Chaotic Role-Playing

Applying the Chaos Model of Organisations for Role-Playing

One of the common pitfalls of game mastering is the assumption that games could or should be controlled. Writing stories is a tempting but usually unsuccessful way of creating games. One key to successful game mastering is understanding the chaotic nature of role-playing and understanding how a game can be guided despite its chaotic nature.

During the last decade, the metaphor of chaotic system has become one of the most attractive perspectives in organisation studies (e.g. Morgan 1997). The dynamic model gives an enlightening contrast to the older models comparing an organisation to a machine, an organism or a culture. The dynamic model emphasises the constant change and unpredictability of the social dynamics of a group of people.

This text applies the chaos model from organisations to groups of role-players in order to describe the progress of a role-playing game or a larp. Indeed, many definitions of organisation can actually be used to define the players of a game as a micro-organisation. Although several researchers have used the chaos-model, this article is based on Aula’s (1999, 1996, 2000) model, which includes the concepts of integrative and dissipative communication to the chaos model of organisation.

My approach is also close to Hansen’s (2003) idea of using the relation theory in explaining a larp. He claims that role-play is an emergent phenomenon arising from individual players’ interaction with each other. In Hansen’s approach, the role of the larpwright is only to provide the starting points and vectors of the characters; The game will emerge from the starting situation by itself. His conclusions are quite compatible with mine. The chaotic model shares features with the circle model presented by Henriksen (2004) as well.

As a very brief definition, in this article, role-playing game denotes a game formed by several participants constructing fictive worlds (diegeses) in interaction with each

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1 Pribram (1996, v–vii) categorises the social scientist applications of chaos theory to rigorous applications of analysed data and to intuitive applications using the vocabulary of chaos theory as a metaphor. According to Pribram, Aula’s (1996) work belongs to the latter category. Obviously, this paper follows Aula’s footsteps. Aula (1996, 204), too, states that empirical research is needed to verify the chaotic behaviour of organisations in physical reality, and to determine what kinds of communication systems are chaotic.
other. In larp, physical reality is also used as a basis of constructing the diegetic realities. (See Montola 2003, also Loponen & Montola 2004 for more accurate definitions.)

**Chaotic System: The Basics**

A chaotic system is an unpredictable but non-random system. The unpredictability is based on three properties, which are used to define the chaotic systems. These are *nonlinearity, recursivity* and *dynamism* (Aula 1996, 197, also Aula 1999).

Nonlinearity means that the changes in the beginning are not linearly transferred to the end result. Think about a pinball game; If no-one touches the bats, the tension applied to the string before launching the ball determines the time the ball will stay on the playing field. However, neither increasing nor decreasing the power launching the ball unambiguously increases the time it takes for the ball to reach the bottom of the field. There's no linear dependency between the power and the time. In the context of tabletop role-playing, the dice (for an example) are used to generate feeling of randomness by nondiegetic nonlinearity; As the way the dice are thrown has no predictable effect on the end result, the dice are used to bring more chaos to the game.

Recursivity means that the end result of the first situation is used as the beginning of the next one. When applied to social sciences, this property sounds trivial as it practically denotes that future is a consequence of the past. In the context of role-playing, it means that the diegeses constructed by role-playing are used as the basis for further role-playing (see Montola 2003).

Dynamism means that the way the system changes is subject to change as the system changes. In role-playing, the way the characters act changes when the characters change themselves. Hansen (2003, 72) claims that all communication changes social relationships, so in role-playing the social relationships change constantly.

The result of nonlinearity, recursivity and dynamism is that over time the system becomes increasingly difficult to predict as the (non-random) changes accumulate. Completely insignificant-seeming minute changes in the starting point may have a radical effect in the end. The best-known chaotic system is the weather system, which is quite impossible to accurately predict a week forward. It is said that the flap of the wing of a butterfly can cause a sequence of accumulating changes to cause a tornado some weeks later on the other side of the globe. The circle of interpretation of signs (presented in Loponen & Montola 2004) going on during the role-play could be seen as a similar sequence of non-random unpredictable changes.

**Predicting the Unpredictable**

Even though they are unpredictable, the chaotic systems tend to follow *attractors*. Attractor is a dynamic pattern of behaviour the chaotic system tries to follow. If the state
of the system changes too far from the attractor, the system acquires a new attractor. For example, racing cars try to follow the track; Their position vary over the race, but generally they try to stay on the track. If a car strives too far from the attractor, it picks a new one leading to the forest. A pendulum follows its swinging attractor quite closely; If it is disturbed briefly, it returns to the swinging movement. As Hansen (2003, 70–71) points out, while the organisers can generally predict the next step a role-play is going to take, no-one can predict how the game will end.

In role-playing context, the idea of an attractor is very important. Instead of writing stories or scripts, the game masters have to understand that they can write attractors at best. When a mysterious wizard gives the character a mission, an attractor is created leading to the dragon’s cave and back again. In larp, the initial attractors are formed when the players are briefed about their characters and groups. As the game progresses, players themselves decide whether to follow their attractors or pick new ones as they go.

The mathematicians call the important crossroads of attractors bifurcation points. They are the critical points where the system decides whether to follow one attractor or another. The character might decline the mysterious stranger’s offer, or the dice might make the character unable to sneak into the dragon’s cave.

Many taboos of role-playing are similar in that they remove the chaos from the game. Some examples are the game master overruling the actions of player characters, or the gaming group overwriting some past events. Eric Wujick’s *Amber: Diceless Role-Playing* was a revolutionary system when it was published in 1991, because eliminating

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2 Two examples of minute changes in role-playing environment: In larp, the positions where players stand when they begin their game affects the order in which they meet the other characters, potentially affecting the emerging of every relationship in the game. In tabletop western game, the game master’s meticulously complex description of the details of a saloon interior may turn out to affect the game vastly as it serves to allow improvising weapons in an unpredicted bar fight. Not every minute change affects the outcome radically, though some do. The definition of a ‘minute’ change is of course up to debate; In this article it’s a minor detail that has no understood significance in the starting point, though when it begins to affect the attractors, no-one probably considers it minute any more. Some minute changes are non-diegetic; For example, the dice are thrown differently depending on where they were placed the last time they were thrown.

3 Loponen and Montola (2004) present the semiotic view on diegesis construction, explaining how interpretations evolve and provoke further interpretations. The semiotic communication system could be seen as recursive and dynamic in the sense that symbolic systems evolve as the result of communication, and that communication is always based on both earlier communication and earlier conventions created by communication. From the social psychological perspective the process of interpreting could be seen as nonlinear as well, as the results of interpreting signs are not linearly dependant on the signs interpreted (see also Aula’s criticism on linear models of communication in Aula 1996, 194–195).

4 Aula (1996, 203–204) states that organisation’s behaviour can be predicted with enough information to some extent, but long-time predictions can’t be made. Respectively, Hansen (2003, 70–71) claims that as an larp is an emergent phenomenon, it can be predicted on short but not on long time scales.

5 Amber was the first commercial diceless role-playing game, according to Mackay (2001, 41).
the dices was thought to eliminate unpredictability and chaos from the play. It took quite a while for role-players to understand that removing dice does not make the play controllable or predictable as long as there is true interaction in the play.

Another taboo was broken when Eirik Fatland and others introduced the Play of Fate in 1998 (Fatland 1998, 16–18). In fate-play, the larpwrights write the characters some instructions they are obliged to follow in certain important points of the game. The fateful actions following each other in a carefully developed pattern efficiently force the play to proceed along pre-determined attractors. Fate-play loses some or all of its recursivity and dynamism. In fate-play, the decisions made are not always direct consequences of the past events, but determined by the fates (defined before the game). Fate-play is not dynamic, because its pre-determined nature prevents the true changing of the system. Perhaps these are the reasons why fate-play is still less accepted than diceless role-playing.

**Integrative and Dissipative**

Easier than controlling how a role-play proceeds is controlling how strong the attractors are – controlling how chaotic or orderly the game will be. In a completely orderly game, the attractors would be solid and unchangeable; There wouldn’t be uncertainty, collaboration or interaction – the players couldn’t affect the plots constructed by the game master at all. In an absolutely chaotic game, there wouldn’t be anything tying the game together; There wouldn’t be characters nor any kinds of attractors. Hence, all the role-plays must be somewhere between the two extremes.

Aula (1999, 144–146) speaks of integrative and dissipative communication in the context of organisation, where integrative communication shifts the organisation towards the order and dissipative communication shifts it towards the chaos. These concepts are easily adaptable to role-playing.

Integrative role-playing takes the game towards order. In integrative playing the players try to go along the attractors, making good stories and allowing themselves to be guided by the game master or the larpwrights. An integratively playing GM or larpwright seeks to provide the players with attractors and story seeds and ensuring that by following them, the players get to have a good game.

Dissipative role-playing takes the game towards chaos. Dissipatively playing players try to forge their fortunes themselves, creating their own attractors and enjoying their freedom within the world of the game. A dissipative GM or larpwright facilitates this progress by providing the players and characters with interesting options and ensuring that there’s a meaningful play whatever the players choose to do.

There are many of methods of playing, game mastering and larpwrighting that can be used to increase dissipative or integrative role-playing. (See table 1.)
Table 1: Integrative and Dissipative Methods

**Examples of integrative methods for game masters and larpwrights**
- Choose the focus of the game properly. When all characters are SWAT-officers, the GM can concentrate on running SWAT operations instead of pondering whether some random people have the guts to attack the terrorists hijacking their plane.
- Define and communicate the play’s genre and style well. Everyone should know whether the western is Fistful of Dollars or Shanghai Noon.
- Fill the characters’ backgrounds with ‘triggers’. If orcs killed the character’s mother, you can predict the effects of bringing orcs to the stage.
- Manage time and cut the game. Instead of finding out whether the strange wizard’s offer is enough for the poor halfling, start the game right from the scene where the poor sod’s already heading far away with a dozen dwarves.

**Examples of integrative methods for players**
- Do what you think is best for the story or what you guess your GM expects you to do. Give up your freedom for the epic story.
- Eat all the plot hooks you encounter.
- Include other characters to your plans; avoid secrets and encourage collectivism.

**Examples of dissipative methods for game masters and larpwrights**
- Create a lot of personal plots for the characters and encourage conflict between them. When every character tugs the web of intrigue to his own direction, chaos ensues.
- Give players ‘irrelevant’ information about the game world. The more they know, the more options they have.
- Use supporting cast played by players (tabletop). Instead of the GM playing every NPC, handing an ex-girlfriend to some player produces unpredictable but working results.
- Use plot points (as in Theatrix), fate chips (as in Deadlands) et cetera (tabletop). Players using out-of-character options to affect the attractors usually increase chaos – unless they choose to use them to follow the pre-set plots. Nothing gives a stronger twist to an attractor than cavalry summoned by player’s plot option at the last minute.
- Portray the world as a realistic, rational whole. Characters are people in the world just like all the NPC:s. There is no plot, just six billion entities to interact with.
- Give players a right to control the diegetic world with true statements (tabletop). Instead of player asking GM whether there’s a café on the street, the player has the right just to declare that his character goes to the comfy French café on the other side of the road.

**Examples of dissipative methods for players**
- Be a Turkuist immersionist; forget the drama and larpwrights’ intentions.
- Write a heap of interesting background for your character if the game master allows. Making your character secretly a closeted homosexual turns social relationships around.
- Talk about ‘nonessential’ things; religion, movies, politics – anything goes.
When both the game master and the players play integratively, the game becomes very orderly – the players try to keep on the trails the game master pushes them to. As a consequence, the dramatic story progresses fairly quickly. The result may be what the Threefold Model\(^6\) calls ‘dramatist’ playing: a game focusing on story instead of immersion, simulation or winning.

If both the game master and the players play dissipatively, the result is a chaotic game focusing on the characters’ relationships and personalities instead of plots. The simulationist playing of the Threefold Model can usually be seen as rather chaotic.

In addition to these basic cases, there are two special cases (usually found only in tabletop) worth some extra attention; a *direction-seeking game* and a *rebelling game*. A direction-seeking game emerges when players play integratively and game master plays dissipatively. The GM provides no direction to players, who would play a well-prepared story instead of everyday life in a chaotic world. A rebelling game is the opposite of the direction-seeking game. In a rebelling game, the players refuse to play the ready-made plots of the GM, dissipating the play instead. Usually both direction-seeking and rebelling can be considered as problems caused by participants’ different expectations on the game.

In the ‘good’ games, the order and chaos are almost always balanced in some working way. The game master gives players proper freedom and guidance, which the players use appropriately. Still, striking the right balance depends on the GM’s vision and the themes of the play. A larp telling about military life is probably very orderly compared to one about Machiavellian intrigue. In addition to recognising that military larp is orderly, the larpwright should use this model to analyse how much power over attractors the different participants have to ensure a properly balanced game.

In all games, both integrative and dissipative role-playing is present. In a role-playing game devoid of integration, there might be some characters, but they would exist in different genres and universes and would not have anything to do with each other – probably there wouldn’t be any character interaction at all. Even the existence of sentient characters can be questioned. On the other hand, a game without any dissipation would not be interactive at all.

On the scale from dissipative to integrative, taboo breaking techniques (overruling player actions, fate-play, rewriting diegetic history) can be considered over-integrative. They integrate the game, but as they remove interaction, dynamism or recursivity, they also change the core of role-playing essentially.

### Conclusions

The first main strength of the chaos model of role-playing is that it is addresses the emergence of the plot of the game, which is usually left relatively untouched (e.g. Gade

\(^6\) John H. Kim’s website explains the birth of Threefold Model (or ‘GNS-model’) in 1997 and provides a faq as well. [www.darkshire.net/~jhkim/rpg/theory/threefold](http://www.darkshire.net/~jhkim/rpg/theory/threefold) (December 2003)
2003, 64–65; Hakkarainen & Stenros 2003; Montola 2003; Mackay 2001, 4–10; Fatland & Wingård 1999, 23–25; Pohjola 1999, 34–35), except in normatively written dramatist models. The second strength is that the ideas of an attractor as well as dissipative and integrative playing are useful on the practical level of game design and analysis. On the other hand, the chaos model is quite vague in treating the game itself, which means that the essence of the play is quite difficult to see from the perspective of this model.

The model has been criticised by a claim that as the game master is the supreme authority within the diegetic reality (see Hakkarainen & Stenros 2003, 56, 58–59), a tabletop role-playing game can never be considered chaotic. I have previously commented the power of the game master (Montola 2003), arguing that as it is impossible for any participant to understand the whole of every diegesis constructed during the game, no-one can have absolute control on what the participants consider diegetic. If the GM defines the whole diegetic reality by himself, the game loses its interactivity and turns to storytelling. Also, many definitions require chaotic systems to be at least partially deterministic, an issue belonging to philosophers and neuroscientists instead of social scientists.

This application of chaotic thinking created a lot of discussion in Finland when it was first presented in Finnish Ropecon 2002. Though an often-heard argument (based on issues of nonlinearity and determinism) claims that chaos theory cannot be validly applied on social behaviour of human beings, I consider this model at least a valuable thinking tool, which can be fruitfully applied in design and analysis of almost any role-playing game.

**References**


