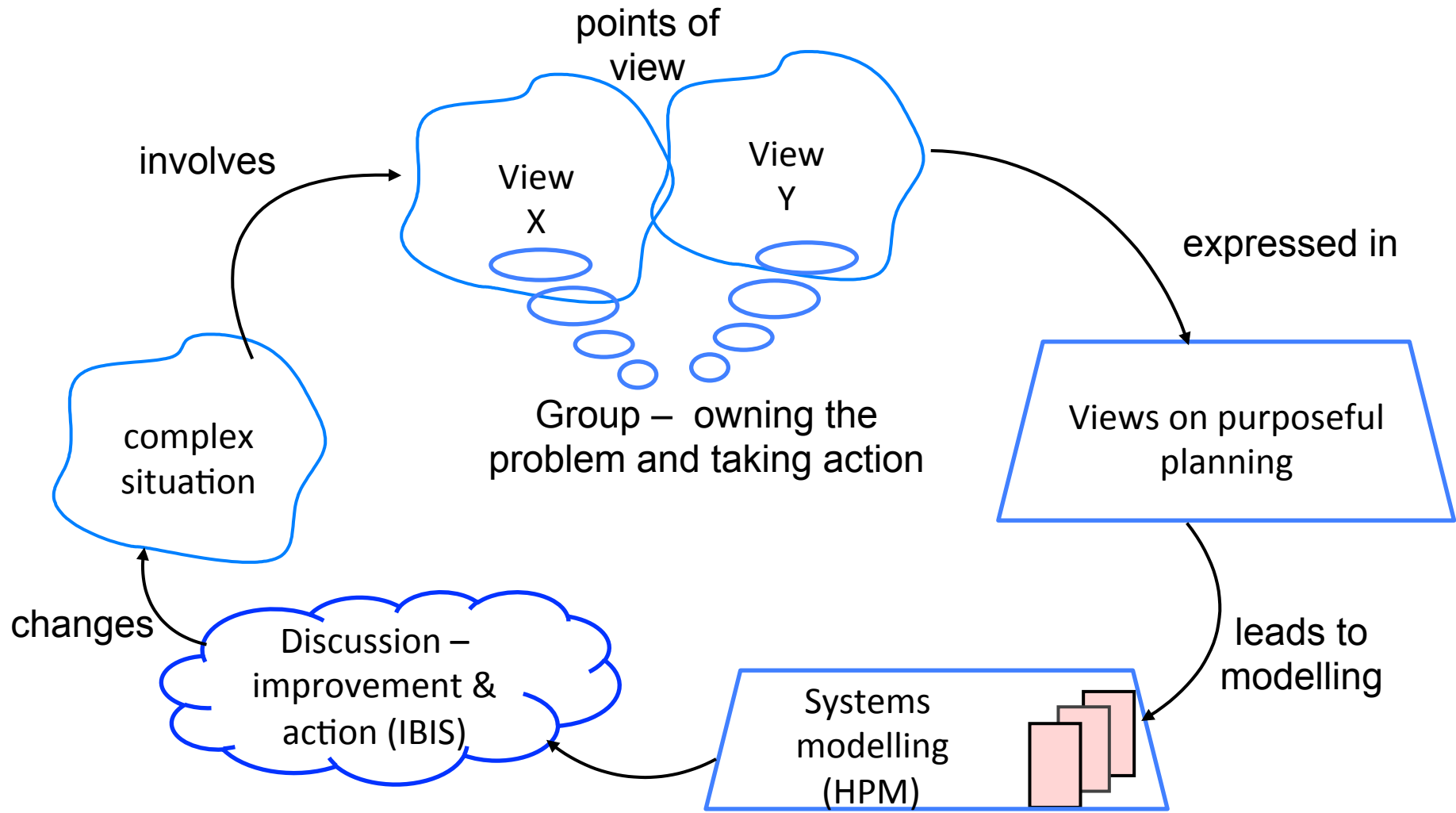


## 1<sup>st</sup> Stage – stakeholder engagement

- Recruiting/engaging with the relevant stakeholders
- Using techniques to express views about current situation e.g. SWOT, PESTEL analyses, rich pictures, evidence on the ground, what-if scenarios from GIS-based models (Task 2.2)
- Expressing views and identifying key issues, stepping back from the situation, creating interaction between participants.
- Following these principles:
  - Getting participants to stop making decisions (especially managers)
  - Being holistic – see patterns in the big picture
  - Dealing with *worldviews* which determine what we see (our POV feels real and objective)
- To a certain extent, this is what STEEP is doing already

Adapted from (Hindle, 2011; White, 2009)





Adapted from (Hindle, 2011)



# Stakeholder engagement - SSM's verb modelling technique

- Verb models describe an activity in the form: “A system to do P by means of Q in order for R”
  - Example: “A system to carry out community programmes (P) by providing corporate sponsorship (Q) in order to foster sustainable development (R).”
- Useful verb models include a number of elements:
  - an activity or transformation (T), a worldview that makes sense of this (W) and an environment in which the transformation takes place (E).
  - three types of Stakeholders are distinguished: stakeholders as actors (A), as owners (O) and as customers (C)

Adapted from (Checkland & Scholes, 1999)



## SSM's verb modelling technique – example

- A system for the Smart City Group (A) at Bristol City Council (O) to achieve energy efficient development of the TQEZ (T) for the Bristol community at large (C) by promoting a set of practices around open data and GIS modelling (W) and which is seen as essential activity to meet commitments to 2050 emission targets (E)
- (T) then expressed as a process e.g.
  - District energy master planning
  - Accelerating interventions for greater energy efficiency in city districts...



## 2<sup>nd</sup> Stage – systems modelling

- Deciding purpose
- Choosing Options
  - Baseline “as is” model – Now
  - Design model (creative, innovative, future state) – referent (organisation, business unit, service, process, change project)
- Hierarchical Process Modelling – processes linked by decomposition into hierarchies arranged in layers to manage complexity
- Gathering evidence of performance



## Purposeful holons...

- A holon is a conceptual, abstract, representation of a whole, which is also a part
- Used as an intellectual device to think about the world
- We will be using conceptual models that consist of processes, described by verbal nouns, structured into a hierarchical arrangement by decomposition and representing the minimum processes in a system required to achieve a *purpose*



## Exploring and expressing purpose

- Using the soft systems tradition our system model (holon) is an intellectual device that will be used to decide how to intervene in a messy problem situation
- This system has a *purpose*, which needs to be articulated as the starting point for our modelling process
- Examples of possible top level process descriptions
  - District energy master planning
  - Accelerating interventions for greater energy efficiency in city districts
  - Transitioning to a smart city
  - Achieving deployment of low carbon technology
  - ...





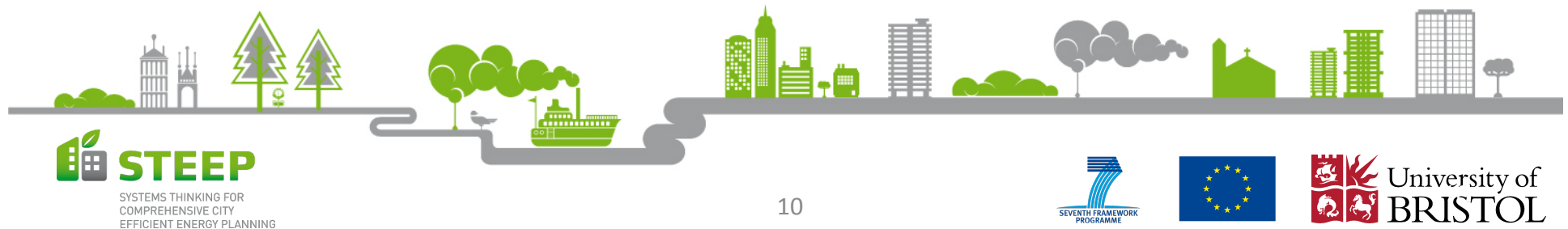
## 3<sup>rd</sup> Stage – deciding interventions

- Reviewing the Hierarchical Process Model
- Capturing *evidence* of process performance
- Eliciting *issues* relating to poor/unknown performance
- Investigating and capturing possible *options* to intervene in the problem situation
- Capturing *arguments* for and against the options
- Agreeing an *Action Plan* that is i) Desirable, ii) Feasible, iii) Ethical
- Reflecting, documenting, evaluating important



## Exercise

- Decide a *meaningful* purpose description to be used as the top-level process for your system taking into account
  - Key issues
  - Stakeholders involved
  - Assumptions you are making
- Feedback to the group
- We will re-examine this purpose later



## References

Checkland, P., & Scholes, J. (1999). *Soft Systems Methodology in Action: Including a 30-year retrospective*. Chichester: Wiley.

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