

A European Cooperation in Science and Technology Proposal

# The NarCS Concept

NarCS is a proposal to bring together specialists in narrative theory and complexity science in order to develop a new methodology for science communication of real-world systems, with stakeholders and among scientists themselves.

The first principle of effective communication is to tell a story, yet complex systems defy narrative explanation, even as they exhibit behaviour that invites it. The

tendency to misrepresent complexity in the name of communication affects many of the most important and socially consequential areas of contemporary scientific knowledge. This is a deep problem, stemming from the centrality of narrative sense-making to human cognition, and goes to the heart of complexity science itself.

To develop effective narrations of complex systems, we have to overcome the resistance of complex systemic processes to narrative frameworks; both to examine contemporary cultural manifestations of this impasse in science media and fiction, and to engage with the

communicative and conceptual problems it raises.

Our methodology is founded on the interplay among four components:

COMMUNICATION
CULTURE
CONCEPTUALISATION
COGNITION

- what can be conveyed
- what to convey
- how do we narrate
- how do we interpret

We will form trans-disciplinary working groups to frame these individual components. Once framed, a major activity will be to determine components interconnections, theoretically and practically.

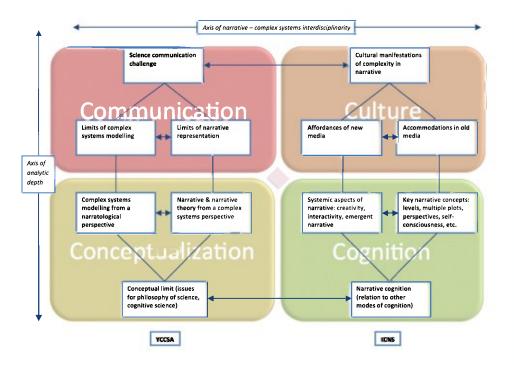
We will demonstrate our methodology in practice by engaging with three distinct domains, with real-world problems set through stakeholder-led workshops in the challenging areas of robot companions, climate change and human health.

Ultimately we will develop the next generation of researchers, able to operate at the interface between narrative theory and complexity science. We will provide training and support activities to bridge this discipline divide.



**EU COST Trans-disciplinary proposals (TDPs)** 

TDPs are funding mechanisms designed to bring together different disciplines in order to enable breakthrough scientific developments leading to new concepts and products



# Our approach

Our proposal is for 4 years of activities, with one development phase per year.

### Phase 1: framing the components

A set of initial actions will determine current research and exemplars of practice in each of Communication, Culture, Conceptualisation and Cognition. Key outputs will be a summary of current thinking linked to examples of practice in each component.

## Phase 2: forming the axis of analytical depth

The axis of analytical depth binds components vertically. Key to linking Communication and Conceptualisation is to establish conceptual models of narration that might support complex systems communication. Culture and Cognition interact to determine the affordances of narrative media in society.

Phase 3: synthesising the axis of narrative - complex systems We will bind components horizontally by reconciling the opportunities provided by Communication:Conceptualisation with the affordances and limitations of Culture:Cognition. Our primary deliverable will be a Handbook on how best to narrate complex systems.

### Phase 4: narrating complexity

We will test our Handbook on three real-world case studies by developing complex systems narrations that address central and complex issues in those case studies. The lessons learned from this will feed back into both our Handbook and our understanding of how to narrate complex systems.

### Indicative activities - we will:

- Establish Working Groups to deliver on each of the above phases
- Hold an Annual Conference and associated Summer School for training young researchers. We will publish peer-reviewed Conference Proceedings
- Support Young Researcher Exchange, especially from Narrative Theory groups into Complex Systems groups and vice versa
- Stimulate stakeholder engagement through problem-led meetings
- Deliver regular Progress Reports
- Invest time in Proposal Writing for securing research funds
- Maintain a project website to promote our activities

# **Proposal Invitation**

Would you like to be part of our proposal? If so, please provide the following information:

#### 1. Contact Details

The following details are required for an EU COST proposal: name, institution, email address, telephone number, gender, years since PhD

### 2. Expertise

A short statement of what you could bring to this proposal

- 3. Related EU-funded projects
  A key element of EU proposals is
  how they can draw on and add
  value to currently funded
  activities. Please list consortium
  involvement (including number of
  partners) that might be willing to
  interact with NarCS
- 4. Other project activity
  As per item 3, please list other project activity that might cross-link with NarCS
- 5. Institutional support
  Would your group / department /
  institution be willing to host PhD
  student exchange, summer
  schools and annual conferences?
  Do you / your group have track
  record in this?

## Key deadlines

Invitation Acceptance:

14th March 2014

**Proposal Submission:** 

11th April 2014

### **Contact Details**

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