THE KROMOSOMER PROJECT



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Abstract

This article is a reflection on the Kromosomer project, a storytelling performance held in the physical world and implemented through digital, virtual and social media. The motto was the traditional Norwegian legend characters that represent "the other", the not "normal". They were illustrated as avatars in the metaverse, where they were also distributed as unfinished artefacts, open to mutation.

We will describe and analyze the main work method used on this project, a shared creative process of collective and distributed creativity. We will also focus on how metaphors constitute themselves as paramount to our way of working.

Keywords

storytelling, performance, legends, avatar, embodiment, shared creativity.

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1 · Introduction

 A compilation social media dissemination can be seen at the Scoop.it page of Project: Kromosomer: http://www.scoop.it/t/ project-kromosomer Kromosomer was a traditional storytelling performance that interacted with digital, virtual and social media during its adaptation and implementation process1. In the realization of this project two visual artists, a social entrepreneur, graphic designer and filmmaker and a storyteller participated. The project had a "distributed" dramaturgy, where different participants contributed equally, but creatively independent. The Norwegian storyteller and initiator of this project Heidi Dahlsveen (aka Mimesis Monday) grew up with a grandfather who used storytelling, more specifically folk legends, as a way to deal with the daily life. It was as an adult that she realized that these stories were more than everyday anecdotes. Briefly, one can say that a folk legend is a short traditional narrative that has been told as a true event. The Kromosomer project was developed as an attempt to understand the disturbing concerning these stories.

In the project avatars were created based on characters from Norwegian folk legends; they formed the basis for new stories mainly mediated through pictures and they were distributed in Second Life free and with full permissions. This meant users could copy, transform and share them. In this way the avatars could be embodied in an open and creative form.

The users were encouraged to take pictures and machinimas,

2. http://mimesismonday.com/?cat=360

3. When a user contribute into the project we decide to call them produsers, according to Axel Burns' concept of produsage that we will address later on. or to use the avatars in any other creative form. Some of those pictures were used on a blog2 where readers were invited to create new stories. These stories were then passed on either in social media or verbally told in the performance. These produsers'3 interpretations were later assembled into a video that was projected on two walls during the physical performance. There were also installations with picture stories of the avatars created by produsers. One of the stories in the performance was told simultaneously in world and in the physical world. The storyteller (Heidi Dahlsveen) was then using one of the avatars created for the project.

In this paper we will describe the background for this project, i.e. Norwegian legend characters and the way it was developed through virtual world, social media and physical performance. We will concentrate on two important aspects of this project's implementation — a shared creative process and a metaphorical way of working.



2 · Background

The background material for the project was collected from oral tradition, more specifically Norwegian folk legends. It was primarily natural mythic legends that formed the basis for this project, meaning an encounter with the supernatural, the unseen, the other **4**.

The folklorist Linda Dégh states that "legend contextualises and interprets belief"[1]. Belief is the core of the legend, and not only that - the science (knowledge) is a necessary counterweight when the legend occurs [1]. Folk legends are told spontaneously as people orient themselves within community norms: "It is common knowledge that the human being is, by nature, a homo religious, who by compulsion constructs personal variables of the established Church canon in which he or she had been indoctrinated by public education" [1]. The belief does not itself come forth as a narrative, but it lays behind the folk legend as a hidden reference, as a fear of the unknown, as a pattern, an explanatory model. The frame around the folk legend is the real life topology [1], "everyday life" is there prior to the folk legend and it is there afterwards. It is as if life stumbles along the way, discovers something and moves on. We must emphasize that what separates folk legends from other traditional stories is the radical encounter between two worlds. Folktales also portray the meetings with other worlds, but there they exist naturally next to each other. When a protagonist encounters a troll or other "unnatural" being it is as if they meet a neighbour. In folk legends you meet a character gallery of trolls, mermaids, sea serpents and so on, but also characters bearing a likeness to human beings like ghosts and huldra. In people's stories about meeting with "the other" the folk legends pose social

F1. Heidi Dahlsveen performing at PopUp hub, in Oslo, 2012.

4.We use the term "the other" referring to an origin legend about how "non-humans, but similar to humans" were created. The story is related to The Fall (Adam and Eve), a legend you find in many european countries, explaining why some people are "different". Shortly it tells about how Adam and Eve were kicked out of Garden of Eden They got quite a lot of children and heard that God wanted to visit them. They were embarrassed by all these children, so they hid some of them away: in the basement, in holes in the soil, in caves

When God came, he asked if these children were all their children, they said yes and God said then: "Let those children who are hidden remain hidden but not forgotten". So all the children hidden away remained hidden away, living their life like we live ours, but under our feet. They became the unseen people. Both in Norway and in Ireland (and maybe other places) there are still people who believe in these unseen people or the "other" people as they also might be called. We avoid using the term "fairy tale" because there is considerable disagreement about what it really is within the type of story today.

and under the bushes.

 Changeling is a child who has been replaced by a child from the "huldre (fairy) people.

and existential questions. This meeting may be analogous to what occurs when you meet an avatar, as we shall see later.

It is useful to include Julia Kristeva's concept of "abjection" here. The abject is located outside both subject and object, it is something else. The clearest description of abject, often used and collected from Kristeva, is the meeting with a dead body, a corpse. The corpse is similar to life, but it is not "life". It reminds us of nothing but we find it offensive, we are disgusted, it makes us feel sick because of the comparison and alienation [2]. The logic, the meaning is broken down because we lose the distinction between subject and object, "I" and "the others". Abject is the feeling of seeing an open dirty wound:

It is thus not lack of cleanliness or health that causes abjection but what disturbs identity, system, order. What does not respect borders, positions, rules. The in-between, the ambiguous, the composite. The traitor, the liar, the criminal with a good conscience, the shameless rapist, the killer who claims he is a savior. . . . Any crime, because it draws attention to the fragility of the law, is abject, but premeditated crime, cunning murder, hypocritical revenge are even more so because they heighten the display of such fragility [2].

This may also relate to the concept of the "Uncanny Valley" developed by Masahiro Mori, when studying robot design — a sharp and sudden depression in a line chart describing growing familiarity caused by increased human likeness in a robot [3]. Basically, our sense of familiarity tends to increase when a robot appears more human until, suddenly, it drops to negative levels, when this human likeness becomes uncanny. For Freud the "uncanny" is "that class of the terrifying which leads back to something long known to us, once very familiar" [4].

Reinforcing Kristeva's argument, Mori investigations also put the dead corpse at the bottom of the valley and even further down if this body would move, becoming the "zombie", the animated dead corpse, the lowest peak in the chart. It seems that we are more terrified of what looks familiar but falls outside our explanatory models, than we are of the utterly fantastic.

In folk legends about the changeling**6** or "utburden"**7** our concept balances on the edge of meaning. The legends point to something terrible behind them: the killing of children and the ex-

perience of having children that are "not normal". It's disturbing because we understand and do not understand, because we reject what lies beyond our safe and comforting civilization. Abject is prior to the subconscious, it is an encounter with something primitive that has not yet manifested itself symbolically. In legends we already find traces of assimilation. Once we have verbalised the meaninglessness it gains a symbolic value. Once we submit to the symbols a new order arises:

Sublimation, on the contrary, is nothing else than the possibility of naming the prenominal, the pre-objectal, which are in fact only a trans-nominal, a trans-objectal. In the symptom, the abject permeates me, I become abject. Through sublimation, I keep it under control. The abject is edged with the sublime. It is not the same moment on the journey, but the same subject and speech bring them into being [2].

Often the folk legends portrayed the meeting with "the other" as a physical meeting, either because they look different (trolls are giants, huldra have a tail, draugen/ghosts without head and so on) or that it is actually a physical confrontation between the protagonist and "the other". The sublimation associated with the folk legends somehow implies an embodiment of the uncanny. If meeting a character from folk legends can correspond to a meeting with avatars, can we infere that this meeting provides a tool to extend the language that can handle the feeling of meaninglessness?

> F2. Catarina Carneiro de Sousa aka CapCat Ragu, Peasant becoming Skurekallen, 2012. Surekallen installation on Second Life.

The folk legends arose because they had no other terms for children with for example Down syndrome.

7. Utburden is a child who is murdered and not buried. The folk legends tell of places that are haunted by the murdered child. It is always a man who discovers the crime and there is always a woman, the child's mother, who is the killer. The women are poor single mothers who are sentenced to death for their action. The child's father is never mentioned.

3 · The avatars

8.Attganger means

"walking back" - or

to be more precise, it

means ghost. This is

one of the characters

you find often men-

tioned in Norwegian

number of meanings,

beyond being a dead

description is that of

someone who broke

a promise, and the

dead comes back to

remind the person of

ever what inspired this

group of avatars was

the tale from a valley

"Osterdalen", the story

in Norway, called

of a child who dies

and comes back. The

child plays with her

sisters and brothers,

and the family grows

so accustomed to the

dead child that they

forget she really is

dead. The installation

consisted of a dream-

like children's room,

resting on a cloud,

where one could ear

the continuous sound

of a music box. In the

walls one could see the

old photographs of

the betrayal. How-

person. The usual

legends. It has a

Second Life avatars not only enable this meeting, they actually allow the embodiment of the uncanny. One can become "the other".

The Kromosomer avatars were built around the characters in the Norwegian folk legends as we mentioned before. They resulted from free interpretation through avatar design. Heidi Dahlsveen (aka Mimesis Monday), the initiator of this project, commissioned Catarina Carneiro de Sousa (aka CapCat Ragu) and Sameiro Oliveira Martins (aka Meilo Minotaur) to build these avatars. The two artists were given a document where a number of characters were briefly described. They were inspired by this document but had total creative freedom for reinterpretation of these characters. Three groups of avatars were built in articulation with the virtual installations in which they were to be distributed.

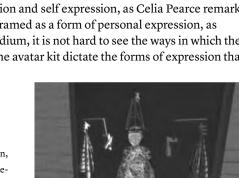
The Surekallen installation and avatars (the Peasant and Surekallen) were based on the myth of a grain spirit associated with the fear of being the last to cut the grain. If this was the case, one had to accommodate Skurekallen through the winter, or even worse, one could be forced to sacrifice oneself and continue life as a grain spirit, in order to ensure the spirit's existence. For this a harvested cornfield was created, where an old peasant, realizing he was the last to crop his corn, transfigures into Surekallen (see fig.2). This scene illustrates the whole concept of these avatars, the possibility of embodying "the other", the legends became a pretext for the exploration of a different kind of body. As we said before, through avatar manipulation in virtual environments one can actually experience the embodiment of "the other". Nick Yee and N. Jeremy Bailenson studied this process of inhabiting alterity. These two researchers argue that "immersive virtual environments provide the unique opportunity to allow individuals to directly take the perspective of another" [5], and even suggest the possibility of embodied perspective-taking in virtual environments having an impact on the reduction of negative stereotyping [5].

Two more installations were created in order to distribute other avatars: the Attganger installation sheltered four avatars, the ghost and its earthly family**8**, while "Ocean Avatars" gathered some of the characters from "vannvetter"**9**, where five avatars were given in the eggs of an enormous Sea Monster: Havfrue Melusina, Lindorm, Draugen and Kraken**10**.

All avatars were distributed with full permissions, meaning that their new owners could copy, transfer and modify them, thus broadening the ways they could embody them. Second Life avatars have the characteristic of being very customizable, one can change one's appearance quite dramatically solely with the platform's interface. In addition, the platform also gives one the ability to upload content such as textures, meshes, animations and so on, whereby avatars can be customized to an unprecedented level. In this way the avatar designers are the residents themselves, through their own designs or through what other residents share or sell.

According to Nick Yee, N. Jeremy Bailenson and Nicolas Ducheneaut virtual environments can significantly alter selfrepresentation. Their studies show that behaviour can change according to the avatar, not only online but in subsequent offline interactions as well. To these changes in behaviour resulting from the handling of avatars, the authors called Proteus Effect [7]. These findings have highlighted the importance of avatar design in virtual worlds, as embodiment can have a very real impact in both self perception and self expression, as Celia Pearce remarks: "If the avatar is framed as a form of personal expression, as performance medium, it is not hard to see the ways in which the components of the avatar kit dictate the forms of expression that occur" [8].

F3. Eupalinos Ugajin, Untitled, 2012. Elements of the Attanger avatar combined with other elements to create another avatar.



a mother and her two little girls. The avatars given there were the mother, the two sisters and the Attanger. 9. Folklorist Ørnulf Hodne distinguishes between "landvetter" and "vannvetter", a distinction that corre sponds to whether the character lives on land or in water [6]. 10.Havfrue was a mermaid, half human and half fish. She was primarily seen at sunrise. Her face was beautiful and down her back, she had long, wavy hair, which she would braid while sitting on a rock. Melusina was quite similar, but with a more tragic perspective. Only one folk legend from a part of Norway called Helgeland mentions her. Because every Saturday half of her turned into a fish. she was unloved and evicted from her home after giving birth to nine children. Lindorm was a big serpent that guarded a treasure and was able to take people down in the water to eat them. One way

to get rid of it was by running seven times around a campfire while being chased by it and then lure it into the fire. Draugen was a drowned man who was never buried. He howled terribly at sea as warning. His scream sounded like that of someone in distress. He could have an arm with a claw and often rolled himself up in a boat, and then made himself so heavy that he would sink the boat. Kraken was a horror from the sea. If the fishing was good, one should be aware because it could happen that Kraken was around, one had to be ready to move the boat on in a hurry.

11.Residents of Second Life. With the free distribution of the Kromosomer modifiable avatars, instead of dictating the design and subsequently the avatar expression, we aimed to promote residents' **11** disposition to have an active and creative part in the process of their own avatar design, as well as in the embodiment of the story itself as a character. These avatars became illustrations that enabled the public not only to actively participate in the telling of the story, but also to embody these characters in a creative and parcipatory way.

4 · From the storytelling community to creative collaboration

The original avatars themselves were built in a shared creative process.

There are two different ways in which one may address this concept of shared creativity — one is through collective creation, the other is through distributed creativity.

When we address collective creation we refer to a creative process in which all of the agents involved act as one creative entity. This derives from a high level of intimacy between co-creators. In this case, CapCat Ragu and Meilo Minotaur constructed the avatars on an equal partnership basis in which each of them relinquished her own authorial mark in favour of the group's authorship. The complete dissolution of one's identity within a common one is of course utopian, but Capcat and Meilo worked as a plural organism or a two-headed monster. This kind of creative process not only requires a high level of intimacy but also complete trust and openness.

Another process of shared creativity began once the avatars were distributed, becoming the avatars of others, inhabited by different identities that could take them literally as the legends'

avatars or radically transform them and use them to impersonate entirely new stories, as they are always "unfinished artefacts" [9], that can not only be used but also modified into a new creation. This brings us to an emergent concept born online, fundamental to this project: produsage.

Axel Bruns developed the concept of produsage to describe a new arising reality "emerging from the intersection of Web 2.0 user-generated content, and social media since the early years of the new millennium" [10], realizing that the conventional sense of production no longer applied to "massively distributed collaborations [...] constantly changing, permanently mutable bodies of work which are owned at once by everyone and no-one" and in which the participants easily shift users to producers and vice versa, originating a hybrid role in between [10]. He defines the concept of distributed creativity as "projects which harness the creativity of a large range of participants to build on and extend upon an existing pool of artistic material" [10]. This can also be seen in online creative sharing communities based on the dissemination of visual output, from Flickr pile-ups to Creative Commons collages, such as DeviantART fan art.

Kromosomer avatars were just the beginning of a creative flux, in which users needed to become producers in order to fulfil their aesthetical experience of the project. Their productions would then "feed" the project through social media dissemination of this creative output. This would in turn become input once again, integrating the physical performance.

In our project we can also refer to Rebelo's distributed dramaturgy [11] where each individual is responsible and contributes something specific to a production. The idea of collective creation relates to a storytelling situation. Norwegian legends are part of the oral tradition, a cultural storage that is readily available for everyone within a given community. One of the important principles of this project was that the materials used were free of copyright, according to Norwegian law. The entire project, including process and performance, should be transparent and free to share and use without any compensation. Moreover, participants were free to interpret the material as they wished.

In the late 1990s Gabriela Kiliánová examined the social network around storytelling situations in Slovakia. Community and sharing of the stories appear as necessary to socialization and dissemination of knowledge, but there is also an aesthetic presence: "Storytelling is, on the one hand, a form of entertainment, a performance during which the audience appreciates the artistic qualities of the narrators. Yet, on the other hand, it is also a means of transmitting information and knowledge." [12] In the oral storytelling tradition the stories are part of the collective property; this is confirmed by Parry and Lord who researched the bards in the former Yugoslavia in the early 1930's [13]. The bard performed for an audience who knew and had a sense of ownership of the material. This condition affected the aesthetic on several levels all the way down to the dramaturgy of the moment [13]. The community's ownership of the material is similar to the produsage concept. The term includes the collective and sustained expansion of existing content in order to improve this:

When – exactly because what takes place here is no longer a form for production in any conventional sense of the word – the outcome of these massively distributed collaborations appear in the form of constantly changing, permanently, mutable bodies of work which are owned at once by everyone and no-one, by the community of contributors as a whole but by none of them as individuals [14].

Furthermore a low threshold in terms of participation characterizes produsage, artifacts are unfinished in favour of a continuous process and the hierarchical structure is floating [14]. Picone stresses that within this definition the commercial market values cannot dominate: "Still, it is an amateur-driven, non-profit way of producing information." [15] The focus is on procreation and not consumption. In our project, roles were often blurred and without clearly defined limits. We navigated between creation, procreation, and recreation without prior agreement, as did all sorts of participants. This was influenced by and influenced temporality, where kairos were cultivated over chronos [16]. There were no fixed working hours, one floated in what occurred. There were only a few coordination points like deadlines and performance times.

Yet, there are important factors that might extend beyond the term produsage. If we go back to the storytelling situation, we see that the collective also highlights someone who will manage the community's knowledge[13]. There are some who have the talent and knowledge to level information up to an aesthetic experience. The project's initiative and input did not arise from an information need, but had an inherent power to create and the desire to seize the world with a rich multivocal language, to inspire aesthetic experiences. People who define themselves as artists, who were paid, created the project's framework and the arts council supported the project. It is necessary to stress that the artists worked with as much intensity and commitment as in any art project. The paradox and the tension was that they gave up any ownership as soon as an artistic contribution was made.

5 · Metaphors

We call our work process a metaphorical way of working because in new connections and meetings, we seek to articulate and give meaning to issues that concern us: "metaphor holds two thoughts of different things together in simultaneous performance upon the stage of a word or a simple expression, whose meaning is the result of their interaction" [17].

The metaphor has been understood as a stylistic figure of speech, mentioned by Aristotle in Poetics. Traditionally, the metaphor had two functions, or belonged to two different disciplines: Poetry and Rhetoric. The metaphor's two functions are the creative and the ornamental: "The second seeks to persuade men by adorning discourse with pleasing ornaments, it is what emphasizes discourse in its own right. The first seeks to re-describe reality by the roundabout route of heuristic function" [17].

One of the pioneer founders of contemporary metaphor research I. A. Richards claims that metaphor comes from something basic in our consciousness. We always think two thoughts, or more specifically, our thoughts are making comparisons. We think two things at once and our thought creates an interaction between them. That is the way a metaphor operates [17]. A metaphor is not a substitute - something instead of, something that occurs when you replace a word. A metaphor is an interaction between two concepts, it appears as a whole and cannot be replaced, cannot be said in another way. In its juxtaposition of two concepts, the metaphor takes something from the concepts and creates something new. In this way, one can also say that the metaphor is like a bridge between old and new knowledge. In the juxtaposition between the two concepts a number of specific connotations is activated. The metaphor works as a filter in order to promote a number of properties [18]. A cliché of a metaphor is: The girl is a rose. The comparison evokes something recognizable latent in us, it highlights certain properties at the expense of others. When we see the concept: The girl is a rose, we do NOT think that she is red

and has thorns.[19]: In this way metaphor confers an 'insight'. Organizing a principal subject by applying a subsidiary subject to it constitutes, in effect, an irreducible intellectual operation, which informs and clarifies in a way that is beyond the scope of any paraphrase [15]. It is not the case that you can take any "two concepts" and expect that a metaphor occurs by itself. It requires knowledge, ability and talent to generate new insights. In the virtual environment of Second Life the experience of the body is mostly conceptual and not exactly an experience of the flesh. One cannot deny, though, a perceptual and sensorial aspect to embodiment in desktop based virtual worlds, but they mostly continue to be experienced through our organic body, not our avatar body. That is the body that sees, shivers, gets aroused or sickened by something. Yet, it's the avatar that walks, goes places, reaches for objects or other avatars, etc.

Jacquelyn Ford Morie emphasizes that the virtual world is not completely imaginary, but is still "not fully based in solid physicality" either [20]. This is a world that has abstract and variable dimensions, consisting of bits and ruled by conditional behaviours, we experience in a metaphorical way, through simulations [21]. Lakoff and Johnson suggest the importance of metaphors based on bodily experience, in how we think and act upon the world. The authors consider that the ordinary conceptual system is fundamentally metaphorical – the way we think, what we experience and what we do every day is a matter of metaphor. A significant part of our concepts are organized in terms of spatial metaphors: up/down, in/out, forward/backward. These metaphors are rooted in our physical and cultural experience [22].

The metaphor is fundamental to the way we interact with the computer. When we drag an item from our "desktop" to the "trash", we are merely providing a command to the computer to delete that object. Most current operating systems work through this kind of metaphor which, according to Murray, is fundamental to the design of digital interaction [21]. As regards the avatar, these metaphors are further extended, enabling one to feel as if she can step into the computer and fully experience the virtual environment. In fact, this metaphorical dimension of the virtual body enables a poetic appropriation of this kind of corporality.

6 · Conclusions

Legends are already a way of trying to assimilate and give symbolic value to the meaningless, a sublimation, an attempt to name the prenominal: the other, the not normal, the one that looks "different" which we want to distance ourselves from; or the abject, something outside both subject and object, prior to the subconscious, something primitive not yet semiotized.

Often the legends portrayed the meeting with "the other" as a physical encounter, but by using avatars in the metaverse one can experience the embodiment of "the other", this can be a process of actually inhabiting alterity, possibly providing new tools to extend the language that can handle the feeling of meaninglessness.

Second Life avatars are unprecedentedly customizable, giving its residents the ability to become the designers of their own avatars, making embodiment an aesthetical experience that is in fact a creative one. The free distribution of the Kromosomer modifiable avatars promoted a different kind of relation between artists and public, in a project that might stride against traditional roles. Instead of expecting a solely contemplative audience to an artistic performance, we proposed a shared creative process. This included the collective creation of the avatars and the distributed creativity that was constantly arising as derivative of the unfinished artefacts that we delivered.

This is in fact a very similar process to oral tradition, a cultural storage that is readily available to anyone within a given community, a distributed dramaturgy where each individual can always contribute something to the ongoing process of building a story. In this case, produsers could actually be a part of the story, as they would literally go into another world to take part in the project. This occurrence has similarities to the context of legend story telling – it is an event framed by ordinary life.

F3. Sameiro Oliveira Martins aka Meilo Minotaur, Little Attganger playing with his sister 1, 2012.



The way in which one takes part in it, however, has a metaphorical dimension, arising not only from metaphors embodied in our interactions with computers, ¬, but because the metaphor itself comes from something basic in our consciousness – our thoughts making comparisons. A metaphor is not a substitute, but the concurrence between two concepts; it functions as a filter, in which a number of specific connotations are activated in detriment of others. The insight produced in this way has a poetic function.

The virtual body is a metaphorical one and therefore a body of expression and language. If we think of the avatar as a body/ language entity, open to experimentation and possibility, then by offering them copy-enabled, transferable, and most importantly, transformable, we became more than authors, creators or artists: we were partners in a shared creative and poetic flux.

To work in such a project is to follow the strategy of thought. By freeing us from space and time and working with what arises in creative meetings between diverse artifacts such as folk legends and metaverse avatars, professional artists and amateurs, different disciplines, different interpretations, we achieve a poetic function: "In service to the poetic function, metaphor is that strategy of discourse by which language divests itself of its function of direct description in order to reach the mythic level where its function of discovery is set free" [17].

Kromosomer showed us a completely different way of working within artistic production. From there other parameters and consequently other possibilities arose .

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