



GAME OF SWARMS

PAULA NISHIJIMA JUNE 2019

GAME OF SWARMS – WORKSHOP

Artist: Paula Nishijima

Dates of sessions: June 25 and July 9, 2019

Max n° of participants: around 20

Duration of each session: 3 hours

SUMMARY

The workshop will be structured as follows:

- 1) Introduction Platform-A and IMNA + purpose of the workshop + introduction of participants (15min)
- 2) Presentation of research on networks (10min)
- 3) Presentation of progress of the game with diagram (10min)
- 4) Explanation of rules + preparation for the activity (10min)
- 5) Activity in groups (4 groups) to elaborate on new rules for the Game of Swarms (60min)
- 6) Break (10min)
- 7) Presentation of the rules by the groups (40min)
- 8) Collective discussion (20 min)
- 9) Wrap up (5min)

INTRODUCTION

Game of Swarms is a cooperative game to be developed and test collaboratively. The final version will be online and incorporated into the website of Mutant Institute for Environmental Narratives under noncommercial use creative common licenses. The general objective of the game is composing a network taking into account the **distribution of agency and control, and the resilience of the network.**

GENERAL OBJECTIVE

Elaborating/adjusting the rules for the *Game of Swarms*. It is expected that each participant contributes with his/her own expertise and background to the game.

SPECIFIC OBJECTIVE OF THE SESSION

Applying the concepts discussed in the previous workshops—sensorial structures, learning process and collective decision-making—to create new rules for the game. The concepts will be introduced during this workshop.

STEPS

1) Introduction Platform-A and IMNA + purpose of the workshop + introduction of participants

2) Presentation of the theory related to the network topologies and living networks.

3) Presentation of the progress of *Game of Swarms*, including the first two workshops held on April 11 and June 18.

4) Explanation of the rules of the game that we have so far.

5) The participants will be divided into 4 groups of 4-5 persons. Each group will receive a set of pieces with nodes and connections to test and elaborate new rules.

The groups will have one hour to play and create together new rules. They will also be able to adjust and propose changes on the previous rules. They will be asked to write down the possible new rules of the game.

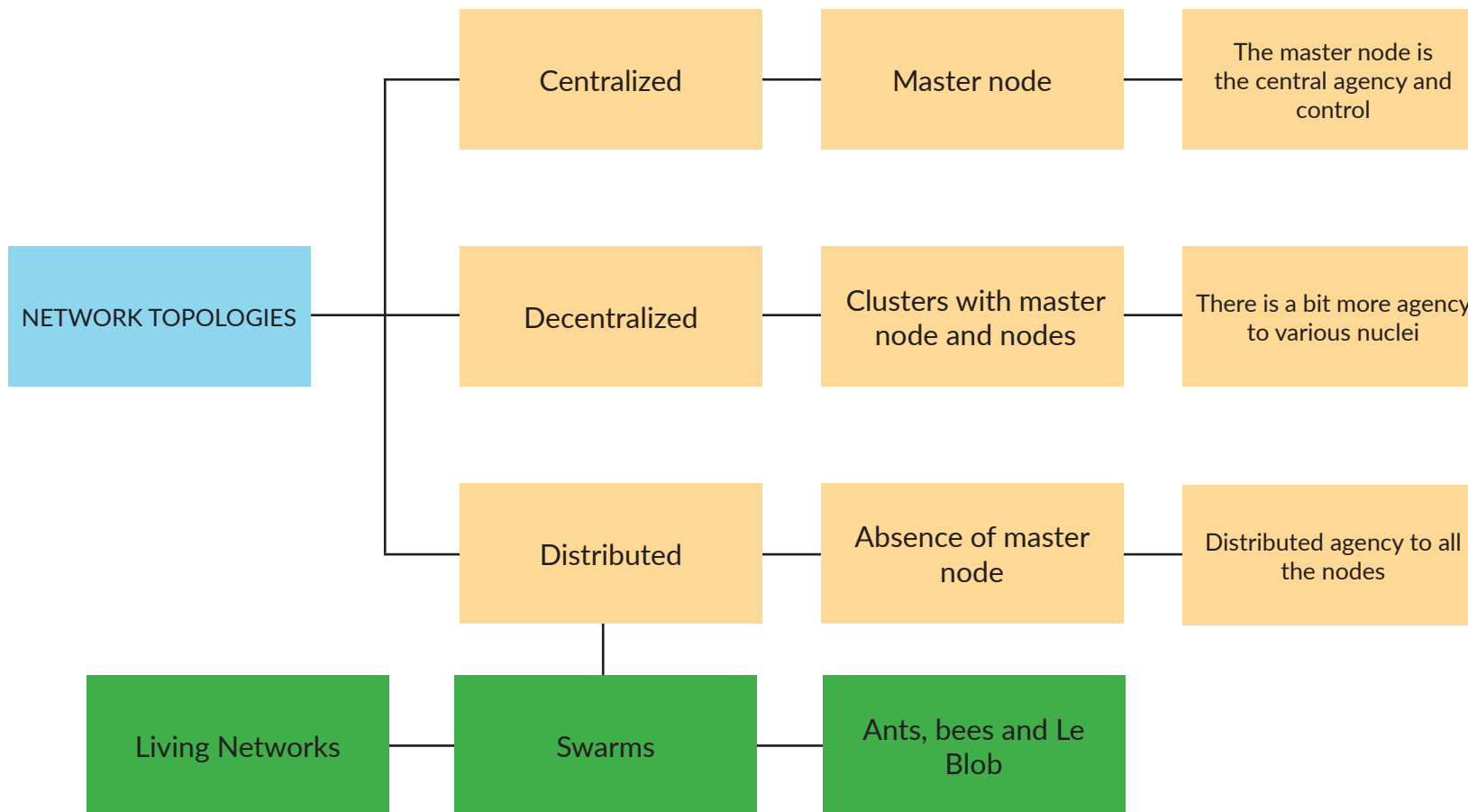
6) Break of 10 minutes.

7) Each group will present the dynamics and rules created by them.

8) The whole group will have the opportunity to discuss together the dynamics and rules created, and possible future steps for the implementation of the online game.

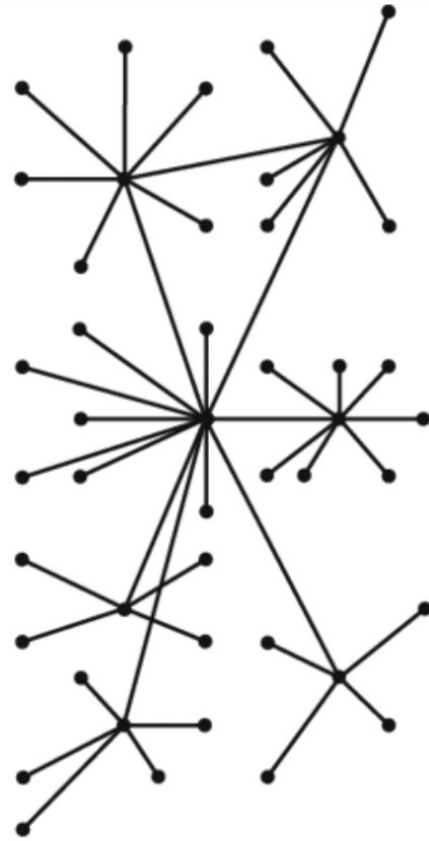
PROGRESS OF THE PROJECT

PREVIOUS RESEARCH

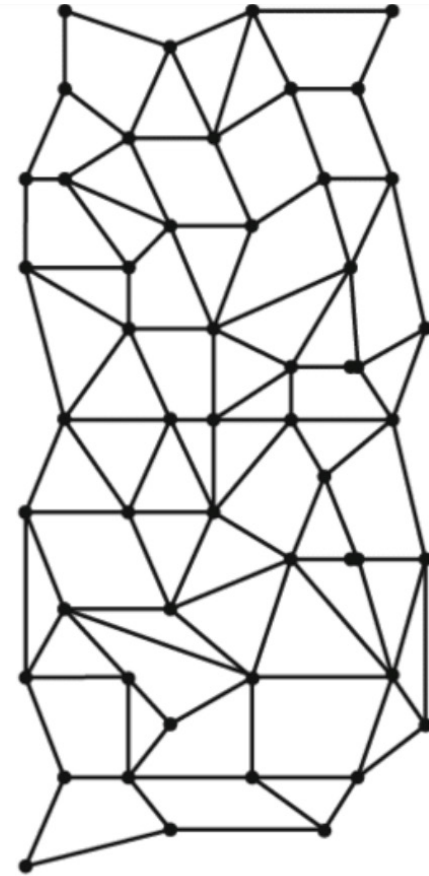




Centralised

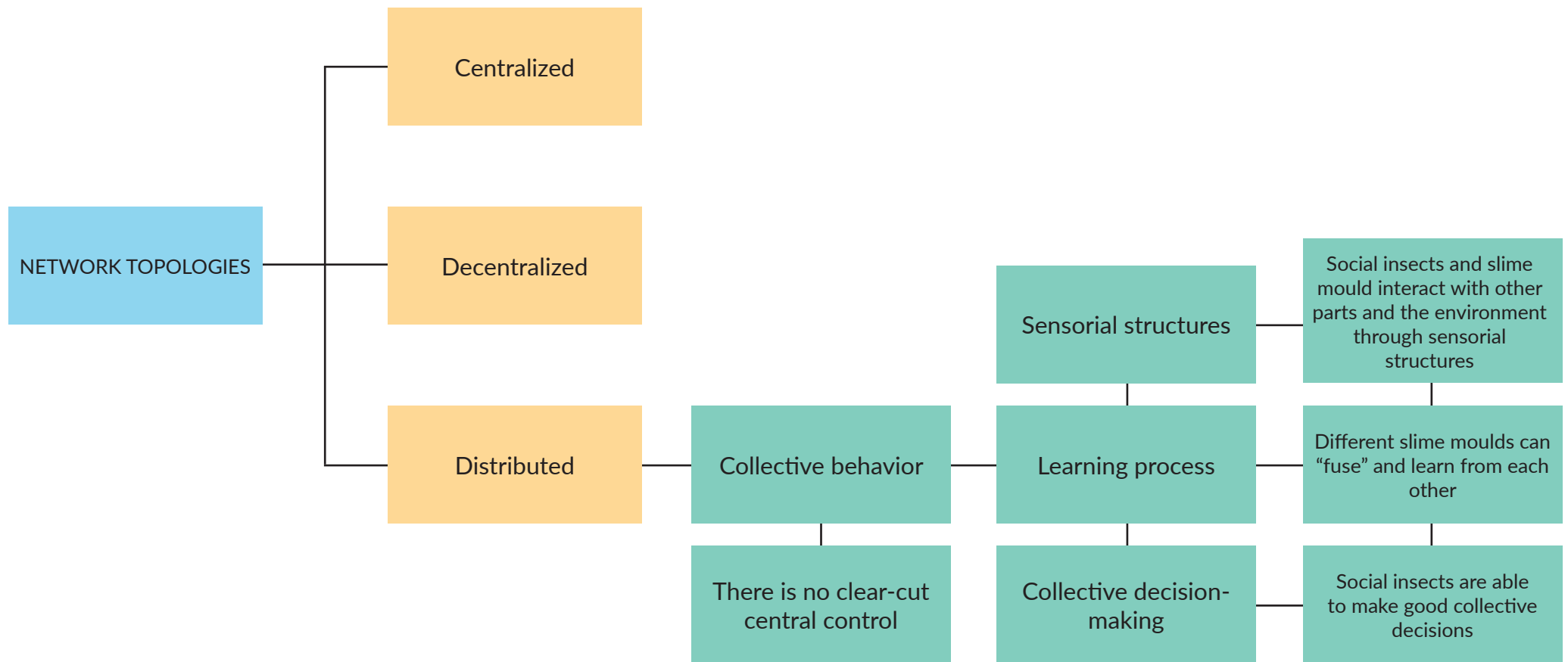


Decentralised

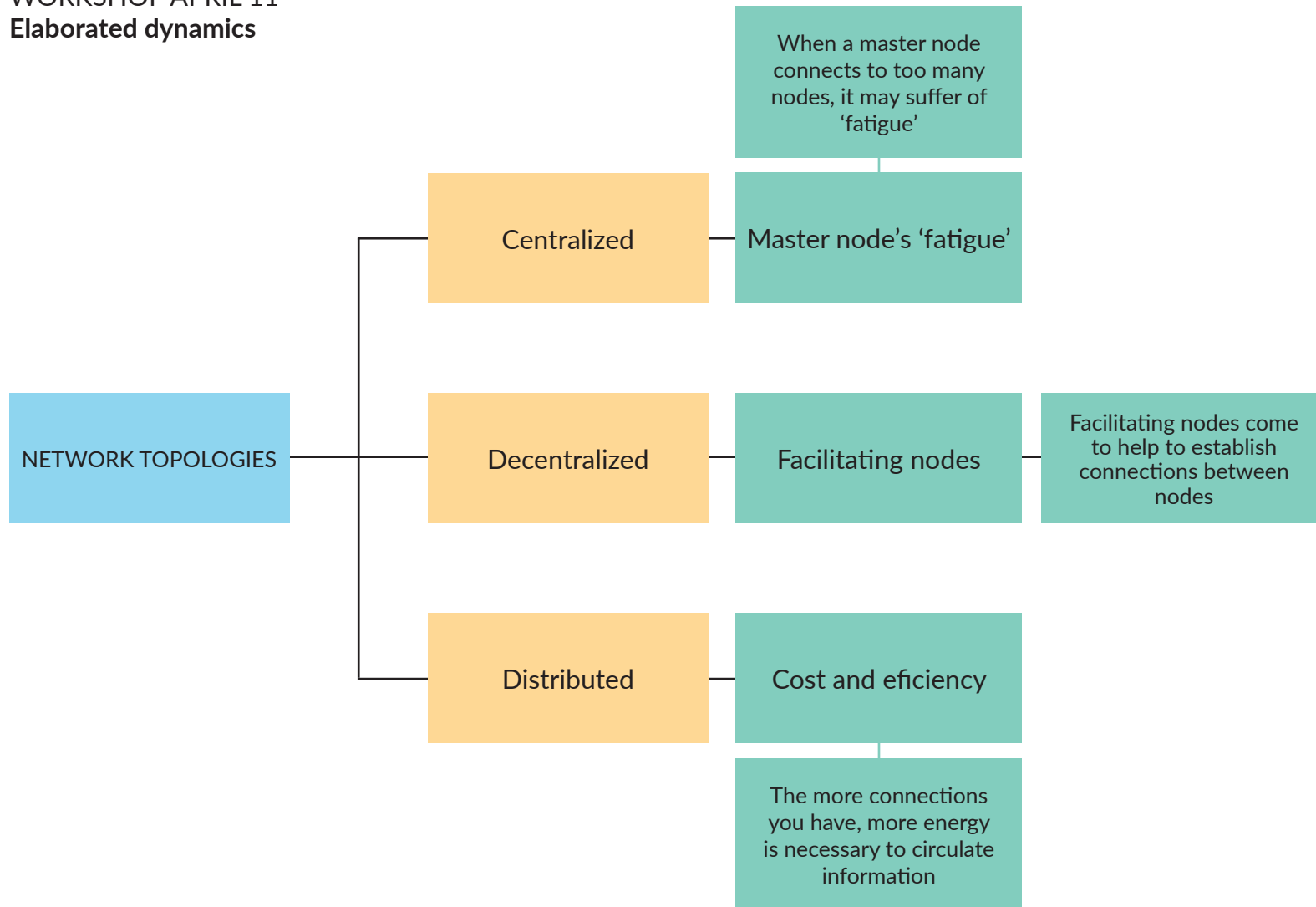


Distributed

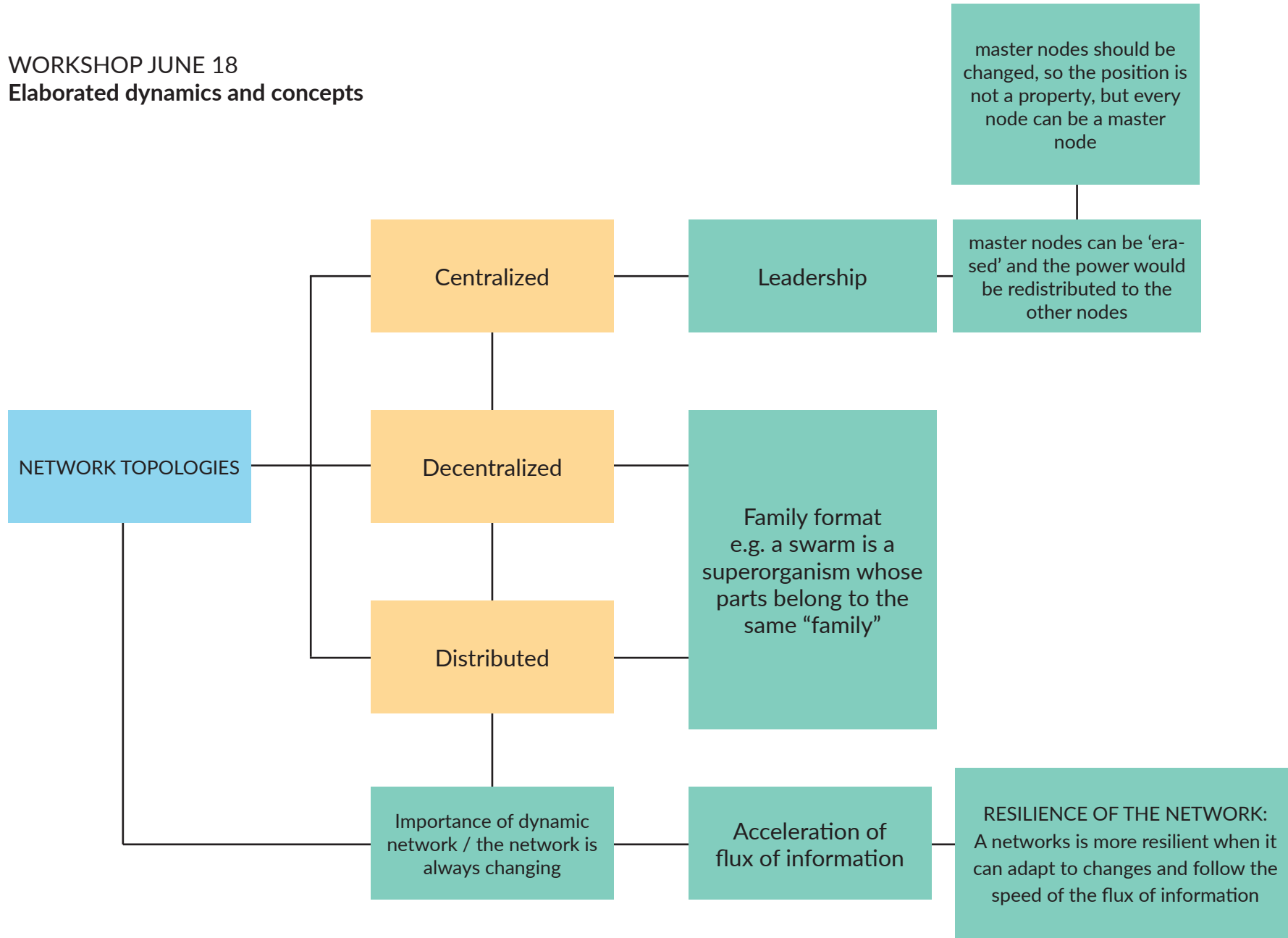
COLLABORATION WITH ETHOLOGISTS
Elaborated concepts



WORKSHOP APRIL 11
Elaborated dynamics



WORKSHOP JUNE 18
Elaborated dynamics and concepts



THE GAME

GAME OF SWARMS is a cooperative game, whose final online version will be incorporated into the website of Mutant Institute for Environmental Narratives.

General objective: composing a network taking into account the following premises to connect:

- distribution of agency/control
- resilience of the network

* The common goal of the game will be decided together with the collaborators.

Prototype pieces:

- Master nodes (MN): white pieces
- Nodes (N): black pieces
- Connections: black strips
- 2 dice

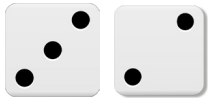
Example:

1) To start the game, a player rolls **ONE DIE** and this number will be **the number of master nodes** to be added to the board.



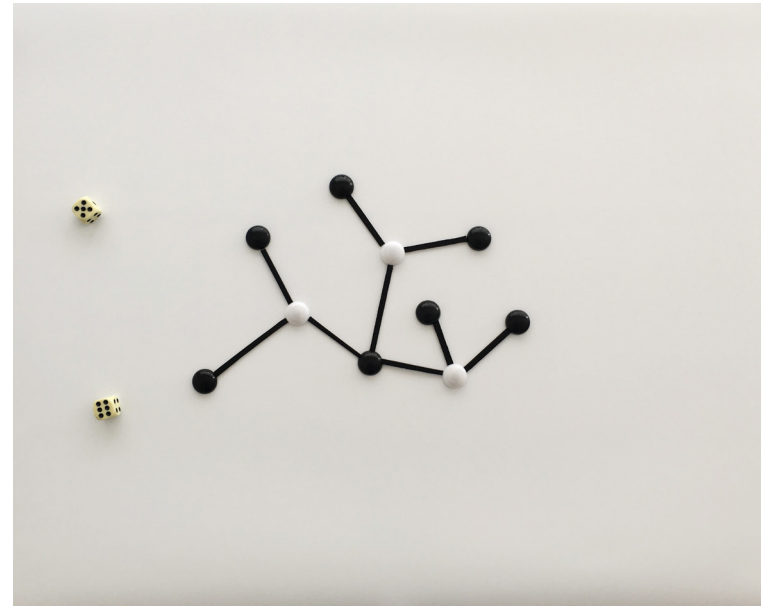
2) Then the first player rolls TWO dice and the **largest number is the number of connections** to be added to the board. **The smallest number is the number of nodes** to be added to the board.

A connection can only be added if it connects two nodes.

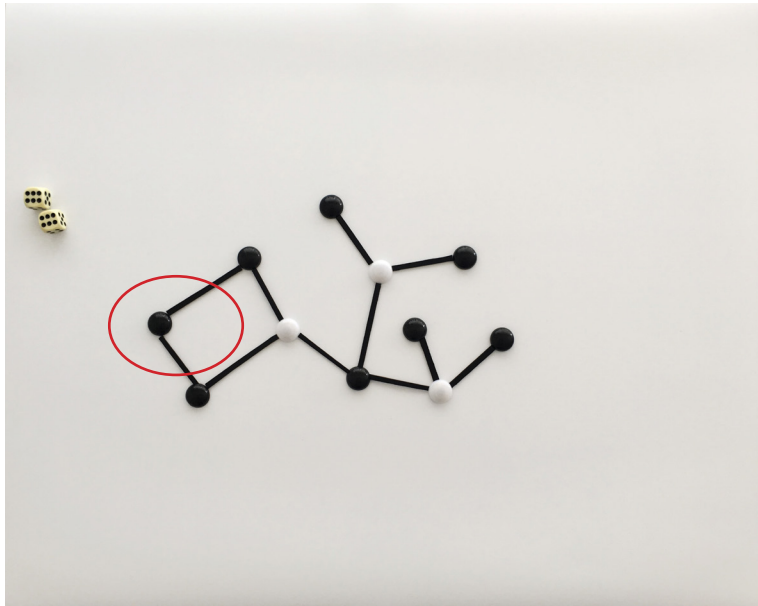
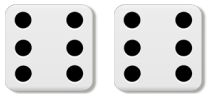


3) The next player rolls the dice and the numbers are 6 and 5, so s/he has 6 connections and 5 nodes to add to the board.

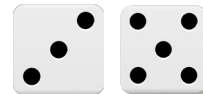
As long as you have a master node on the board, all the **NEW nodes must connect to at least one master node first.**



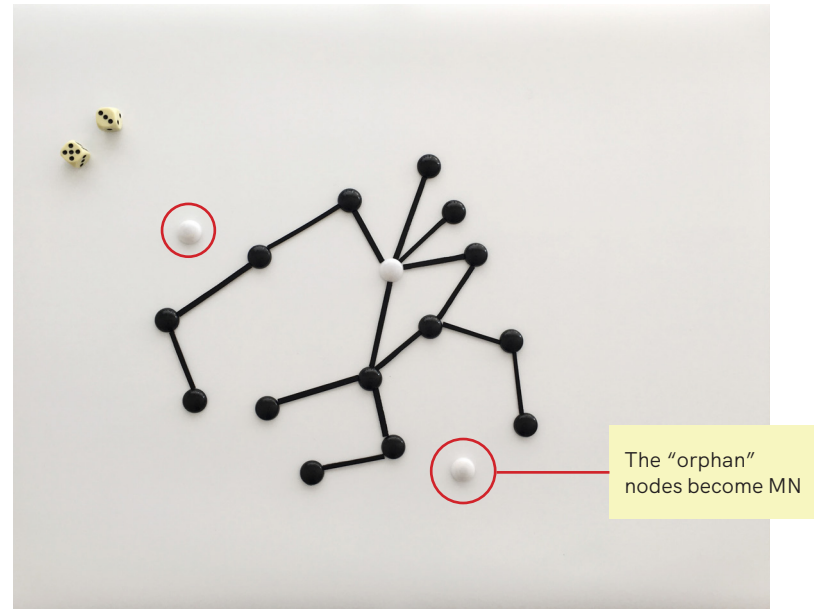
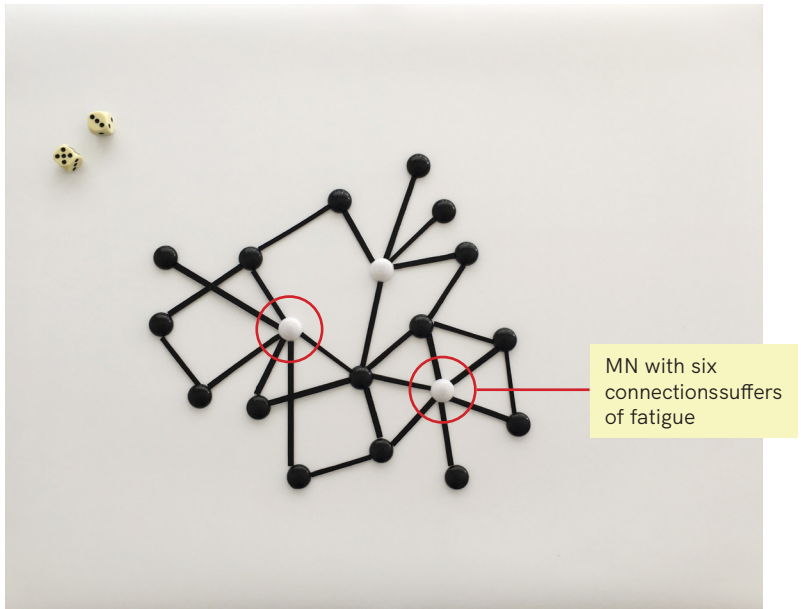
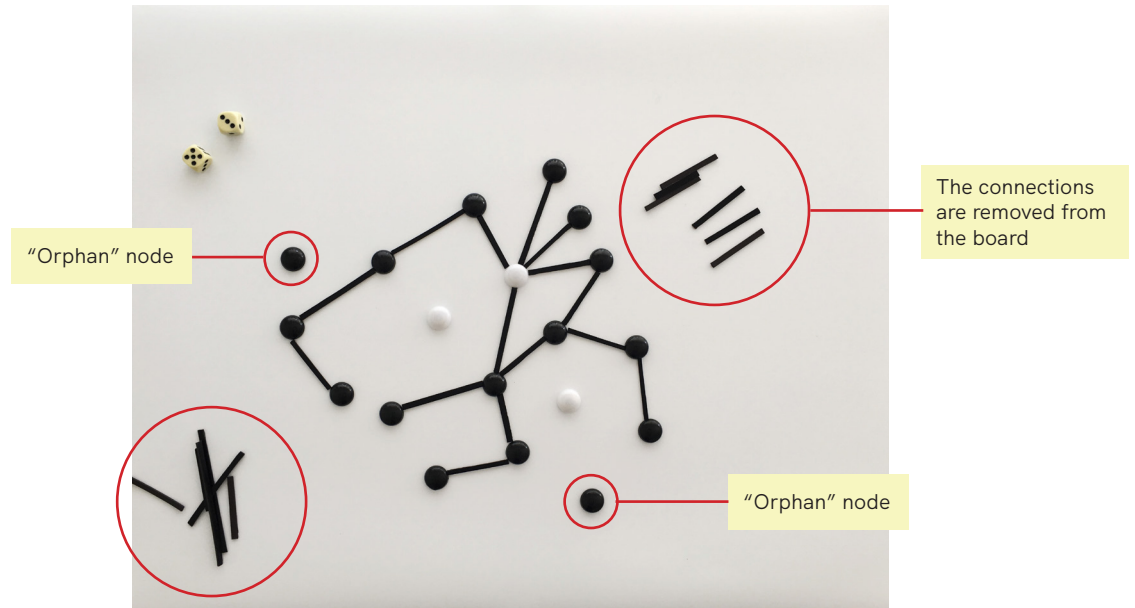
3) The next player rolls the dice and the combination is two repeated numbers: six and six. In this case, s/he gains a **facilitating node** to add to the board, that is, one node and two connections:



4) The next player rolls the dice and the numbers are 3 and 5, so s/he has 3 connections and 5 nodes to add to the board:



5) When a master node achieves six connections with other nodes, it suffers of **"fatigue"** and "explodes," breaking the connections with the other nodes.



6) When the combination of the dice is equal seven (3x4, 5x2, 6x1), a **contingency** happens, and all the players should choose together a node to be eliminated (in the online version, the eliminated node will be **random**).

