

Playful Ways to Experience Complexity

1. Background and Aim

Complexity as a basic concept of understanding social systems, patterns and interdependencies becomes increasingly relevant. While we observe that common ways of addressing and tackling our social problems fool us more and more, leaving us clueless on how to deal with the issues that matter in our lives, work and development, other ways of looking at and addressing the very same situations promise better ways of understanding and coming to terms with the challenges we are faced with.

However, the suspected “complexity of complexity” – and even more the related concept of *complex adaptive systems* (living systems) – drives many “practitioners” away and prevents them to deal with this topic. This is a missed opportunity, since engaging with it could lead to an important understanding of real dynamics, patterns and interrelations and a different way to perceive the world that surrounds us, the reality as we experience and quarrel with it daily. There is a playful way to get an initial understanding of what a living system is and to reduce such inhibitions. Players do not only (literally) experience it with their own body, but also start exploring the underlying ideas and make sense of it in their own terms.

The game allows exploring the idea of *dynamic complexity* in particular. Dynamic complexity means that cause and effect of an action are distant in terms of space and time, i.e. it is fuzzy and long-term. It is not possible to create a clear link between a cause and its effect, and the result cannot be judged quickly.¹

2. The Game²

The game requires a group of 10-40 persons

1. 2-3 persons leave the room as “observers”.
2. The rest of the group receives just one simple instruction (= rule): *Choose two other group members and constantly optimise your position in the room, so that you always stand in an equal distance to the two.* It is irrelevant whether the chosen “partners” know about it or not.
3. Now the observers are called back into the room and have to figure out what the single instruction is, that the group is following.
4. As an aid the following supplement can be introduced: an observer may take hold of one of the players and move the person through the room – this player must willingly follow. The rest of the players must continue following the rule. As soon as the player is “released”, the “misled” person will resume the game and adjust his or her position according to the rule.

At this stage the observers may be initiated into the rule and integrate into the game as normal players. Yet, there is still a series of variations that can be introduced:

All players receive a small piece of paper, however, most of them are blank – only a small number of persons (= “change agents”) receive a particular instruction, which “replaces” the basic rule. They are not allowed to disclose their identity and should try to remain unrecognised (\Rightarrow yet it might be interesting to experiment how the group reaction alters if these change agents are known by everybody). These instructions may be:

¹ Cf. Adam Kahane, „Solving Tough Problems: An Open Way of Talking, Listening, and Creating New Realities“, 2004

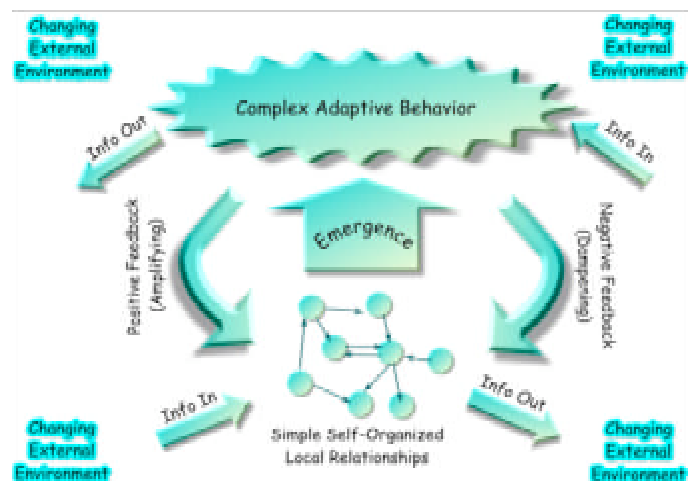
² The initial game has been introduced to me by Moraan Gilad from Pioneers of Change at the occasion of the Annual KM4Dev Meeting 2007; cf. also Marianne “Mille” Bojer (Pioneers of Change), „Changing the Game“, 2004

- a. A piece of paper is placed on the floor. The change agents have the task to get a designated player to stand on this position by altering their own position and thus trying to “manipulate” the entire group. All other players behave as in point 4 (above).
- b. The change agents try to get the group rotating clockwise in a circle around the centre of the group.
- c. The change agents try to shift the entire group into another part of the room.

3. What can be learned from the game?

- 📌 A complex adaptive system – like any living system – is based on a few simple principles:
 - Individual entities, that organise themselves
 - The movements are determined by local relationships
 - There are only a few very underlying rules which determine the course of events and movements
 - There is no central, steering and controlling authority

- 📌 A living system is adjusting and moving constantly – thereby going through phases of relative calm and stability, which however suddenly (and unforeseeably) can lead to a phase of strong and abrupt movements – seeking another state of balance and stability (emergence of complex adaptive behaviour; experience of positive (= amplifying) and negative (= dampening) feedback)



- 📌 A living system constantly adapts to any external influences and change (→ information)
- 📌 Since the system is dynamically complex, it is not possible to predict what a particular intervention/ action will cause/ spark off
- 📌 Not being part of the system, it is very difficult to understand the simplicity of the rule(s), since the emergent behaviour has a very sophisticated appearance

The important element of the game is to interrupt regularly (i.e. after each game step) and to discuss/ debrief the experiences and observations of the players/ observers. They will be able to come up with most of these elements/ characteristics.

4. Experiencing Emergent Group Behaviour

A group of people gets just two instructions: a) constantly move and b) stay as close together as possible. The group starts moving and after some time it should start to form into a rotating circle (possibly even into two concentric, counter-rotating circles). Usually (and in particular in larger groups) none of the group members are aware of this emergent group behaviour. It can be filmed from a slightly elevated spot and debriefed afterwards by showing the film – and making the link to swarm behaviour of fish.

IngeniousPeoplesKnowledge, Marc Steinlin, 2008