Unusual Perspectives on Dynamic Networks: Building Interdisciplinary Understanding

April 2021 - September 2022

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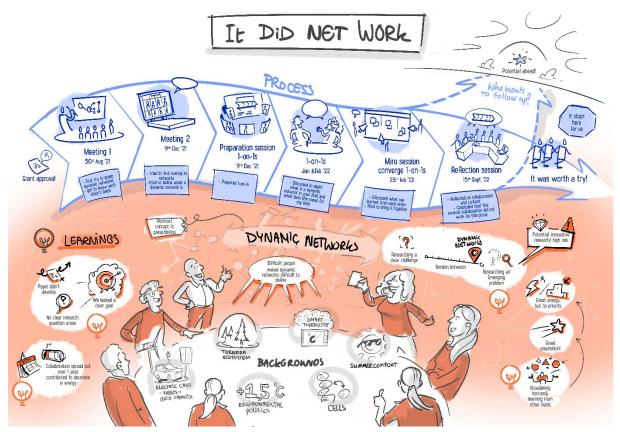


Figure 1. An overview of our journey through the spark project (top) & Our learnings and reflections at the end of the journey (bottom).

Introduction

This document presents the results of our Unusual Collaborations Spark project *Unusual Perspectives* on *Dynamic Networks: Building Interdisciplinary Understanding*, which ran from April 2021 to September 2022.

The project arose from the observation that within our respective fields spanning design, ecology studies, molecular biology, political science, sociology, human geography, and science and technology studies, there is a growing realisation that the topics we study all exist within a dynamically changing network of relations to other 'things'. However, we all conceptualise such 'Dynamic Networks' in different ways.

These different perspectives shape the type of research questions asked, methods employed and suggestions concerning where to intervene in order to steer change in desirable directions.

The goal of this unusual collaboration has been to cross-fertilize these otherwise separate perspectives. This approach aims to lead to new insights within and between our respective disciplines, which can advance our collective toolbox to address societal challenges.

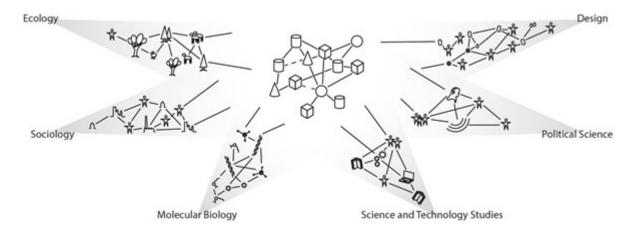


Figure 2. Bringing together diverse perspectives on Dynamic Networks (Spark proposal)

This report offers an overview of, and reflection on our activities and results. Apart from Figure 2, which was made by Joep Frens, all images in the report are made by Flatland. Flatland – an agency specialised in envisioning and activating strategies – supported us in running three of our four project meetings and summarized these in visuals.

Our journey through the spark project

Over a time-span of about a year, we have held four project meetings (either online or physically). In addition, members have come together in 1-on-1 sessions halfway through the project.

Meeting 1: 30th of August 2021

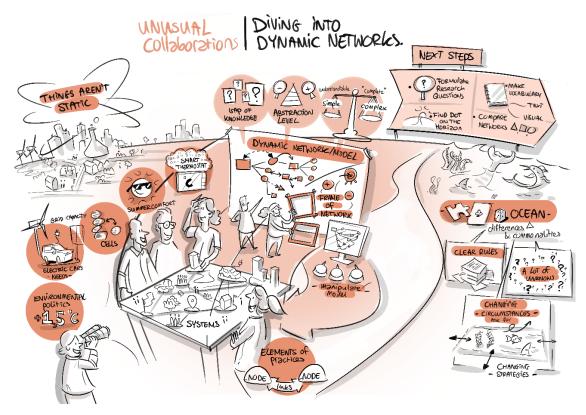


Figure 3. After having interacted online about the project since November 2020, we were finally able to get together physically. This kick-off meeting was focused on getting to know each other. This included exchanging our respective disciplinary conceptualisations of dynamic networks. Next to PowerPoint presentations and brainstorming questions, links, difference and similarities, we also had more unusual elements to our meeting, including playing the collaborative board game Oceans.

Meeting 2: 9th of December 2021

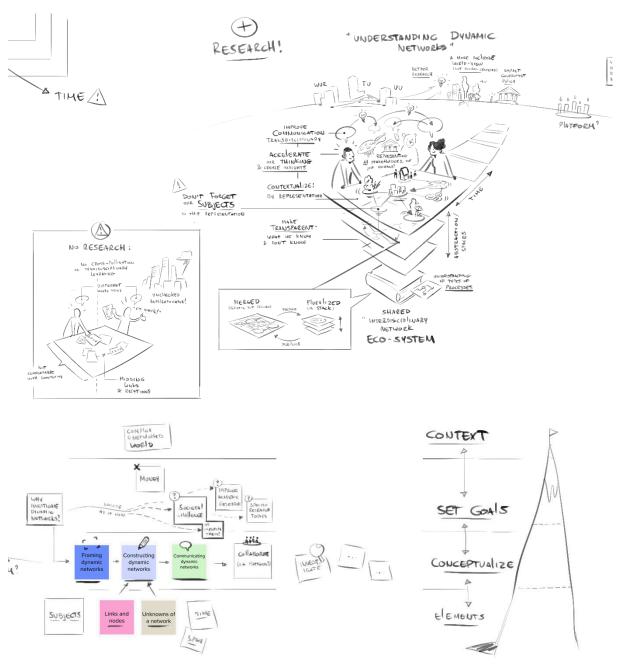


Figure 4. In this online Mural meeting (hosted by Flatland) we explored the questions 'What will the world look like when the research has been successfully executed?' and 'What will the world look like when the research did NOT take place?' (top picture). From this exploration follow-up steps were planned to investigate the concept of shared dynamic networks (bottom picture).

1-on-1 sessions: January/February 2022

Through these various activities, we found that our different perspectives made it challenging to dive deeper into shared dynamic networks in a group setting. The next step was to discuss in duos. In 1-on-1 sessions the members got the assignment to explore how their perspectives could inform each other. Members talked for example about how the starting point influences where the analysis begins, how different perspectives use systems/network theory, and the challenge arose of understanding how each discipline defines the nodes and edges of their network.

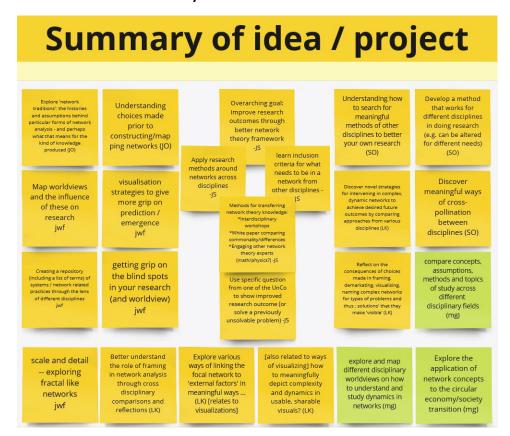


Figure 5. In an online Miro meeting, the duos presented their outcomes of the 1-on-1 sessions and we tried to bring it together in a brainstorm for project ideas. Some ideas that came forward were for example to learn about inclusion criteria for what needs to be in a network, to explore the histories and assumptions behind network analysis (and what does this means for the knowledge that is produced?), to set up interdisciplinary workshops, to write a white paper comparing the commonalities and differences between the use of network theory frameworks, and to eventually solve a previously unsolvable problems by having learned from each other's network theory usage.

These intentions were taken as a starting point to begin composing a follow-up grant proposal, however, in the end we had to conclude that this particular consortium was not able to produce a coherent, unusual or otherwise sensible grant proposal at this moment in time. More about this in the next section, and in Figure 1.

Reflection session: 15th of September 2022

In a physical meeting at the UnCo Centre in Utrecht, we reflected upon the spark project by looking at the steps we took and what we learned both as a collective as well as individually (see Figure 1). The learnings can be summarized as follows:

1) Lacking a concrete problem/goal. As much as we have tried to come up with a shared research question or goal to support a follow-up proposal, eventually we did not manage. In the session we reflected that the topic of dynamic networks that brought us together was relatively abstract and therefore difficult to translate to a concrete (societal) research focus. We view this as part of the risk of composing a consortium on the basis of an abstract concept – dynamic networks – rather than a concrete challenge. This approach can bring together highly diverse disciplines, and therefore has potential for highly innovative research to emerge from the

collaboration, but also has a risk of failing to identify any common denominator. A more concrete research challenge, such as a specific health issue or environmental problem, could have formed a more solid basis for the formulation of a research plan, but also potentially limits the scope of collaborating disciplines.

- 2) <u>Field specific jargon makes dynamic networks difficult to define</u>. Since a dynamic network has a meaning in each discipline that is very different from someone else's dynamic network, it makes it challenging to come to a shared language.
- 3) <u>Broadening of horizons & learning from other fields</u>. The project did bring great inspiration for the individual members of the group which can be applied to personal research. For example, it set members to think about how they are doing their research and what else they could possibly do.
- 4) The collaboration was too spread out. Due to the group members having large gaps of time in between the meetings the collective energy may have decreased.
- 5) <u>Great energy but lack of priority</u>. During the group meetings all members were very involved and enthusiastic about learning from each other's dynamic networks. However, a priority for the project outside of those meetings was lacking. Therefore, this group has decided to end this collaboration (in this setting) after the spark project and not continue to apply for the UCo Grant.

Conclusions

It did net work – failure should be an option, and failure isn't failure.

Was the project too unusual? No, we don't think so. We fully support the objectives of the Centre for Unusual Collaborations. One might argue that our 'failure' emphasizes the success of the Centre to allow for high risk research. High risk research has potential to lead to highly innovative results, but also to 'fail'.

The title of our final poster however represents the double layer to failure. Although not moving on as intended, we have all learned from the experience, and extended our networks with quite unusual, potential future collaborators.

Acknowledgements

We want to thank the Centre for Unusual Collaborations to bring us together, offering us financial support, and supporting several of our meetings in their wonderful workspace the Uithof Campus in Utrecht. We also want to thank Flatland, and in particular Nanne Uffen for their energetic, enthusiastic and helpful support in our process, and Sieb Posthuma and Iren van Oosterom for their fantastic visualisation skills, which were super helpful both during and after the project meetings.