CO-CREATED MOBILE NARRATIVES

by

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Finnish resumé - tiivistelmä

FM Marjo Mäenpään Turun yliopiston Humanistisen tiedekunnan Kulttuurituotannon ja maisemantutkimuksen digitaalisen kulttuurin oppialalle valmistunut väitöskirja *Co-created Mobile Narratives* tarkastetaan Porin yliopistokeskuksessa 27. huhtikuuta 2013.

Marjo Mäenpää tutkii, kuinka ihmiset tarinallistavat elämänsä, kuvittavat ja jakavat kokemuksiaan toisten ihmisten kanssa mobiilin median avulla. Elämänjulkaisemisesta on tullut ihmisten arkista toimintaa.

Mäenpää lähestyy jaettuja kännykkävideotarinoita kolmesta eri näkökulmasta. Hän tutkii tarinoiden rakennetta, julkaisemista ja julkaisevia yhteisöjä narratologian, yhteisöjen toiminnan ja mediantutkimuksen valossa.

Teoreetikot aina Aristoteleesta klassisen narratologian tutkijoihin ovat esittäneet erilaisia tarinallisuuden kaavoja ja rakenteita, joita on havaittavissa myös yhteisössä tuotetuista videotarinoista. Myöhemmän alan tutkimustradition, muun muassa kognitiivisen narratologian mukaan ihmiset hahmottavat tarinallisia kokonaisuuksia pienemmistäkin fragmenteista ja vihjeistä. Elämän tarinaa, käännekohtia ja elämyksiä kerrotaan usein – esimerkiksi Facebookissa – yksittäisillä, sattumanvaraisilla kuvilla.

Yhteisöllinen tuotanto edellyttää luottamusta. Yhteisö jakaa tarinoita, jotka voivat olla hyvinkin fragmentaarisia, mutta saavat merkityksensä yhteisestä kokemusmaailmasta ja kulttuurista. Julkaiseminen on sattumanvaraista, luovaa toimintaa, jonka lopputulos voi olla ennalta arvaamaton. Kuitenkin julkaiseminen edellyttää jonkinlaista aktiivista toimijaa tai tuottajaa. Rakenteen julkaisemiselle voi antaa tuottaja, moderaattori tai hyvin rakennettu teknologinen julkaisualusta.

Monitieteisen väitöstutkimuksen aineisto on peräisin Turun yliopiston, Tampereen teknillisen yliopiston ja Aalto- yliopiston Porin yksiköiden yhteisestä Mobile Social Media -tutkimushankkeesta. Vuosina 2008–2010 hankkeessa suunniteltiin MoViE (Mobile Video Experience) -sovellusta, jonka avulla ihmiset voivat julkaista omia lyhyitä videoitaan ja jakaa niitä toisten käyttäjien kanssa. MoViE-sovelluksen avulla käyttäjät voivat editoida omia ja toisten kuvaamia videoita sekä julkaista kuvallisia tarinoita yhteisöllisistä kokemuksista. MoViE-sovellusta kokeiltiin muun muassa Pori Jazz -konserteissa. Samasta konsertista taltioitui kännykkävideoille useita näkökulmia, ja testikäyttäjäryhmä koosti useita erilaisia videotarinoita yhteisestä konserttikokemuksestaan.

Marjo Mäenpää (1959) työskentelee opetus- ja kulttuuriministeriössä kulttuuriasiainneuvoksena. Hän on toiminut muun muassa kustantajana, multimedian dramaturgian opettajana Teatterikorkeakoulussa, digitaalisen mediatuotannon professorina Aalto-yliopiston Taiteen ja suunnittelun korkeakoulussa vuosina 2006–2012 sekä Taiteen edistämiskeskuksen väliaikaisena johtajana vuonna 2013.

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KIITOKSEN SANAT

Tällä työllä on ainakin kolme selvää innoituksen lähdettä. Ensin on tarinat. Olen elänyt monenlaisten tekstien kanssa. Isoisäni oli saarnamies ja hän jaksoi tarinoida tuntikausia, kuulijakunnan itkiessä ja sihistessä. Muistan isäni jutut, jotka jännittäessään draamallista juonta, saivat kuulijakunnan hiljaisiksi. Äitini opetti minut muistaakseni ensin kirjoittamaan ja sitten lukemaan.

Kertovien tekstien tuottamisessa ja ymmärtämisessä myöhemmin auttoivat hieno suomalainen koulutusjärjestelmä, rohkaisevat äidinkielenopettajat, Helsingin yliopiston taiteiden tutkimuksen laitos ja lukuisat työpaikkani alkaen ravintolan keittiöistä ja rakennustyömailta, päätyen kirjastoihin, kustantamoihin ja korkeakoulujen luentosaleihin. Ihmiset tarinallistavat elämäänsä. Kuinka monta kertaa olenkaan kirjoittanut elämäni juonta esimerkiksi CV:een. Se on juuri niin valikoiva, korostava ja poissulkeva kuin dokumentaatio tai historiankirjoitus vaan voi olla.

Näitä fiktiivisiä dokumentteja, ihmisten tarinoita omista kokemuksistaan halusin lähteä tutkimaan. Ehkä pakkomielteen lailla yritän tuoda järjestystä kaaokseen. Siksi kertomuksen kerrokset, epäjärjestys ja luova kaaos näyttäytyvät mielestäni parhaiten kun ne voi hahmottaa rakenteena, jossa kokonaisuus, alku ja loppu ovat aavistettavissa vaikka eivät ilmeisenä. Rakenteet voivat antaa mielikuvitukselle tikapuut, joita nousta pilviin ja joiden avulla voi pystyttää telttakankaan tarinani suojaksi.

Toiseksi innoituksen lähteelleni voisin antaa nimen mediateknologia. Tällä tarkoitan kahden ihmeellisen ja inhimillisen ilmiön yhdistelmää: media ja teknologia. Tallennustekniikka, kuvaustekniikka, levitystekniikka – kaikki tämä on mullistanut meidän elämäämme. Muistan vielä elävästi kuinka ystäväni 1970-luvun lopulla esitteli uuden videonauhurinsa. Tuosta vaan voidaan tallentaa ihan itse mitä tahansa tv-kuvaa, laittaa pakettiin ja kuljettaa mukana. Huimaa ajatellakin, mitä sitten tapahtuikaan digitaalisen murroksen myötä. Mediastamme tuli elävää ja se taipui vuorovaikutteisesti katsojan pyyntöihin. Mobiiliteknologian kohdalta tunnustan olevani varhainen omaksuja, niin kuin aika moni suomalainen.

Oli selvää, että media ja teknologia ovat tämänkin tutkimukseni aiheita. Herkuttelen ajatuksella, että vielä ammatinvalintaani tuskailevana filosofian ylioppilaana en tuntenut sellaisia käsitteitä, joita nyt työssäni käytän.

Työni kolmas lanka on yhteisö. Työssäni tullut huomaamaan kuinka tärkeä taito on rakentaa ja ylläpitää yhteisöä. Yhteisö tarkoittaa joukkoa, joka jakaa työn ohessa myös arkea. Kirjoitan tässä tutkimuksessani motivaatio- ja innovaatioyhteisöistä ja kunnioituksen yhteisöistä. Yhteisön tärkeimmät voimavarat ovat luottamus ja kunnioitus – ilman näitä yhteisö ei toimi. Ajatusten ja ideoiden jakaminen on vaikeaa, uuden synnyttäminen käy mahdottomaksi ja yhteisöllinen tuotanto ei onnistu, jos ympärillä ei ole avointa ja kunnioittavaa yhteisöä.

Tämä teos on syntynyt yhteisössä, jossa on paljon kunnioitusta, luottamusta. Verkostot ovat olleet vahvoja. Tutkimukseni mobiilimedian kerronnallisista rakenteista alkoi kiinteän tutkimusyhteisön sisällä. CAT-tutkimusverkosto Porin yliopistokeskuksessa oli ennakkoluulottomin ja avoin tutkimusyhteisö, jossa olen työskennellyt. Kun vuonna 2006 sain perinnöksi ystävältä ja kollegalta Anita Sepältä jäsenyyden Turun yliopiston digitaalisen kulttuurin professorin Jaakko Suomisen ja Tampereen teknillisen yliopiston professori Jari Multisillan tutkijayhteisöön, tunsin päässeeni turvalliseen ja innostavaan paikkaan. Meillä oli rohkeutta heitellä uusia ideoita ja innostua toistemme ajatuksista. Juuri tämä kokoonpano, kulttuuri, taide ja teknologia oli vankka yhdistelmä myös Mobile Social Media –tutkimushankkeelle.

Työni on syntynyt yhteisössä ja ihmisten keskellä, perheen ja työn vaikutuspiirissä. Aivan ensimmäinen innoittajani, ystäväni ja ohjaajani professori Slavko Milekic antoi työlleni otsikon ja esitti olennaiset tiukat kysymykset, joilla työ pääsi alkuun. Professori Jaakko Suomisen kannustus ja ystävyys ovat olleet korvaamattomia työni loppuvaiheessa. Tämä työ ei olisi luettavissa ja ymmärrettävissä ilman ystäväni, kääntäjäni ja kielentarkastajani Susan Heiskasen ammattitaitoa ja venymistä. Tarkastajani professori Andrew

ACKNOWLEDGMENTS

This dissertation has at least three distinctive sources of inspiration. First, there are the stories. I have spent my whole life surrounded by stories of many kinds. My grandfather was a preacher and he could talk for hours, as the listeners cried and hissed. I remember my father's stories, which by building up dramaturgical tension, held the listeners silent. My mother taught me, as I remember, first to write and then to read.

Later I got help in producing and understanding narrative texts from the excellent Finnish education system, encouraging Finnish-language teachers, the Department of Art Studies at the University of Helsinki, and my many jobs, their settings ranging from restaurant kitchens and construction sites to libraries, publishing houses and university auditoriums. People narrativize their lives. Who knows how many times I've written down the plot of my life in, for example, CVs. They've turned out just as selective, weighted and eliminative as documentations or historical accounts usually are.

It is these fictional documents, people's stories of their own experiences, that I wanted to set out to study, in an almost obsessive endeavor to bring order into chaos. For this reason, the layers, disorder and creative chaos of narratives become, in my mind, most effectively apparent when they can be perceived as a structure where the whole, beginning and end can be anticipated but are not outright obvious. The structure can provide a ladder for the imagination, from where we can rise to the clouds and with which we can put up a tent cover to shelter the story.

The second source of inspiration I would name as media technology; by which I mean a combination of two wondrous and human phenomena: media and technology. Recording technology, filming technology, distribution technology, all this has radically changed our lives. I still vividly remember a friend showing me his new video recorder. Imagine, you can record just like that any show on TV, put it in a package which you can bring along anywhere you go. And my head still starts to spin when I think about what later happened along with the digital revolution. Media became alive, interactively bending to the needs of the viewer. When it comes to media technology, I confess to having been an early learner, same as quite a large number of Finns.

It was obvious that media and technology were to become the subjects of this dissertation, as well. I revel in the thought that as a young student of philosophy I had no idea of the concepts that I'd be using in my work today.

The third strand of my work is community. I have come to learn in my work how important the skill of building and maintaining a community is. By community I mean a group that shares not only the work but also daily life with me. In this thesis I write about motivation and innovation communities, and about communities of respect. The primary resources of a community are trust and respect – without them the community wouldn't function. Sharing thoughts and ideas turns out difficult, innovation becomes impossible and collective production fails if you are not surrounded by an open and respectful community.

This dissertation was born in a community that had a lot of respect and trust. The networks have been strong. My inquiries into the narrative structures of mobile media started within a close research community. The CAT research network at the University Consortium of Pori was the most open-minded and inclusive research community I've ever worked in. When in 2006 I inherited from my friend and colleague, Anita Seppä, membership in the research community shepherded by Jaakko Suominen, professor of Digital Culture at the University of Turku, and professor Jari Multisilta from the Tampere University of Technology, I felt like I had made it to a safe and inspiring place. There we dared to throw out new ideas and become inspired by each other's thoughts. It was this teaming of culture, art and technology that also served as a solid combination for the Mobile Social Media research project.

This dissertation was born in a community and among people, in the sphere of influence of my family and friends. My first inspirer, friend and instructor, professor Slavko Milekic, gave it its title and asked me the essential and strict questions that got me started. Professor Jaakko Suominen's encouragement and friendship have been indispensable in the final stages of my work. This thesis would not be readable or understandable without the professional competence

I INTRODUCTION

My first www home pages in 1995 were titled "My Home is Hypertext". The clumsy, hand-coded website showed a picture of children in a living room. The room looked like any room of a family with small children; teddy-bear, book, pillow, messy couch, various toy cars… The objects in my image were active hyperlinks. The teddy-bear is from Moscow, the painting from Prague, my daughter becomes cyber girl, the book is my publishing house, the sofa can be traced to the recycling center... No longer were images only looked at, they could be used, generated into tens of different stories or into one big hyper story. One linking html code made it possible for us to dive through media, render associations visible, portray something that has never been portrayed before. I got hooked on linking. I became the sum total of my links, now all points referred to what was in the future or in the past, new possibilities or lost chances. My old picture told a story that was new. It had all the elements of a story but viewers would have to traverse the path that gave way to my story themselves.

IMAGE 1. "My Home is Hypertext". Marjo Mäenpää: Screenshot from WWW homepage, 1995.

In 2008 I was starting my research in the Mobile Social Media research group. The idea of sharing experiences through short videos inspired me and a small group of my friends and colleagues to test the new mobile media platform. On Christmas Eve 2008 a group of my friends send me 15-second video clips of their own Christmas preparations. I get clips from around the world, the US, Latvia, Lapland. We play around with the clips – shots on preparing and eating the food, when linked together, make up a remix of a festive plate of gravlax, a ceremonious Christmas hymn by the baked ham and rocking pizza slicers. The montage reveals that Christmas is a feast of food but the degrees of ceremoniousness vary. When linked together in a different order, the clips tell the story of waiting for Christmas – foremost to us who have filmed them.

1.1 The research question

This thesis is a qualitative study on how a video created by several authors is constructed into a consumable medium and, potentially, into a narrative. My research proceeds from the basis of short, co-created mobile videos, their remixes and the narrative compilations born from these remixes. The aim is to study visual narratives co-created by a user community with the video cameras of mobile phones. I will explore the marginal conditions of narrativity and whether coherent stories can be produced out of the video material created by several users in a community.

My study seeks answers to the questions of how people tell "mobile" stories using their phones and how a community creates narrative through mobile phones, using video. The questions are based on claims that people today are telling stories through social media and, also, visually – through images and videos (Koskinen et al. 2001; Koskinen 2005; Klastrup 2008; Villi 2010). One of my main hypotheses is that mobile and collective story production is a creative process where the end result is unpredictable. In this study I investigate how the narrative is structured, what the co-creation process is and do the co-created videos fulfill the design principles of narratives. How do we define the "author" and narrator in co-created narratives?

The scope of my research also entails interaction in mobile media, community created media – social media and the remix culture, production in community (von Hippel 2005; Lessig 2005; Rettberg 2005; Lessig 2008; Bacon 2009). My main emphasis is, however, on media and narrativity and on stories produced by several users and authors, as well as the structures of co-created mobile video narratives. I approach narrativity, narrative structures, from the perspective of classical (Propp 1928; Genette 1988; Barthes 1993) and post-classical narratology (Fludernik 1996; Fludernik 2003; Herman 2009a; Herman 2010; Ryan 2010).

My research data are based on the community co-created mobile video stories. The data have chiefly been produced within the Mobile Social Media research project during 2008-2010. My own role in the production has been central; I took part in the community-based production of the videos as one person shooting them and in mediating the experience. In most of the video projects described in this thesis, I had the roles of application developer, researcher of narrativity, and, in many cases, project coordinator and producer. As part of the Mobile Social Media project, also a MoViE online application was developed and the development work was closely linked to the lessons and experiences gained in the video production projects. The research data – and therefore the research question – are crossdisciplinary in combining different

qualitative research methods to analyze the data and study the narrative structures and narrative communities. Design research, narrative analysis and in a certain sense also methods of action research helped me to seek the answer to the research question.

In my study, the mobile videophone (ie. smartphone[1]) is seen as an expressive device for self-expression and as a communicative tool for distributing the video stories and participating the creative and collaborative process of creating expressive mobile video stories. The main research data consist of a set of test users' videos and remixes with narrative structures. Methods of narrative analysis will be applied in the analysis of the remixed video data.

Even a small unit qualifies as a narrative. A single picture can make a story. Hietala (2006, 98) writes about contemporary narratives, mass media and especially audiovisual media. Hietala notes that at the practical level mass media are the machinery that produces a majority of the narratives we encounter in daily life. The language of the narrative machinery is to a large extent audiovisual. Visuality is a very prominent aspect of communication; moving or still images produce stories that we keep constantly running into and which we have to constantly interpret.

Narrative is a story, and narrative analysis is a qualitative research method that aims to study the quality of stories told about certain things, events or experiences. Narrative analysis helps to define how certain phenomena are structured and narrated. The object of narrative analysis could be text, media, image, music or, as in my case, mobile video[2]. (Löytönen 2012).

I am studying storytelling or engaging in narrative inquiry rather than performing sociological narrative analysis. The word 'narrative' implies an audience and an author – sometimes also a narrator. The question of author is complex and complicated in co-created and interactive narratives, in classical narratology a distinction is made between the real author and implied author, and in a certain sense this model is useful also in analyzing the role of the author in mobile videos. However, the main attempt is to study more closely the narrative structures of community co-created videos. The process of co-creation and production in community has also importance.

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1 Smartphone is a mobile phone built on a mobile computing platform, with advanced computing ability. In this study the mobile phones are always smartphones, with WLAN connection and a camera with a video recording system.

2 There are different variations of narrative inquiry and research. Research that studies the structures and theories of narratives is called narratology. (Löytönen 2012).

My interests can be located in the field of audiovisual media research. It is a broad field – and constantly broadening as e.g. new forms of cross-media establish themselves. It can be seen to include, for example, research of technological innovations, film, game industries, global media culture, communication, media economy, gender studies and, on the other hand, research of individual forms of media publication; mobile media, television, the Internet and, more extensively, social media. (Mörä, Salovaara-Moring, Valtonen 2004). The scope of my research is limited to the sharing and production of media content and mobile communication. Within these fields I focus on the phenomena of narratives and narrativity, mobile media and co-created production – there are also overlapping areas, such as interactive narratives, mobile communities and social media, that define my research topic rather well.

The design research method has an important role in studying the process of co-creation and especially the design process of the mobile video application MoViE (Mobile Video Experience) and other possible models for designing methods and applications for people to share experiences and narratives through mobile video. Design research methods are suitable tools here since I have personally been involved in the study process as a researcher and designer of the MoViE application. Design research is systematic research for and acquisition of knowledge related to design and design activity. (Bonsiepe 2007, 27). In my study the scope is delimited to people, users of mobile video, in particular, and, more generally, to people as storytellers and sharers of experiential stories. Design research studies, besides people, also processes and products. (Cross 2007, 47). The focus of this study is, on one hand, on the process of creating narration and sharing stories, the participation of the users in immaterial production. On the other hand, I examine the process of designing an application meant for sharing mobile videos and the stories and experiences that are being produced. It is, in other words, a design process where certain kind of interactive applications and services for communities are produced using a platform for mobile technology. The product that is studied in the context of design is the MoViE application. I took part in its production as a researcher and a designer. One of my main methods as a designer has been the visualization of structures and narrative processes, using models familiar from scenario-based design and use-cases[3].

Even my main method is based on narrative analysis, and to some extent also activity theory was a suitable source of research method for studying the use

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3   The concept of *use-case* is used in programming. It is applied mainly in designing and programming object-oriented and interactive systems. Use-case describes one act of interaction, and the objects, feeds, feedbacks and other actors that are active in this action. (Muller 1997, 153).

of mobile phones as cameras and video cameras because it attempts to discover and document methods of everyday activities and methods of digital interaction design. (Kaptelinin, Nardi 2006, 4-5). In this study activity theory was used in describing the processes of the authors of the video clips and remixes in Chapter VII (Conclusions). I believe that the process of creating collaboratively narrative video clips is itself an important process of experiencing the content by producing it and by reflecting one's own clips to other clips produced by other authors. Finally, the outcome of the process may not be as important as the process itself. (Multisilta, Mäenpää 2008a).

The mobile videos in my study were created in communities. Action research (or participatory action research) is research that aims to solve the questions of reflective processes. Communities of practice and organizations that aim to improve their strategies or processes can, for example, be studied with action research methods.

However, my study has a multidisciplinary and practical scope. Specified methods seem more or less superimposed. The study is based on "hands-on projects" with real cases and users. The various methods implied (i.e. mostly narratology and design research) serve mainly to deepen understanding of the usage of various tools.
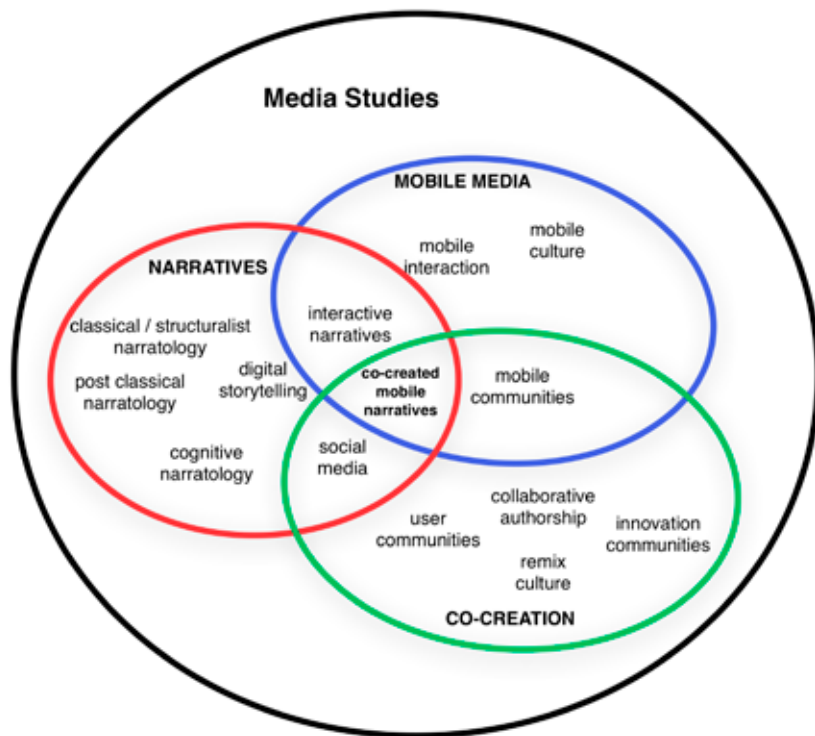
IMAGE 2. The field of research. Graphics: Marjo Mäenpää, 2011.

My study involves an empirical part, the research project, and the experimental tests carried out within it. The tests were carried out in research projects of the CAT – Culture, Art and Technology[4] – network based at the Pori University Consortium. The Mobile Social Media project in 2008-2010 (later also referred to as MSM) studied how people were using the video cameras in their mobile phones, what kind of video images they were sending each other and what they wanted to communicate with these images. The research question was focused on the study of social media. One result of the project was the planning and implementation of the MoVie application. MoVie is a social media service where users can construct stories out of video clips produced

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4   CAT – Culture Art and Technology network was a group of researchers and professionals from the
     Pori units of Tampere University of Technology, University of Art and Design and University of
     Turku acting at the University Consortium of Pori during 2006-2010.

within a community by combining video clips in their own remixes and/or with those of other users. Professor Jari Multisilta from the Tampere University of Technology and I first tested the service with a kind of "mind flow technique" by filming visual comments to videos shot by other users. (Multisilta, Mäenpää 2008a; Multisilta, Mäenpää 2008b). My own research question started to focus somewhere in between the areas of narration, production and sharing, to study the structures that had been produced within the community and that can be found in co-created narratives.

In my analysis I provide an overview of literature and research in the field: Narratology is a wide area of research. My main emphasis is on classical and post-classical narratology. However, the more recent studies and new paradigms in research of digital storytelling, interactive dramaturgy and game design have also offered important and useful insights. (See Aarseth 1997; Murray 1997; Eskelinen 2002; Meadows 2003; Jenkins 2007; Montfort 2009). Mobile media is a new area in the field of digital media studies, but there are articles and literature that have been written on the subject. I examine how the concept of media research and media are defined in the field of narrativity and digital storytelling, and how the current definitions on narratology could be applied to co-created stories and mobile media.

The term 'new media' is difficult to use today, combinations of different media, intermediality, transmediality and convergence mix different forms of performance – and 'the new' and 'the old' may be difficult or impossible to distinguish from each other. (See Manovich 2001).

Research on mobile human computer interaction, HCI, has been presented since 1998 in various scientific conferences. The conference Human Computer Interaction with Mobile Devices was organized for the first time in 1998 in Glasgow. (Johnson 1998). The papers delivered at the conference were foremost centered on the usability of mobile devices and the challenges presented by new, ubiquitous media – wearable, mobile media, including mobile phones.

More recently, mobile images, moveable digital images, exchange of images and the practice of communicating and interacting through mobile images have been the subject of a large number of research and books. Software applications for mobile phones and mobile communication are a constantly expanding area of research. (See Bourdieu 1990; Koskinen et al. 2001; Koskinen 2003; Koskinen 2005; Klastrup 2008; Multisilta et al. 2010; Villi 2010).

As mentioned, I have focused my research on co-created mobile videos and the study of what is essential about these videos – that the community is able to act impulsively, regardless of time and place, using mobile technology. I explore what conditions the short videos created by several authors can be formed into

stories. It is interesting what kind of stories are born, for example, when the components supporting the structure come from the users' geo-location and tagging. To what extent is the author of a co-created video narrative the person or group of people filming it? To what degree does someone have to define the set of rules of the narrative beforehand?

My research data are based on five different tests that were carried out in different stages of developing the application. The first test was only a scenario, the last ones would already qualify as experiments where a larger community tried out the MoVie application, downloaded pictures online on a commonly agreed-upon event and created remixes, video montages of the shots filmed by the community. The video clips featured the community members' own experiences, their own daily life, festive occasions, travels, preparing for parties. In my research of this, people's relationship to their own reality presents itself as narrativization of reality – or sooner, the videos are stories of these realities.

1.2. Cross-disciplinary and trans-disciplinary research – the sources

My thesis touches upon many different fields of science and research. Narratology and narrativity have already established themselves as specific fields of research, and in this study at hand I use narratological models to gain insight to mobile, collective interactive storytelling. My study does not aim to serve as a commentary on, for example, literary narratological research, I am, rather, using classical and post-classical narratology as a tool to analyze the narrative process and structures.

Research on digital interactive storytelling is also an established line of research. (Aarseth 1997; Koskimaa 2000; Eskelinen 2002; Montfort 2007). The narratology and dramaturgy of digital new media, hypertexts, games and multimedia have been actively studied since the 1980s. The related literature often borders more closely with the field of technology, rather than theatre research or film studies. Researchers of narratology and media have not in large scale seemed able to find each other, or writers in the field appear to be speaking of different things when it comes to interactivity, new media or narrative structures. Mobile technology is a new area of research, as are narratives in social media. It is of course interesting how networks, ubiquitous media and mobile communication are spreading into all spheres of daily life and art, self-expression and communication. Besides the technologies, the questions of how people use mobile media, what everything is connected with mobile devices and how the

mobility changes human interaction and communication are also well worth investigating. Mobile video stories are made to be consumed, spontaneously in situations where the device that records the situations and experiences is always close at hand. It is the narrative structures of the stories born from these situations that I have set out to analyze.

There has always been collectively created art but the expansion of information networks is what finally gave rise to the current, actual boom of sharing and collectively acting in this sphere. Remix culture and producer communities are becoming common practice, and they have been written about extensively in the 2000s. In economy, production and art co-creation is, alongside social media, a growing area of scholarly interest. (von Hippel 2005; Lessig 2008; Bacon 2009; Sumiala 2010).

I have used in my study literature and research results, media, from all these fields and orientations. The literature from the field of narratology comes from two different approaches; first, classical structuralist narratology, since, for example, the texts of Vladimir Propp (1928), the early texts of Roland Barthes (1993) and the texts of Gerard Genette (1988) have formed the basis of later narratological studies; and, secondly, post-classical narratology such as the analyses by Marie-Laure Ryan (2001; 2004; 2006; 2010) and texts concerning recent studies of cognitive narratology by, for example, David Herman (2009a; 2009b; 2010) and Monika Fludernik (1996; 2003). The literature on mobile interaction and mobile culture is rather recent. Quite a good amount of studies and research has been carried out on the subject at the University of Art and Design (current Aalto University, School of Arts, Design and Architecture), such as the research by Ilpo Koskinen et al. (Koskinen et al. 2001; Koskinen 2003; Koskinen 2005) and Mikko Villi (2010). In Denmark Lisbeth Klastrup (2008) has done similar research concerning mobile media and user communities. The literature about co-creation and communities comes mainly from the discussion around management and media design, ranging from texts on multi-user communities in game communities to recent studies of motivation and innovation communities. Scott Rettberg (2005), Eric von Hippel (2005), Lawrence Lessig (2005; 2008), and Jono Bacon (2009), among others, have brought multiple insights to the discussion on co-creation.

When reading and analyzing the literature and theories of narratology, co-creation and mobile interaction I also refer to some existing media productions, artworks and research projects in these fields. I wished to test how well, for example, the concepts of narratology fit in the realm of digital storytelling or videos. Especially the media industry has applied the practices of co-creation in several productions, such as Ridley Scott's *Life in a Day* (2010) or the Finnish

film company Blind Spot Picture's Wreckamovie (2010) online platform for crowdsourced media production. These examples helped me to define and analyze the concepts of narration, co-creation and mobile cultures, as well as the videos produced in the Mobile Social Media project.

I have thrown myself into cross-disciplinary research to apply information and experiences. In an intersection of sciences, a researcher may find herself a bit ill at ease; respect for the traditional fields of research and wariness of the less known fields of research can make one feel somewhat like an elephant in a porcelain store. My basic premise is however to pave way for a new kind of analysis by combining existing information and experience. Transdisciplinarity is born in the terrain between sciences, and sometimes – when the existence in-between becomes established enough – one may speak of a research orientation of its own, or even a field of science.

II THE RESEARCH PROJECT AND DATA

1. Mobile Social Media research project

In the Mobile Social Media project (2008-2010) the idea was to research how separately filmed mobile videos from the same event or experience could form a dramaturgically intensive story after they were loaded into a web-based application called MoViE (Mobile Video Experience). The test hypothesis was that a community – whether it is virtual or non-virtual – could create an entertaining experience through a video montage or remix. The second sub-hypothesis was about the experience of entertainment being more accessible if the community that shares the mobile videos is already previously connected.

The starting point for the Mobile Social Media project was in Professor Jari Multisilta's visit to Stanford University in 2007, made possible by preparation funding from TEKES, the Finnish Funding Agency for Technology and Innovation. The task was to chart a new, developing area of research together with researchers from the H-STAR Institute at Stanford. The use of social media applications with mobile devices and especially the use of video in social media services is an interesting and developing area. The Diver software, which had been developed at Stanford University earlier, enables the analysis and re-editing, i.e. *remixing*, of video data. The idea was further developed and oriented towards social media, and thus a sketch for the MoViE service was born.

The Mobile Social Media research project was launched in August 2008 at the Social Mobile Media workshop held at Stanford University. At the seminar I voiced some of my ideas on applying research results from the field of classical, structuralist narratology to the analysis of community co-created video narratives and the designing of story generators to be used in mobile media. In September 2009 the project proceeded to organize a workshop entitled "Sharing Experiences with Social Mobile Media", in connection with the MobileHCI 2009 conference, where I discussed the development of the MoViE application. At the conference I described how my ideas of a mobile, community-based story generator making use of the narrative structures introduced by narratological research had sharpened through the video experiments performed within the research project.

A cross-disciplinary group of researchers with a voluntary test group took part in the different testing stages of the Mobile Social Media research project. The core team of MSM represented three different fields and traditions of research: technology and software design from the Tampere University of Technology; cultural studies and user research from the University of Turku; and dramaturgy of user interfaces and interaction from the University of Art and Design Helsinki. I was the head of the research group from the University of Art and Design. My own research in the project centered on storytelling in mobile social media and the description of the narrative structures of co-created video materials.

The project's research tasks were centrally connected to our cooperation with the Pori Jazz 66 association. The Pori Jazz Festivals 2008 and 2009 served as testing platforms for the services and service concepts produced within the project. The other financiers and partners in the project were Floobs, Qwertomec, Porin seudun matkailu Oy Maisa and Satakunnan Kirjateollisuus Oy. The main financier was TEKES (ERDF funding). The project was divided into work packages which were overseen by the Tampere University of Technology (Professor Jari Multisilta), the University of Art and Design Helsinki (Professor Marjo Mäenpää), the University of Turku (Professor Jaakko Suominen) and Stanford University (H-STAR Unit, Professor Roy Pea).

At the time when the project was launched, social media were gaining popularity but their usage through mobile devices was still uncommon. Moreover, the practice of using video in mobile social media was still taking its first steps. During the project, social media have spread to mobile devices, and people all around the world are now updating their Facebook and Twitter accounts through mobile phones. Video has also become mobilized and recently its use has become amusement for the masses for example through YouTube and Vimeo. (Multisilta et al., 2010). Also social media have during the recent three years become an

everyday phenomenon. Social media could be seen as a synonym for Internet at large. Actually the idea of social media has brought the basic idea of Internet as a thoroughly interactive global network into reality.

The aim of the project was to explore what kind of factors support the use of mobile social media and how mobile social media are utilized. In addition, the project aimed to examine what kind of technological challenges there were for the use of mobile social media. Such challenges had already been identified to concern, for example, the mobile phone interface and the data transfer speed of wireless networks. For example, the task of creating tags can be challenging with mobile phones because their user interfaces are more limited than those of computers. Making use of location data was one of the main goals of the project. On the other hand, the goals of the project centered on creating and testing situations of use and concepts for mobile social media. The objective of the work package of my own research team was, as stated before, to study storytelling in mobile social media and co-created video materials (Multisilta et al. 2010, 11). My research team included, besides myself, the research assistants Riikka Kiljunen and Saija Mustaniemi from the Pori School of Art and Media, University of Art and Design Helsinki. (Mäenpää, Kiljunen, Mustaniemi 2009a; Mäenpää, Kiljunen, Mustaniemi 2009b; Kiljunen, Mustaniemi 2010, 59-72).

2. The MoViE application

For the purposes of the MSM project, the MoViE application we implemented was a demo platform that enables users to create mobile narrations and stories using narrative structures. The implementation is based on a video database (MySql), a set of interface scripts (php) and user interface design for Nokia Series 60 phones. (Multisilta, Mäenpää 2008a). (See images 3 and 4).

In the different projects and demos the aim was to test how different narrative structures work in mobile video storytelling applications – first of all for creative projects. The special interest was in narratives produced with the mobile phone and for the mobile phone, i.e. to be viewed on the mobile phone. The main research data consist of a set of test users' videos and remixes with predefined narrative structures. (See Multisilta, Mäenpää 2008a; Multisilta, Mäenpää 2008b; Mäenpää, Kiljunen, Mustaniemi 2009a; Mäenpää, Kiljunen, Mustaniemi 2009b; Mäenpää, Mustaniemi, Rajanti 2010a; Mäenpää 2010b; Multisilta et al. 2010).

The MoViE application was designed in a process where human activity and the objectives of that activity determine the conditions and features set for

the application. My own research focused on the needs and communication of the people using mobile video narration, the study of the narration. The MoViE application sort of developed and extended through the process, through the experiences gathered by the various researchers. Describing the methods of action research in the interaction design process, Kaptelin and Nardi (2006, 34, 35) write: "…using a system does not normally have its own purpose; its meaning is determined by a larger context of human activity carried out to accomplish things that are important regardless of the technology itself, such as writing a memo to a colleague or keeping in touch with a friend." The use of the system is not significant as such. People interact with the world through the interface, and not with the interface itself.

At the beginning of the research project the aim was to build an application, a platform for the web that could serve as a database for the video clips. Through various scenarios and tests, we developed the indexing and tagging functions of the MoViE application. The idea of detaching each individual filming process into files of their own in the database was partly based on the objective of keeping the different video narrations (such as in Chapter VII, Cases 2, 3, 4, 5) separate.

MoViE (Mobile Video Experience) can be used with a mobile phone browser in all phones that support web browsing. However, we wanted to design a system that would support the tag creation by collecting automatically as much context data as possible. The MoViE mobile client is a video capturing, tagging and uploading tool for Symbian S60 mobile phones. It uses GPS (Global Positioning System) and GSM cell information as the automatic context for videos. This information is used to find the most appropriate words for tag suggestions. MoViE is meant for mobile video sharing, it does not support real time video sharing. (Perttula et al. 2010)
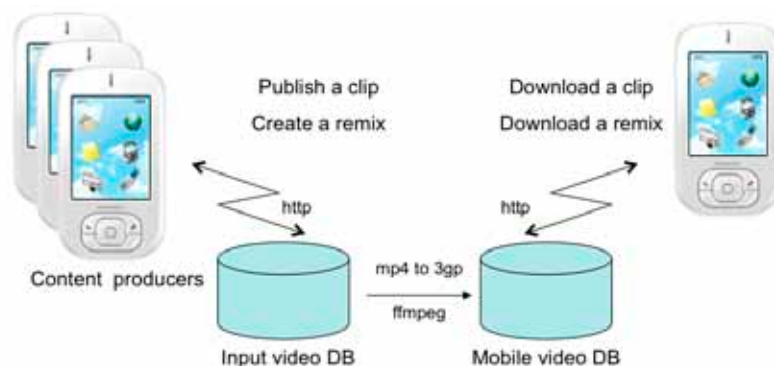
IMAGE 3.   MoViE architecture (Multisilta, Mäenpää 2008b).
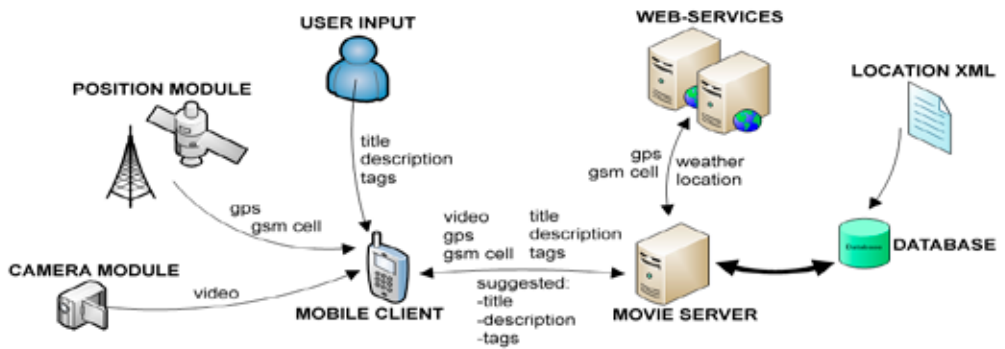
IMAGE 4. MoViE2.0 – with new tagging system and GPS (Global Positioning System) (Perttula et al. 2010, 130).

MoViE enables users to share, communicate and compose short mobile video stories in a networked community. It also works as a database for various users to shoot, collect and share video and create remixes, as a story generator that automatically collects data according to the tagging system.
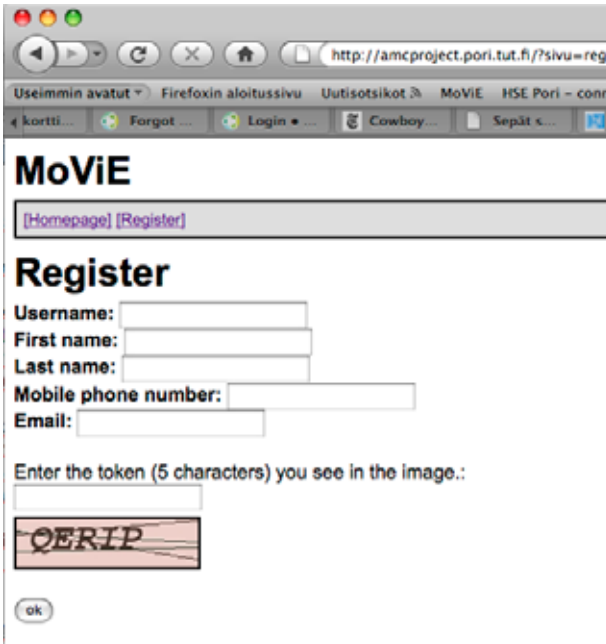
Registering to use the MoViE generator – via mobile phone or on Internet
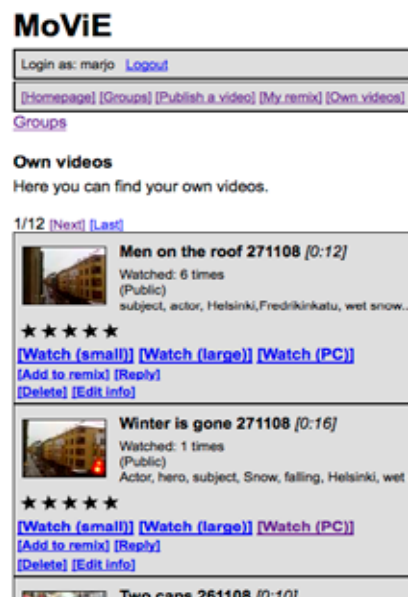
Browsing downloaded videos in MoViE interface

IMAGE 5. User interface of MoViE test version used in 2008-2009. Screenshots from application.

In Chapter VII I will present various projects that aimed to test the hypothesis; whether it is possible to create more or less structured and intense narratives using the MoVie application.

Since the hypothesis was that it is possible to create a dramaturgically intensive and coherent story from various short mobile videos shot by several authors, we tested both the preprocessed story generator that composes narratives according to a certain given structure and order from a given combination of mobile videos and the narratives that were remixes composed by a human author from a given group of collectively shot mobile videos.

2.1. Story generator or editing tool

In some parts of my study (especially when analyzing the videos and cases produced during the Mobile Social Media project) I also call the MoVie application a story generator. In the early days of hyperfiction and computer-generated content the idea of story generator was seen as an answer of the digital age for communicating with Aristotelian theories on drama. (See Laurel 1991; Aarseth 1997, 79; Montfort 2007). The literary adventure games and story generators were usually developed by artificial intelligence methods or using dialogue programs, such as chat bots.

Brenda Laurel (1991) believes that computers could be studied with a humanistic perspective, using well-defined models established for other forms of art. She argues that technologies could offer new opportunities for interactive experiences and new forms of drama (and speaks in favor of that – if only the control of technology is taken away from the technologists and given to those who understand human interaction). Interactive drama or rather the action in human-computer activity – as Laurel presents it – is collaboratively shaped by the system and the user. The action may vary in each interactive session.

Espen Aarseth argues that the fundamental problem in computer poetics is the aesthetic relation between a human narrator and a machine narrator. The problem is that the computer is forced to simulate the human narrator. (Aarseth 1997, 129). Aarseth writes that "Using /…/ Aristotelian drama theory, as their generic goal, programmers typically try to get the output of their programs as close to traditional literature as possible, with an ambition to achieve original prose or 'well-formed action'." (Aarseth 1997, 129). Aarseth also lists successful and failed attempts to generate tense and coherent

narratives with a computer. Sometimes the mechanical structure manages to succeed because the failures create funny, irrational or unforgettable results. (Aarseth 1997, 131).

Aarseth defines the positions of human-machine collaboration through three different types of human-computer interaction:

> "1) preprocessing, in which the machine is programmed, configured, and loaded by the human; 2) co-processing, in which the machine and the human produce text in tandem; and 3) postprocessing, in which the human selects some of the machine's effusion and excludes others." (Aarseth 1997, 135).

MoViE – in its development phase in 2008–2010 – was partly a preprocessing application and partly a co-processing application, in Aarseth's terms. Users uploaded the tagged short videos to the MoViE database and used, edited and published the data in two different ways. In preprocessing action the human editor chooses the short video clips from the database and edits the remix according to her/his own rules and wishes. In the corresponding act the human user again shoots and uploads the tagged videos to the database herself/himself and lets the MoViE *generate* a remix from the given tags in the order the human user chooses.

The MoViE application does not include any artificial intelligence and therefore it is more like an editing tool. But as Aarseth writes about the position of the author: "A game system without a 'playwright', like a world without a god, would perhaps appear meaningless to the outside observer." (Aarseth 1997, 140). Aarseth also calls out for an investigation of new ergodic forms and asks us to focus on the computer as a literary instrument; a machine for cybertext and ergodic literature[5].

With the MoViE application – whether it functioned as a preprocessing or co-processing generator or a remix editor – the most interesting thing was the context of social media and communities.

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5   More about Aarset's concept of ergodic in Chapter III 3.1.

III THE FIELD OF MEDIA

The singular form of the word media, medium, refers to the concepts of agency or substance. It brings into mind associations with clay and steel or text, image and bits. The term 'the media', as means of communication, comes from the plural form of the word, and is naturally associated with such channels as press, television, mobile application or the Internet. Medium is also about codes, Braille and user interfaces, not to speak about individually or collectively produced mobile interaction.

1. Media, medium and narratives

Media make up a multifaceted phenomenon. The plural form 'media' is often used to refer to the institutional side of media and especially to media as exercisers and actors of societal influence. The singular 'medium' refers to a state of midway, being in the middle, i.e. transmission and communication. In a philosophical sense media can be viewed from an ontological perspective, as a medium that produces and constructs existence, something that conveys the subject and the object, spirit and matter, self and others, us and the world – in other words, the elements of the story. (Ryan 2004; Ridell, Väliaho 2006; Ryan 2010).

Media can be distinguished into two categories: On the one hand we are speaking about a medium as a mediator, a channel and a process that transmits externally given messages or meanings. On the other hand the medium is a structure, a place of human experience. (Ridell, Väliaho 2006, 16-20).

One approach to media has risen from the field of mass media studies; in connection with communication the medium often appears as a technologically understood channel and instrument through which the communication takes place. Marie-Laure Ryan writes about media as a 'tube', a kind of pipeline. (Ryan 2010).

My own approach to studying media production and media culture mostly derives from the field of digital story-telling and cultural productions. What is novel about new media is their interactive nature and the digital form of recording. Today we prefer to speak of media and convergence, trans-media and cross-media. Narrative media are a combination of pluri-medial texts. (Ryan 2010, 39). They are a mix of language, sound, image, movement, interaction and potentially many other types of content – or should we say here, also many types of mediums. Every medium has its own way of narrating stories.

The challenge with narrative media is how to combine the information gained through sensory experience and understanding into one, coherent story. When different mediums are combined, we are usually dealing with media production and media institutions.

Media studies can approach media production from many different perspectives: The development of systems built under market conditions can be studied on the basis of theories on cultural industry, through the connections between culture, art, ideology and media. Media can also be analyzed through human needs. In order to attain a form for their needs and to participate and interact in society, people need stories, usually media, literature and TV-series. In a media critical view, middling cultural and media production is a social problem relating to the usability and free distribution of information. The field of media can also be viewed with a critical-emancipatory approach which is concerned with power, accessibility and gender – the objectives for producing and consuming media (or media productions and media content) cannot be the same for everyone.

My approach in research is grounded in an analysis of one narrative medium and the structures of narratives created with this medium – mobile video. Dramaturgical models of narrative media have been studied and analyzed by numerous philosophers from Aristotle to modern-time narratologists. As opposed to research into the field of literature, scholars of audiovisual or interactive media are also interested in the producer and the user as well as the actors in interactive games, non-linear narration etc. The text and message of a story can be the same, but do new narrative structures and interaction bring in additional value? The study of games and hyper and cyber texts seeks answers to the question of how the structures of interaction create new meanings.

The study of mass media has already since the 1940s been familiar with the model of communication process; who says what through which medium and with what consequences. (McLuhan 1964; Herman 2009). The model is not outdated. The recipients still bear the consequences, only their role has changed. The 'recipient' has become the 'user', one of the most important role characters

in media who also adapts and produces contents. In resent literature the terms *produsage* and *prosumer* have emerged – meaning that the production as well as the consuming is collective and happens in a community. (Bruns 2008).

The diversity of media production is evident all around us. Entertainment, games and WWW are content production but so are also alert tones, train announcements, company intranets, newspapers, literature and services that rely on newest technologies. At best they can enhance people's well-being and access to services, entertainment and the arts. Media narratives are watched but they are also touched, listened to, smelled and moved. In this study I focus on examining media from the viewpoint of production. I chiefly examine media production through the context of the narrative medium – how narratives produced by a community through the mobile medium continue the tradition of narrative representation and narrate experiences. The societal or institutional implications of media are in this study left with less attention.

1.1. The three areas of media and medium-specific narratives

Scholar of narratology and virtual reality Marie-Laure Ryan (2006; 2010) begins her observations with the dictionary definition of the word 'medium'. The medium can be seen 1) as a channel system of communication, information or entertainment, or 2) as material or technical means of artistic expression[6]. Tailored to different media presentations, the material presents itself as texts, discourses, as so-called contents, i.e. entertainment or information. In a technological sense, it is a question of different technologies, hardware and software of transmission, and from the perspective of cultural practices, it is a question of the large institutions connected with production and reception or consumption. Media obtain and transmit information, in such contexts as the press, TV and broadcasting and social media applications. Moreover, in Ryan's model no distinction is made between the new and the old media – she studies media through different means and forms of expression, from the perspective of narrative media.

According to Ryan, also the term of medium (plural: media) covers a wide variety of phenomena: (a) TV, radio, and the Internet (especially the WWW) as the media of mass communication; (b) music, painting, film, theatre and

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6   Merriam-Webster Online. www.merriam-webster.com/

literature as the media of art; (c) language, the image and sound as the media of expression (and by implication as the media of artistic expression); (d) writing and oral expression as the media of language; (e) handwriting, printing, the book and the computer as the media of writing. (Ryan 2010, 16). Media have a dual task: transmitting information and/or forming the support of information. In short, media are presentations, technology and practices. (2006, 18; 2010). They are either a channel (or system) for transmitting information, communication and entertainment or a means of material or technological – and also artistic – expression. "The first definition regards media as conduits for the transmission of information, while the second describes them as 'languages' that shape this information." (Ryan 2010).

In the pipeline definition, media are nothing more than means of transferring artifacts – a digitized image is transmitted through WWW-pages, text through printed newspapers, films through TV broadcasts; and messages, images and videos through mobile networks. The shape, speed and quality of the pipeline of course determine the form in which the information is transmitted through it. It affects the reception of the information and often also defines the production; we use specific channels of conduit that have been tailor-made for a given medium. Quick, real-time communication calls for new channels, for written expression the slow production process of printed text or books is usually enough. Some films are made for TV distribution, but high definition or 3D images require their own channel of conduit. Ubiquitous interaction and media are reached through the mobile medium.

Ryan brings emphasis on the content of media – especially for researchers of narratology the channel-type media are only interesting to the extent that they involve "differences that make a narrative difference"— in other words, to the extent that they function as both conduits and 'languages'. "Among technologies, TV, radio, film, and the Internet have clearly developed unique storytelling capabilities, but it would be hard to find reasons to regard Xerox copy machines or phonographs as possessing their own narrative 'language'. " (Ryan 2010).

Mobile devices – as a channel of conduct, a medium – offer opportunities to discover this "narrative difference", their distinctive quality. Impulsiveness and a documentary nature coupled with subjective narration are essential to media and narratives produced by mobile phones. The messages – images and videos – are often highly personal, less ceremonial, unedited and random. They illustrate and speak of the world always in first person. (Rantavuo 2008; Poikselkä 2010; Villi 2010). Contrary to Ryan's observation, Xerox copy machines have created narratives. A collection (book) of copy machine humor was published in Finland in 1989 (*Siistiä sisätyötä* 1989, 194). It was compiled in pre-digital times when

copy machines conquered the workplace and people started having fun, sending messages and jokes with them, on the job. The texts were preconditioned by the copy machine. It was a new technology that enabled the reshaping and dissemination of messages in a novel way.

Ryan writes about the nature of media from a semiotic point of view. Ryan's typology is also well suited for the purposes of my research. The previously described definitions entail – according to Ryan – three conceptual domains. They are approaches to media (rather that categories): semiotic, material-technological and cultural. Each of these domains is linked in different ways to narrative media, in other words, the specific medium for telling the story. (Ryan 2010,16). For my research, the question of the storytelling ability of the medium is essential.
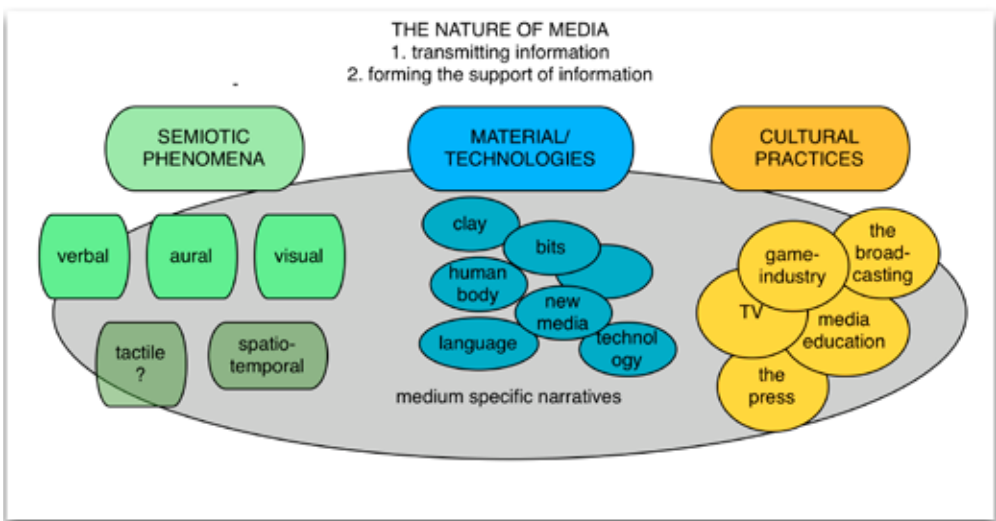
IMAGE 6. Three areas of media and medium specific narratives, according to M-L Ryan (2010). Graphics: Marjo Mäenpää, 2011.

According to Ryan, the semiotic approach is centered in "three, broad media families", verbal, visual and aural, through which media can be grouped. The groupings correspond to art types, based on their sensory reception: literature, painting and music. Even Ryan herself can't help but ponder which grouping the art of dance, for example, would belong to, as based on movement, space and time. I would also add 'tactile' and 'spatiotemporal' media to the groupings of the semiotic approach. Stories transmitted through mobile media, for instance,

involve as an essential element the coordinates of time and location. Sometimes they are in fact an important part of the story conveyed by the medium.

An art exhibition aimed at people with visual impairments featured works based solely on the experience of touching. According to Ryan (Ryan 2010, 17), with tactile narratives the plot needs to already be known to the user for them to be understood. Tactile "picture books" in which the suspense, the experience, is produced by the surface, texture and various movable parts are made for children with visual impairments. Do the experiences give birth to stories? Can dance actually tell a story? Many games based on movement (games designed for Wii consoles, e.g. "Kick Ass Kung Fu", "QuiQui"[7]) are built around the element of narrative – the basic story is more than just movement.

Ryan does however point out that media research cannot merely rely on the groupings of semiotic, technological and cultural. She takes newspapers as an example (Ryan 2010, 18), which of course rest on the same semiotic dimensions as books, but the press has – at least in the field of sociology – also been distinguished as a medium in its own right. Drama performances often use various media channels. TV films are a medium in a category of their own. Mobile media produce medium-specific narratives – stories that are based on the functioning and form of expression of a specific medium. The independence of production and consumption of time and place, spontaneous expression, sharing and communality are distinctive features that produce specific kinds of representations and narratives of a specific nature.

1.2. Narrative and language – the narrative medium

As Ryan suggests, media – and narrative, of course – is a phenomenon of language. (Ryan 2010, 22). Narrative is a discourse that conveys stories. A story, in turn, is defined as a mental image made up of four 'constituents': 1) a spatial constituent: a world containing agents and objects: 2) a temporal constituent: unusual and 'non-habitual' changes occur in this world; 3) a mental constituent: the events involve intelligent agents who have a mental life and are able to emotionally react to the states of the world or the other agents; 4) a formal and pragmatic

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7   http://www.cs.uta.fi/kukakumma/htmls/mitaih/frset.html QuiQui is based on a heroic story set in locations with different visual, sound and also physical themes, such as flying in the sky, diving in water or weightlessness in the center of the world.

constituent: advocating closure and a meaningful message. (Ryan 2010, 5).

Ryan concludes, on the basis of these constituents of narrative, what language is needed for. The spatial constituent and the pragmatic constituent, making up the formal message, are not dependent on natural language. Instead, the events and change in the story (2) and the agents' reactions (3) cannot be told without natural language. (Ryan 2010, 5). In mobile video narratives the story is usually formed by visual constituents, with no spoken language or written text. In order to convey a story, visual or non-verbal narration presupposes that the "pictures must capture the temporal unfolding of a story through a static frame". Ryan distinguishes three kinds of pictorial narratives: "Monophase works that evoke one moment in a story through a single image; polyphase works that capture several distinct moments within the same image; and series of pictures that capture a sequence of events." (Ryan 2010, 6). Ryan is of course speaking in the context of the mechanisms of unmoving, still-images for conveying stories. I will later present my own example where Hannes Heikura's 2007 Press Photo of the Year (Mäenpää 2010, 21) would appear in Ryan's categorization as a "polyphase" picture – a picture including several layers and reaching several (temporal) dimensions and probably also several various schema in the viewer's mind (see Chapter IV 6.2).

2. The narrative process in media

The transferring of messages – or narrative as the subject of my research – from one medium to another is an interesting question. Roland Barthes stressed that a story can be told similarly with all media – the discourse changes but the plot stays the same. The narrative prevails throughout the media, whether it is set in literature, a glass painting or a film. (Barthes 1975, 79).

On the other hand, narrative structures have previously been sought out of music, dance and theatre. Many forays have recently been made into the area of narratological approaches to film, hypertext narrative, ballet, comic strips, drama, poetry, and even painting and music. In this area Chatman was an important innovator, for it was he who staked out a place for film in narratology and who also confronted narrative with other text types, putting the concept of narrative under a new light. (Chatman 1978; Alber, Fludernik 2010, 27).

With media and texts translation doesn't only mean that works are translated to different languages (for example, the translation of poems from one language to another has often been subject to debate). The translation of a work from one

medium to another is an even more elaborate question. Reflecting on it can help us to understand why, for example, the video works of my study can be analyzed by means of narratology. The narrative structures and the process of reception of co-created mobile narrations could be studied like literary works or narrative texts. More easily, we can apply to them the same means of analysis as with film narration. It would be easy to claim that a literary text and a film based on its adaptation have nothing to do with each other. On the other hand, the idea of transmediation becomes more apparent the more we explore cohesive, discrete works that have been produced with a number of different media.

Two excellent documentary films by Finnish director Kanerva Cederström present an effective example of how a same story can be illustrated with different media. In them the text and the image seem to each run on their own tracks, but together they form an interesting artistic entity, one story. *Haru – The Island of the Solitary* (1998, together with Riikka Tanner) is based on the experiences of writer Tove Jansson and her lifelong partner, graphic artist, professor Tuulikki Pietilä. For 25 years they spent their summers on Klovharu Island at the outermost tip of the Pellinki archipelago in the Gulf of Finland. Cederström compiled a work of film art out of the soundless Super 8 material Tuulikki Pietilä filmed in 1971-1990. In it the seemingly fragmentary excerpts of film form together with the text read out loud a comprehensive, discrete story of artist life and the passing of time, ageing.

IMAGE 7. Kanerva Cederstöm, *Haru - The Island of the Solitary*. National Audiovisual Archive http://www.kava.fi/kanerva-cederstrom (reviewed 3 Aug. 2011).

The other one of Cederström's cross-media or intermedial productions is a documentary story even more clearly realized through a combination of two different media: *Trans-Siberia, Notes from the Camps* (1999) is a visual story of an 8-day train journey from Moscow to Vladivostok. Alongside the images, two actors read the recollections of two deportees to Siberian prison camps. Ingrian teacher of mathematics Amalia Susi (nee. Tiihonen, 1898-1972) and Moscow-born writer Andrei Sinyavsky (1925-1997) were forced to live in prison camps for years; Susi wrote her notes on pieces of cloth, sheets, from which her daughter later rewrote them. The film *Trans-Siberia* was created on the editing table and its soundscape was also almost completely constructed anew. The film features, for example, Siberian contemporary music, punk and the music of local rock bands. Instead of interviews, the shots illustrating the progress of the train and authentic texts from the past construct a cohesive and coherent story – foremost in the viewer's mind.

Co-created video narrations could be effectively compared to documentary narration or reality TV productions. The mobile videos of my study have been filmed in real-life situations, in a way they peep into the life of the persons filming them – joined together in *remix* they portray daily life, special occasions or, for example, time spent at a festival among a group of people. Reality TV productions are close akin to fictional narrations, maybe even closer than carefully edited, branded and merchandized TV series or films. (Freeland 2004, 249). Reality TV shows are manipulated by the producer only to an extent that leaves room for the tensions and conflicts between the carefully selected characters – which are the main sources of narrative interest. In the mobile video narratives the authors themselves have the power to manipulate the story, to organize their shots or clips in any chosen order, to define shots with tags.

3. New media – interactive narratives

Today I no longer draw a distinction between so-called traditional media and new media. Only a decade ago there was still reason to contemplate on what makes media new. Interactive, digital media have been seen to belong in the field of new media. Television (so-called old media), cinema (also so-called old media) and newspapers are today produced digitally, and interactive communication is possible with these media too. In 2001 Lev Manovich noted that the new media and "computer media" revolution had already reached every form of communication. (Manovich 2001, 19-20). In the 2010s, the forms of media that

could be termed "old" are few. The layering of different forms of media, their mutual merging and interaction, is referred to with such terms as, for example, 'transmedia', 'cross-media' and 'intermedia'.

At the end of the 1990s the term 'remediation' was used to describe the relationship between the different media – multimedia and the developing Internet applied the forms of expression of many different media. (Ryan 2010, 13). Remediation of media in, for example, video games, meant the use of cinema narration in an interactive, digital environment, in the same way as how digital photographs make use of various forms of analogous photography. (Bolter, Grusin 1999)[8]. Intermediality refers to the interconnectedness of the different media in terms of references and use, as is the case with e.g. multimedia or cross-media. For example, opera can be intermedial when it uses gestures, language, music, mimicry, visual expression and space for expression. Other definitions describing the relationships between the media include 'plurimediality' for artistic objects that contain various semiotic systems; 'transmediality' for narratives that are not bound to any specific medium but together create the story; 'intermedial transposition' for expression that uses the means of some other medium (e.g. painting borrows its expression from comic art); or 'intermedial reference' for texts that use elements from some other forms of media. (Ryan 2010, 14). For example, Peter Webber's *Girl with the Pearl Earring* (2003) is a film about Vermeer's famous painting and a fictional story of the girl portrayed in the painting.

Interactive media, digital media and hypertext narratives have brought new perspectives to narratological research. On the other hand, in the non-academic world, in e.g. the fields of game development and media art, stories in which the user or the viewer also has a central role, the presentation of the narrative poses an interesting challenge. In latest discussion in the field of narratology attempts of various kind have been made to define a story that is presented through various media. Less thought has however been given to the interrelationship between narration, intermediality and co-authorship. Plurimediality, transmediality, cross-mediality and intermediality are phenomena that assuredly affect how the story is produced, presented and received or "consumed". How does, for example, a film narration change when it is told with many different media? Can we any longer call it a film? Can digital images, sound or effects alter the contents of the story? Film is in itself a medium of its own, in which the imprint of many different media, and their respective professionals, is inevitably visible. Let us think about games. They use the form of film narration but they also reserve the

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8   Bolter and Grusin (1999) proposed that every new form of media must be understood in the context of "old" media.

opportunity for the player or players to affect the course of the story (game). It is interesting to see how the "design principles" of a story work when there are several narrators, or authors, in this case.

Film and game productions are for the most part co-created by a collective group of authors. The story is born from the collaboration of many different media professionals and writers. Narratology focuses its study on the text in general, the narrative medium and the story itself. So I have to trace my steps back to the origins of media research to explore if the "medium is the message" when claiming in my analysis that the means of production – for example, co-creation – brings something new and different to a story.

Today's ubiquitous/pervasive media offer a thousand times more possibilities for interaction between individuals as well. Through social media and the wireless network the virtual space has expanded to become a place of interaction among individuals and communities. The audience and the stories it produces are possibly creating a new dramaturgy. An overall picture is born of the fragments produced by many different people and long distances apart, which can be shaped into and take on the form of a story.

3.1. Hypertext, cybertext and ergodic media

One product of interactive media in the 1990s was hypertext literature, hyper fiction. Hyper and cyber texts placed the reader and the experiences in a whole new position; stories called for a new kind of activeness, and a branching, linked game-like narrative demanded a new kind of approach to the study of narratology. In his early study of hyper and cyber texts, Markku Eskelinen (2002, 20) points out that the phenomenology and reception esthetics of literature (e.g. Ingarden 1973; Iser 1978) contains a self-evident perception that the reader takes an active role in filling the gaps in the text and interpreting story entities from the fragments. Eskelinen writes about a special cyber theory that offers a more exact model for studying the interpretive mode of use. According to Espen Aarseth's ergodic model, interactive texts entail an "information feedback loop". The new term coined by Aarseth, 'ergodic', is derived from the Greek words 'ergon' (work) and 'hodos' (path), to indicate that effort is required for the viewer to be able to traverse the text. (Aarseth 1997, 1). It is a question of active effort, not mere interpretation.

Raine Koskimaa argues that there doesn't exist any presupposed, preset story or model of the world (fabula) that the narrator tells about. The story is born at

the moment of its telling. In hyper fiction there is no "actual story", the narrative is born from the user's choices and navigated routes. (Koskimaa 2000, 3/17). In more far-stretching interpretations Koskimaa (2000, 3/17) writes that there is no story but only modes and moments of readings.

Cross-media strengthens the role of the user even further. Where hyper fiction required from the reader an active and motivated contribution to the "behavior" and traversing of the text, social media, as entities constructed by many different users, place even more requirements on the reader. It is no longer only a question of 'work' (ergon) but also of active contribution.

IV NARRATOLOGY AS A TOOL – NARRATIVITY AND STORY

In this chapter I present the idea of narratology used as a tool of my research. The narrative is also regarded as a tool for emplotting reality, in relation to, e.g. an individual's life and history. Narratology, as a method to study stories and narrative texts, has several approaches, such as the classical approach of Russian formalists, early Barthesian structuralism and modern post-classical narratology. In recent narratological literature questions of, e.g. the design principles of new narratives (Ryan, Herman) or cognitive schemas of forming narratives (Fludernik, Herman) have several convergences with the discussion of digital interactive storytelling.

1. Emplotting reality

Before recent narratologists also Roman Ingarden (1973, 264) addressed the schematic aspects of a work of art when writing about intentional objects. Understanding and interpreting pictures requires prior pictures, apprehension and experience. The information obtained from the picture is supplemented according to the models or schemes provided by experience, which have often been gained over the course of many years. In a way the picture is interpreted according to some ideal model of reality. The ideal models or ideal narratives, i.e. narrative schemas, help us to incorporate the clues given by the discourse for a story. Each picture retrospectively shapes the interpretation of the earlier pictures and gives clues as to how the next pictures are to be experienced. Also other elements linked to the picture, such as sound, movement, editing and form, affect the interpretation. Monica Fludernik, among others, has later also stressed these schematic aspects when writing about cognitive narratology. (Fludernik 2010).

Scholars often speak of 'metalanguage', which affects and directs the interpretation of stories and/or images. 'Genre' is a kind of collective orientation to reality – or orientation toward the final solution of the story. (Bakhtin, Medvedev 1985, 135). One can also speak of archetypes of narrative structure. Hietala (2006, 106) has listed analogies that narratologists have used in reference to narrative archetypes: Paul Ricoeur compares the narrative structure to the *Book of Revelations*, Juri Lotman uses the analogy of a calendar, Barthes writes about similarities between a striptease performance and a narrative – they both tease the recipient without wanting to reveal the final solution. Of these analogies, Lotman's calendar seems to best describe the form of co-created video narrations – a continuum of subsequent events.

Roland Barthes lists the infinite variety of narratives which branch out into a variety of media: myths, legends, fables, fairytales, novels, books, pantomime, paintings, glass paintings and films. What do these forms have in common?, he asks. "Like life itself, it is there, international, transhistorical, transcultural." (Barthes 1975, 237). The narrative and its model is his answer. (Barthes 1975, 237; Barthes 1982, 79; Hietala 2006, 91).

Narrativity means that everything appears in the form of narrative: trips, sports events, weddings, life and death. Veijo Hietala remarks that apparently stories based on reality and fictional narratives have formed a forum of mutual self-expression. (Hietala 2006, 91). Now perhaps more than ever before narratives of personal life – mininarrations – illustrate, conceptualize and perhaps also reshape people's social interaction. Social networks, services like Facebook, YouTube and Flicker, help people to 'narrate' stories of their own life, illustrate them and reshape the dramaturgy of the stories. *Bambuser*, for example, is a social media application in which users can keep constantly downloading video images of their life directly from their mobile phones. It is thus possible to download contents to media and film one's own life almost incessantly. Among the wildest ideas in planning is a mobile video camera that is carried around the neck as it produces a stream of real-time video images of the user's life.

IMAGE 8. Bambuser http://bambuser.com/v/862217 – real-time footage from a demonstration. Screenshot by Marjo Mäenpää, 1 July 2010.

2. The story – the narrative

Story has many definitions – usually it refers to a sequence of events that have been placed in a chronological order, are in a causal relationship to each other and depict a change. Some feel that a story must contain conscious, thinking and feeling agents, others believe that the story has to portray a plausible, possible world. The narrative is a larger entity that is made up of the story and the plot. The narrative discourse determines how these are presented in the narrative. In colloquial language the terms 'story' and 'narrative' are often combined – in narratology the concept of 'story' refers expressly to the sequence of events which the 'narrative' is about. The plot organizes the sequence of events causally. Where the story responds to the question "what happened then?", the plot answers the question "why". (Ikonen 2001, 184).

Dorrit Cohn (2009, 226) has listed the terms and definitions used by various narratologists when describing the analytical phases of a story – the way it is told, the discourse, and the way the events are presented. According to Cohn's listing, Russian formalists used the terms 'fabula' vs. 'sjuzet'; Barthes 'fuctions' and 'actions' vs. 'narrating'; Genette 'story' vs. 'narrative' and 'narrating' (in French *histoire* vs. *récit* and *narration*); Chatman 'story' vs. 'discourse'; Rimmon-Kennan

'story' vs. 'text' and 'narration'; and Bal 'fabula' vs. 'story' and 'text'. In this study I use the words 'story' and 'narrative' side by side. Story means the whole entity, the told and structured narrative. Mobile videos and remixes, narratives in my case, become stories when they are published, seen and analyzed.

Certain requirements have been set for the narrative, but it is said to provide the (only?) model for explaining the world – or at least to analyze the experiences of time, place and change in human life. The perspective I apply here is that of visual narrative – my object of research is mobile videos, usually produced by a mobile phone, and the way in which people tell stories about their own lives through the images they have filmed.

History writing, as an example, can be seen as a narrative genre. The gaps in it (what is left untold), the time where the story and the events are set, follow a narrative formula which can be traced back to our learned models of narration: Writing history (or a story) creates reality by defining the emphasis, point of view and climax, by choosing what is told and what is left untold, what can be presumed to have happened even if it isn't told, and in how time condenses or intensifies – according to the narrator's choice. People also retell their own lives and life stories through social media. Travel photos and videos published on Facebook convey people's experiences. They tell, even through random fragments, other members of the community stories of, for example, unique trips or events – the narrator decides what is told, what is shown, what the climaxes and achievements of the trip are. The person publishing the images is the hero of her/his own journey and story. The community reading the images makes up a story the interpretation of which is affected by the community's knowledge of the person and her/his prior experiences and many other factors external to the images themselves. According to classical narratology, the marginal conditions of narrative are stricter, a narrative requires an acting, intelligent subject, a causal continuum.

David Herman (2009a) writes about the multidisciplinary nature of the narratological approach. He endeavors to place narratological research into a temporal context. Herman quotes Matti Hyvärinen's ideas on broadening the concept of narrativity: "The concept of narrative has become such a contested concept over the last thirty years in response to what is often called the 'narrative turn' in social sciences. /…/ The concept has successfully travelled to psychology, education, social sciences, political thought and policy analysis, health research, law, theology and cognitive science." (Hyvärinen 2006; Herman 2009b).Influenced by structuralist theories in France in the 1960s, the concept extended more broadly to the sphere of humanistic research (Herman 2009b, 4). Also Roland Barthes (1975) laid emphasis on the cross-disciplinary nature of

narratology: Narrative analysis can be applied to visual arts, dance or film, and lately, also to digital media and comic art.

Zvetan Todorov discovered the term *narratology*[9] to specify and develop his own perceptions on text and literature, as well those of other structuralists (e.g. Roland Barthes, Claude Bremond, Gerard Genette and A.J. Gremas). They wished to further develop de Saussure's theories about structural linguistics (Herman 2009b, 5). The writings of Russian formalists[10] (e.g. Boris Tomashewskii, Viktor Sklowskii and Vladimir Propp) also affected the definition of narratology. Narratology is a field of research that defines what story and narrative are. Narratology studies the structures and the impacts and narrativity of stories. Stories can be studied in all media but traditionally narratology has focused on the interpretation of fictional literature.

Rituals and narratives are the cohesive glue of human life. Narrativity is radically morphing – the idea of mass communication has traditionally been based on the practice of sending the message from few to many. Now the message is sent from network to network. I receive a message that is already linked to several other sites, other people's experiences, facts and figures told by the linked network. I read the message on a platform that is also linked, with the context present and in communicating a message. The question of who or what actually manages the narrative in networked remix-culture is worth studying. The notion of author – and also reader – might need new definitions when speaking of co-created narratives.

3. Classical and post-classical narratology

David Herman (2009b) divides narratology into a classical and a post-classical approach. The classical approach has its roots in the theories of Russian formalists. In my own research Mieke Bal and Seymour Chatman represent the classical approach, as do also Barthes, Greimas, Bremond and Genette. The post-classical approach, meanwhile, is also partly based on the formalist-stucturalist tradition but it expands the narratological approach from the bases of gender theories, philosophical ethics and cognitive science. In my research, David Herman,

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9   *In Graimmaire du Decameron*, 1969, Todorov analyzed the parts of one narrative and defined their functions and mutual relationships.

10   Russian formalism was an influential school of literary criticism in Russia from the 1910s to the 1930s. Its objective was to stress the specificity and autonomy of poetic language and literature.

Marie-Laure Ryan, Monika Fludernik, Jan Alber etc. represent the post-classical approach, as proposed by Herman.

More recent narratological research has started to deconstruct the classical structuralist line of research. Since the 1970, narratologists have criticized the old school for placing too much faith in structures and dichotomies. The goal of the deconstruction was to place emphasis on the notion that there is no stable dichotomy and discourse, every narrative fights against rules and form. Post-classical narratology asks what the necessary and sufficient conditions for something to be a narrative are. And if we need narratives to comprehend our experiences and the world around us, then what are the conditions for my mobile videos to be considered as narratives?

Narratological research and the methods born around it have served as tools in my research of co-created video narratives. I will attempt to provide an overview of what classical narratology and postclassical narratology after the 1990s have said about the boundary conditions of storytelling, the narrative. The mobile videos of my research are often impulsively produced illustrations of an experience that people want to share. In the field of post-classical narratology cognitive narratology seeks out means to analyze stories born from experiences, and, most importantly for my research, what has been produced with the different media, so that even a fragmentary presentation is shaped in the viewer's mind into a story.

3.1. Classical structuralist narratology and the poetics of interaction

Structural narratology – the classical theory of narrative – was mostly developed in the 1960s. In its background there were a growing school of semioticians and structuralists and an understanding that there is a kind of semiotic veil of meanings between people and reality. What we see and understand is not in fact purely objective reality but conceptions and interpretation of different semiotic systems. Reality is built from cultural narratives. And if reality is built from narratives, narratives can also be classified and studied. Narratives can be cut up and analyzed. It is a question of making sense of stories – meaning making follows the rules – there are the same rules behind every narrative.

Initially classical narratology drew influences from structuralist linguistics, its analysis of the structures of language. Influenced by the school of Russian formalists in the 1920s, scholars endeavored to turn research of literature into an

exact science and technique. Since the 1980s, structured text has served as a tool for hypertexts and other digital media or game design. Classical, structuralist narratology is experiencing a kind of renaissance, perhaps mostly thanks to the rediscovery of Vladimir Propp's *Morphology of the Folktale* (1928, 1968). I myself have tried to unravel the structures of my own stories – my first homepages and my mobile stories from 20 years later – through Propp's functions and motives.

Classical narratology divides the stories into two levels: story and discourse. The division is based on the discourse / *sjuzet* – *story* / fabula division proposed by the Russian formalists in the 1920s–1930s. Roughly defined, discourse (*sjuzet*) means the surface level of the narrative. Here the narration is understood as a manifestation of the story, the verbal text of the story, a film, comic strip, radio play, opera, video montage or multimedia. The story (*fabula*) is a descriptive entity that is understood on the basis of the hints given by the discourse. Discourse is a form, a genre that steers the way in which the story is understood. The story is a never-ending time-space continuum (*diegesis*) (Hietala 2006, 95) for which the discourse gives a form. A story can't be told about life as such, but when the story is presented in a movie theatre the discourse of cinema determines the beginning, middle and end. According to recent theories of how narratives are understood, the final story is born from the interpretation of the viewer, the recipient. The recipient interprets, supplements and compiles the story on the basis of the clues given by the discourse.

The question whether all stories can be told with various different media led Roland Barthes to conclude that all narrative texts are based on a general model that helps us to identify stories as narratives.(Bal 1997, 175). Barthes' idea was that there is a structural correlation between a single sentence and a text made up of several sentences. Mieke Bal proceeds to seek out this universal structure on the basis of which the structure of the *fabula*/story is consistent with the structure of a sentence. In a subject-object-predicate form: "…A homology was also assumed to exist between the 'deep structure' of the sentence and the 'deep structure' of the narrative text, the fabula." (Bal 1997, 175).

In her book Bal lists certain elements of *fabula* that help us to analyze its structure: There are always two sides to a *fabula* – the objects and the processes. The elements of the story, such as the actors/actants or the time and place (*focalization*) or things in general, are the objects. Processes include the change that takes place within the story (according to Aristotle, change from fortune to misfortune or vice versa), situations of choice, functional and non-functional events, confrontation and relationships. The confrontation is born from the situation that the object of the narrative is also the actor/actant who is in opposition to the subject. (Bal 1997, 176).

The examples I have presented on the interpretation of the video works or clips are of course bound to their exhibition venue; an art exhibition invites the viewer to interpret the works in a much more multifaceted manner. Personal messages might possibly need to be supported by background information on the sender. A discursive clue, could, for example, be the placement of the video in a collection dealing with the relationship between humans and nature. A mobile video I filmed in the forest could be sent as a multimedia message or greeting to a friend. It would then convey a greeting or an invitation – or it could be a heroic story of finding a perfect place for picking mushrooms.

According to the two levels of narrative applying to narrative discourses, the narration of an image is still imperfect in terms of the story. A story can never be told from word to word and moment to moment. The reception of the image always operates with the logic of everyday life. (Chatman 1978, 29-30). We can read the clues given by the image and supplement it to become an entire story based on our experience of everyday life. Two or three video clips combined can be understood as a story on the basis of the clues they contain. Clues are produced in the filming environment. Prior knowledge of the photographer and the receiver, featured persons, identifiable time of events and sound – and the tags (index references) attached to the image – help us to construct a story. In other words, the tags could be understood as motives in the mobile videos and their remixes. Space, time and the creative community (as meaning-making narrator) form the discourse (sjuzet). The story (fabula) is composed by different small video clips which could be understood as a story in the context of the discourse.

Classical narratology offers two approaches to narrative: The first one is to focus on structures in the story of the narrative: seeking, analyzing actants/characters, events, plot. (Propp 1968; Greimas 1999). The second approach puts focus on the structures in the discourse of the narrative: who sees? vs. who speaks? (Stanzel 1984; Genette 1988). Both approaches have been criticized for the fact that the writer and reader are missing. Further, postclassical narratology puts more emphasis on interpretation.

According to structural narratology, narrative can be structurally described as a model so universal that it can be cut up and described part by part. With a similar approach, the functions of narratives and the causal relationships between the different narrative building blocks and scenes were first studied by Russian structuralists. Formalism was represented by an indefinite school of Russian cultural criticizers that arose in the early 20th century and tried to find conformities and connections in the prevailing culture, applying their own methods. The formalists were interested in, for example, Aristotle's *Poetics* (1997). The relationships and order between the beginning, midpoint and end,

and all the dramaturgical material that falls between these, have been studied by structuralists[11], such as A.J. Greimas and Roland Barthes.

The way in which we regard formal actions and structures proceeds from the very fact that in the world at large and in communication there are structures into which stories sort of fall. The structures give the stories the meaning. The starting point of classical narratology has been to discover the structure and rules of the story, so that the 'story' becomes a 'narrative', and how it follows the structures of human communication and the world. The idea is that if the structure and rules are known to us we can interpret the reality (Iversen 2010). Almost every humanistic field is linked to narration. It is an essential part of human communication and understanding.

Narrative structures not only determine the dramaturgical solutions of a story but also how the story is received. By analyzing the structures, the motives, functions and context of the story can be revealed. Structures are like building blocks made up of the actors/actants, events, objectives, time and place – and also the reception – of the story which together form a coherent whole. In the present era of interactive, digital media much has been written about narrative structures. This has involved such questions as how does the role or status of the author change when the user can interfere with the plot, like in games, or when there are several authors and the users can choose the most exciting one of a selection of story plots. In narratology, the starting point has been definition of structures.

Structuralism is an approach that emphasizes the importance of structure in understanding any entity as a whole. The production and consumption of a mobile video narration is affected by technology and its accessibility, interaction between the people involved and the motives of action, time and location – how, when and why the story is told. I will not venture to analyze all the social or narratological factors linked to mobile communication. My main focus is on studying narratives and their structures. In community-created narratives, the structures are influenced by the contribution of many different actors and authors – literally. The structuralist approach emphasizes e.g. the structure of text, and thus the models it provides function well also in the research of video narrations.

The French structuralist and semiotic movement gave impetus and legitimacy to the study of non-verbal forms of representation. (Ryan 2010). Especially Roland Barthes' writings about advertisement and photography

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11   Structuralists, who studied e.g. the arts, culture and society, have laid emphasis on the significance of structure in analyzing entities.

(1982) encouraged scholars to study narrative structures in e.g. cinema, comic strips and video art. However, as I have quoted Ryan previously, all narratives are not fully translatable from one medium to another, even though the structuralists endeavored to chop up narratives into small units, according to de Saussure's model of linguistic theory.

Marie-Laure Ryan writes (2010):

> "However, structuralism sometimes hampered the understanding of media due to its insistence on regarding Saussure's linguistic theory as the model of all semiotic systems. Visual representations, in particular, cannot be divided into discrete units comparable to the morphemes and phonemes of language, and the doctrine of the arbitrariness of the linguistic sign cannot account for the iconic signification of painting and film. In the long run, Peircian semiotics, with its tripartite division of signs into symbols, icons and indices, has proved more fruitful for media studies." (Ryan 2010, 11).

My research into the mobile video projects proceeds from the baseline assumption that in a social community (network, event, etc.) people can portray one event from different perspectives and, with a certain kind of structuralized model, create automated, coherent, i.e. functional, understandable and even enjoyable video narratives. The narratives can be interesting and meaningful to the community itself. One could speak of a "whole and proper narrative", according to the model Aristotle proposed on the structure of tragedy. (Aristoteles 1997; Vainikkala 2008; Mäenpää 2010b).

Structuralist narratology offers useful means to analyze the interactive narratives, hypertexts and multimedia narration and games of the late 20th and early 21st centuries. The structuralist approach has in fact been brought back to light in numerous texts on narration and dramaturgy of interactive media since the early 20th century. The script of an interactive narrative is in principle built like a computer program, of fragments that can be changed and replaced, the interaction is born of the alternatives offered to the user or the reader. The alternative parts are the structural building blocks of the story – the flowchart describes the structure from which also the suspense and coherence of the narrative must be found.

It would be ideal to find in the co-created video narrations a platform/structure in which the viewers can shape in their minds a whole story from the random video clips. The precondition is that the collection of images falls into

a general, learned model of narration in our culture: tragedy, comedy, satire or legend and heroic story. Thus even detached scenes and events can become coherent (and at the same time attain mythical meanings).

3.1.1. Vladimir Propp – functions and motives

Most of the structural models of narrative have been inspired by Russian Vladimir Propp. Propp carried out a survey of 100 folktales in his classical study *Morfolgija skazki* (1928), which did not become widely known in the West until in the 1960s (English translation *Morphology of the Folktales*, 1968). The key point in his theory is that stories (folktales) all have the same kind of structure and therefore can easily be translated to other languages and cut up so that their structures and motives can be examined as separate units. The conclusion was made from Propp's research results that narrative structures are universal and general enough to cover also wider aspects in human cultures. According to structural narratology, narrative models and structures lie deep in the human mind and behavior. (Greimas 1999, 9).

It is Vladimir Propp's *Morphology* that can be "blamed" for the fact that classical narratology has found its way to the chambers of game developers, multimedia designers and hypertext writers. It was thought already in the 1960s, around the time when the book was translated to English, that according to Propp's theory, once the model has been defined, it would be easy to generate new tales. "In fact, Propp's morphology has been programmed for a computer", Alan Dundes wrote in his foreword to the English translation, *Morphology of the Folktales* (Dundes 1968, xv). Propp analyzed the structures and rules of the folktales according to which the elements or functions of the story appear. Later models of scriptwriting for interactive media endeavor to find a universal structure which would bring order to the nonlinear narration of infinite alternatives.

Propp's *Morphology* inspired our first test with mobile videos (Chapter VII, Case 1). The idea was to create a story generator that uses the logic and order of Propp's functions and motives.

3.1.2. Roland Barthes and structural analysis of narrative

Roland Barthes published his analysis of the structure of narratives in 1966[12] – still convinced that the structuralist approach could probe into the essence of literary texts. Barthes' theory was that the structures of narration can be found in a similar way at the micro and the macro level of texts: The same structure could be found in one sentence as in the narrative itself – the structure of the sentence, subject, object and predicate, is also present on a scale larger than the narrative. Barthes writes: "Structurally, narrative belongs with the sentence without ever being reducible to the sum of its sentences: a narrative is a large sentence, just as any declarative sentence is, in a certain way, the outline of a little narrative. The main categories of the verb (tense, aspects, modes, persons) have their equivalent in narrative, except that they are expanded and transformed to match its size, and are equipped with signifiers of their own." (Barthes 1975, 241). Barthes does however point out that the signifiers are often extremely complex.

When we tested the co-creation of mobile narratives, Roland Barthes was the inspirer in one scenario of the Mobile Social Media research project. The users – a group of people at a media research conference – were asked to make short mobile videos on four themes or tags – three of them based on Barthes' model – following the functions of an individual sentence, or for the actor, the subject and the object. The intention was to test how the temporal or spatial element works in social mobile video narration. We also came to realize the complex nature of signifiers – the equivalence is very difficult to construct. (See Chapter VII, Case 3).

Barthes writes about the different levels on which a sentence can be described – phonetic, grammatical, phonological and contextual – and of the interdependency and hierarchy between these levels. A structural analysis cannot be performed without analyzing each level. Levels are operations, or even a system of symbols, rules, etc. (Barthes 1975, 242). For Todorov, and Russian formalists, these levels are two wide concepts, the *story* (the argument) which consists of a logic of actions and the *discourse* (the time and form attached to the story). Barthes defines the narrative into three levels, one of which is *functions*, as defined by Propp and Bremond – the function is significant only if it is realized through the *actant's* actions and if it has been narrated. These three levels – function, actant and narration – can be found in any narrative work. (Barthes 1975, 243).

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12   Originally published in *Communications*, 8 (1966) as "Introduction à l´analyse structurale des récits."

A game-like experiment was carried out in the text versions of the mobile video narratives, with the objective of compiling a story about several people spending Christmas Eve in different parts of the world (see Chapter VII, Case 5). The experiment produced 40 different short mobile video clips (scenes) from which the participants could construct a dialogue or presentation among several users. The experiment primarily tested how a story changes shape if the location of the scenes is changed, but also Greimas's actant model or Barthes' levels of function, actant and narration can be detected in the structures of the video narration.

Viewed from a distance, Barthes' definition of the conditions of a narrative is consistent with the design principles of a narrative as proposed by the post-structuralists. Ryan and Herman stress meaningful function, actant/actor and spatial and temporal change as the essential structural factors of a narrative.

3.2. Post-classical narratology, storytelling and conceptualization of the world

Let us continue with the idea that people perceive the world through stories. *Emplotment* is a force operating in life. For example, the approach of cognitive narratology (Fludernik 1996; Fludernik 2003; Herman 2010) proceeds from the premise that narrativity and narrative structures can be found everywhere. Cognitive narratology studies how people perceive reality through stories and how they tell others about their reality. Monika Fludernik (2003) writes about the conditions or preconditions for how people conduct their experiences into the form of narratives through cognitive frames of action, telling, experiencing, viewing and reflecting.

On the foundation of classical structuralist narratolgy, partly in the spirit of deconstructionism, a group of views were born that all fall under the term 'postclassical'. According to later views, structuralist narratology puts too much faith in structures and dichotomies and too little interest in context. The reader and the author seem to be missing – and what is more obvious, the response of the reader, user or audience is missing.

The later critique wanted to prove that structuralism lost its logic over the structures of the subject, it endeavored to be objective science; phenomenology and hermeneutics are subject-led. Post-structuralism shattered the structuralist conception of signs and structure. At the same time, it shattered the idea of a permanent and unchangeable subject. This made an onslaught at everything

fixed, universal and continuous and also undermined the theories of narrative based on these basic premises. In addition to the theories, it also expressly rejected the notion of a universal narrative structure. In the field of literature, poststructuralist theories were also opposed by the practices of the French 'New Novel', *nouveau roman*, which sought to break away from any universalist approach. Post-structuralism was born in the late 1960s when many of the key representatives of structuralism (such as Roland Barthes) started to change their thinking and concept of narrative, and deconstruction (Jacques Derrida) entered the scene to dismantle solidified structures. At its offset, the movement also had a clear political content. The idea and practice of a universal narrative was for the poststructuralists a form of ideological conformity, and hence opposable. (Vainikkala 2008). Recent narratological orientations have been effected by cognition science, ethics and rhetorics and, to a notable extent, new technology which has enabled interactive narration and hypertext.

3.2.1. Boundary conditions of narratives

'Narrative' has during the past decade become a popular word that has been used in a very wide range of contexts. Our identities are made up of narratives. Cultural narratives shape our lives. Cultural narratives do not only mean narratives carried on by cultural heritage but also collective values that define culture, such as beliefs, stereotypes and narratives on race, religion and gender. Narrative often merges into such concepts as 'belief', 'value', 'experience' and 'interpretation'. (Ryan 2006).

Even though narratives are told through various media, the definition of narrative does call for certain delimitations for us to be able to discuss and research the phenomenon. In the eyes of narratologists, not just any text qualifies as a narrative. (See Genette 1988; Ryan 2006; Herman 2009a). Ryan presupposes specific semiotic gestures from a narrative, such as action, temporality, causality and the ability of world construction. (Ryan 2006, 6). Ryan's dimensions mean that the world of the narrative must be populated by individuated existence, contain a spatial dimension, and that non-habitual physical events and changes take place in the temporal-spatial dimension. At least some of the characters of the narrative must be thinking, intelligent beings that are able to also operate on an emotional level, the action has to be logical and motivated (mental dimension), the events of the story must be in a causal relationship to each other, the events must have a terminal point, they have to be plausible within the world

of the narrative and the story must communicate something meaningful to the recipient (formal and pragmatic dimension).
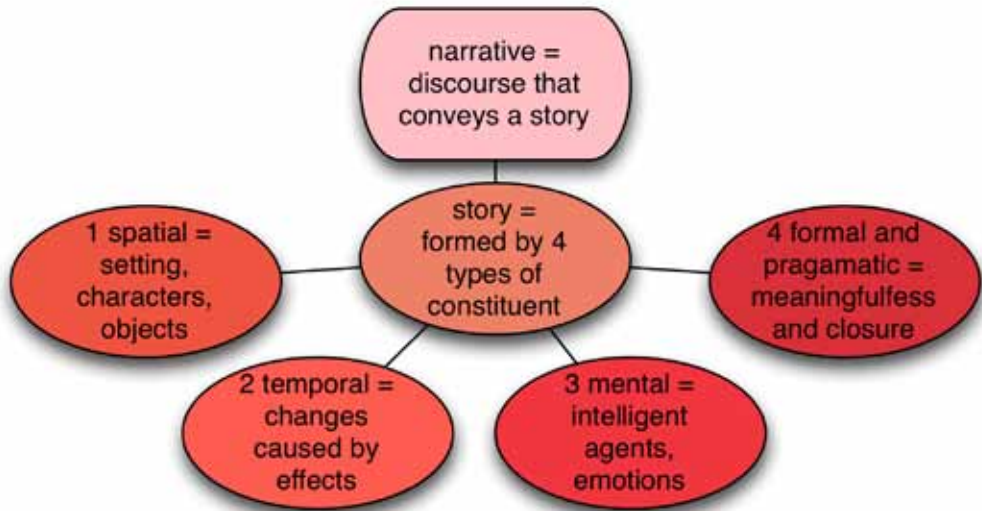
IMAGE 9. Conditions of narrativity according to Ryan (2006, 8; 2010, 22).
Graphics: Marjo Mäenpää, 2011.

A story that is not told with words but with, for example, separate, short video clips, may not, then, comply with Ryan's definition of narrative. In mobile video stories, the narrative takes place in the spatial dimension and the narratives contain clearly conscious, individual agents.

David Herman has listed (2009a, 1-22) a set of design principles for narrativity. Narration is a human strategy for understanding events, time, action and changes. These design principles of narration explain people's ability to distinguish storytelling from other kinds of communicative practices, and narratives from other kinds of semiotic artifacts.

According to Herman, narrative is a basic human strategy for coming to terms with time, process and change.

> **1. Situatedness**: a representation that is situated – interpreted in light of a specific discourse context or occasion of telling (i.e. the narrative presupposes a narrator and a presentation that is interpreted as a story about something).

2. Event sequencing: Cues interpreters to draw inferences about a structured time course of particularized events (the interpreter can make a conclusion from the presentation that it takes place in a specific time continuum).

3. Worldmaking / world disruption: The events are such that they introduce disruption into a story world involving human-like agents.

4. What it is like: Experience – of living through the story world. It can be argued that there has to be reference to "what it is like" for someone or something to have a particular experience.

Not all representations of sequences of events are designed to serve a storytelling purpose. One must draw a line between storytelling and other modes of representation. For example, scientific models that characterize phenomena as instances of general laws do not narrate in the same manner as participation the experience of "what it is like". "What is it like to walk in the rain in the early morning of August 2010 in Aarhus" is a narrative that does not necessitate an explanation.

3.2.2. Narrative and cognitive science – on natural narratology

Monika Fludernik argues that all narratives are built on the mediating function of consciousness, a complex 'natural' category with several available cognitive frames to choose from. (Alber, Fludernik 2010, 4). For Fludernik the fundamental question seems to be the transmission of experience to the form of narrative. Even without a plot people tend to "understand" or interpret experiences as stories/ narratives – the experience just needs to be transferred further in a way and form that is understandable and coherent. Fludernik uses the term cognitive schemata (or frame – which she thinks of as a synonym) as a kind of tool that helps us set the events and experiences into a certain, known and understandable context, time and space frame[13]. According to Fludernik there can be narratives without a plot, but there cannot be narratives without a human experiencer of some sort at some narrative level. Fludernik has created a redefinition of narrativity in terms of experientiality, with embodiment constituting the most basic feature of experientiality: embodiment evokes all the parameters of a real-life schema

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13   In addition, Fludernik broadens the analysis to include a wide variety of narratives, following on Chatman (1978, 96 and 1990, 115) and Bal (1997, 5).

of existence which has to be situated in a specific time and space frame. (Alber, Fludernik 2010, 22). As I see it, the schema – or frame – is constituted from an individual's own story, experiences and cultural context, it is like a prism a person reads and analyzes in the narrative.

It is possible to produce a story from separate, detached video fragments that have been filmed long distances apart, when the clips are linked together. Some of the links bring suspense to the compilation and invite the viewer to think about what is left untold, what happened in between them – in a manner similar to how we look at comic strips. We presume that something takes place between the panels that links the pictures into one distinct story. The story is constructed outside the medium. Where? In the viewer's mind? If we presume that the construction of the story occurs in the viewer's mind, we must also ask what kind of a cognitive process supports the understanding of the story and the perception of the narrative whole. (Herman 2010, 6).

As a source for an answer Herman presents the rather young field of cognitive narratology. The questions to which cognitive narratology could bring new information and insight are, according to Herman, to be found especially in the stories and narrative structures of digital and spatiotemporal media. Digital, interactive environments expressly contain such elements that require research of cognitive processes, if we wish to understand their narrative or storytelling elements. (e.g. Fludernik 1996; Jahn 1997; Ryan 2001; Ryan 2004; Herman 2010, 22-25). An example can be found in Marie-Laure Ryan's studies of narrative as recourse of navigating and making sense of computer-mediated environments.

The roots of cognitive narratology are in the research of artificial intelligence and psychology carried out in the 1970s and 1980s. It was the research of artificial intelligence that started to pay attention to the cognitive mechanisms through which people create and understand stories. (See Schank 2000). People have the capacity to understand wide sequences of events and stories from the smallest clues.

In my Sunday paper there was a small article about an MP who had a long career behind him. The article, which consisted of one column and 15 rows and was written in a humoristic tone, states that the senior politician realized that he needed to re-evaluate his career when a pregnant woman offered him her seat on a tram. Even though not much anything else was mentioned in the article, our understanding of the world, the information stored in our mind and our ability to combine bits of information help us to immediately understand what the story is about; the man is quite old and he may even look rather feeble, justifiably he feels ready to retire, and the fellow passengers probably share that view. Disassembling these elements verbally would in fact seem rather banal. Any

Finnish, city-dwelling person who has ever traveled by tram would understand without saying what kind of a play took place in the tram. Herman writes that the type of knowledge representation that allows an expected sequence of events to be stored in the memory is designed to explain how people are able to build up complex interpretations of stories on the basis of very few textual or discourse cues. (Herman 2010, 12).

Due to its interdisciplinary origins, cognitive narratology lends itself well as a research approach to diverse forms of media that combine fiction and fact, verbal and textual or digital and analogical communication. (Herman 2010, 5). David Herman in fact speaks about the broad nature of cognitive narratology and the aspects relating to the novelty of the phenomenon:

>"Meanwhile, theorists studying mind-relevant aspects of storytelling practices adopt descriptive and explanatory tools from a variety of fields — in part because of the interdisciplinary nature of research on the mind-brain itself. Source disciplines include, in addition to narratology, linguistics, computer science, philosophy, psychology, and other domains. Making matters still more complicated, because the term 'cognitive narratology' is a relatively recent coinage, narrative scholars working on issues that fall within this domain do not necessarily identify their work as cognitive-narratological, and might even resist being aligned with the approach." (Herman 2010, 5).

Monika Fludernik introduces the concept of natural narratology in her book *Towards a Natural Narratology*, which was published in 1996. She wrote the article "Natural Narratology and Cognitive Parameters" in 2003 to clarify and elaborate on her views. (Fludernik 2003). Fludernik has expanded the notion of narrative when writing that it is in essence an expression of human experience. (Ryan 2006, 231).

Fludernik writes about the conditions (or preconditions) for how people conduct their experiences into the form of narratives through cognitive frames of action, telling, experiencing, viewing and reflecting. Fludernik's idea is close to the conception that we reflect our life through the *prism* of our own personal experience world. And while trying to compose narrations out of fragments of short videos, we kind of fill the gaps and compose narration – the story we just want to see.

Fludernik studies the birth of a narrative – narrativization. Her work largely draws on the views of the American linguist William Labov on cognitive

linguistics. Labov (2003) uses the concept of narrative pre-construction. The events are constructed into a story through a cognitive process in which, Labov states, the events have to be *reportable* and *tellable*. To be tellable, situations and events must somehow lean on the everyday experiences, expectations and norms the receiver, the reader, has. (Herman 2009b, 282). Labov explains that "…before a narrative can be constructed, it must be preconstructed by a cognitive process that begins with a decision that a given event is reportable." (Labov 2003). According to Labov, the preconstruction begins with this most reportable event and proceeds backwards in time to locate events that are linked causally each to the following one. It is a recursive process that ends with the location of the unreportable event – one that is not reportable as such and needs no explanation. "Comparison of such event chains with the sequence of narrative clauses actually produced will help to understand how the narrator re-organizes and transforms the events of real time in the finished narrative." (Labov 2003).

4. Narrative analysis

Performing a narrative analysis on people's personal videos is investigation that falls somewhere between narrative analysis and narratology. Primarily, the focus of the research is on the appearance of narrative structures. Are the marginal conditions for narrative met in co-created mobile videos, can they be called stories? And if they can be called stories, then they can, obviously, also serve to communicate experiences and information.

The presumed story of a mobile video, or mobile video clips, is not born until the viewer (who can also be a researcher, narrator and/or author) has interpreted it somehow. This presupposes that the surface level of the video story, the narrative, is able to give clear hints at the commonly known forms in which stories are manifested. On the other hand, we can assume that the short video clips, or a sequence of video clips filmed by the different members of the community, can be compared to comic strips, film or some other narrative discourse. The clips together form a story, a fabula, that has been constructed, that can be researched and that has narrative structures.

Catherine Kohler Riessman (2002) writes about narrative analysis that the metaphor of story emphasizes that we create order, construct texts in

particular contexts. (Kohler Riessman 2002, 218). Narrative analysis[14] is applied to studying how people recount their lives through autobiographical interviews and stories. "Narrative analysis takes its object of investigation from the story itself /…/ The purpose is to see how respondents in interviews impose order on the flow of experience to make sense of events and actions in their lives." (Kohler Riessman, 218). Although my research here is not methodologically linked to narrative analysis and interviews, the video remixes – and especially individual shots – published by and in communities bear resemblance to autobiographical narratives. The sharing of mobile images has been studied on, for example, the basis of what the photographers' and the sharers' motives are. Mikko Villi writes in his dissertation that the researchers distinguished affective and functional motives or reasons for taking mobile photographs: "Affective is used for images which have been captured for some sentimental or emotional reason. By contrast, functional images are those taken to support a particular, more pragmatic or practical task." (Villi 2010, 34). His findings indicate that a majority of the shared mobile images are shared for emotional reasons. People are sharing experiences.

Kohler Riessman writes (2002, 218): "Analysis in narrative studies opens up the form of telling about the experience, not simply the contents to which the language refers. We ask, why the story is told *that* way?" I am studying how the narratives are structured, what the essential parts of the narratives are – which are the actors and what are the other narrative parts, like plot, functions and point of view. Narratives are meaning making structures. Nature and the world don't tell stories, people do. Therefore in any kind of analysis interpretation is inevitable, narratives are representations. (Kohler Riessman 2002, 218).

4.1. Analysis of digital storytelling

The history of the dramaturgy of digitally published interactive narration is relatively short. Not until the late 1980s was thought given to how hypertext functions, how the reader, the user, could navigate in the network of links in a branching text without getting lost. The conceived ideal was that the recipient

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14   A broad definition of narrative analysis or inquiry includes various methods and ways of screening and reading the texts. The central concept is narration and the story. There are differences between the metaphoric and methodological use of narrative. Metaphoric use refers to the way of understanding everything people tell and narrate that could be called stories and narratives. Methodological use refers to a strategy of analyzing discourse and language (Löytönen 2012).

could perceive an interesting, entertaining or touching story, experience the whole. Interactive storytelling aims to find a dramaturgical model for a story where the user also has a role.

Narrative and digital media have attracted a wide range of scholarly interest. Narratologists have been interested in the interactivity of digital media; how to analyze and interpret a story that may contain many and varied development trajectories and ends. For example, Nick Montfort (2007, 173) writes about potential narrative as "this space of possibility within which many different narratives can be realized". Montfort – similar to many other researchers – focuses his interest in the narrativity of digital media through the context of multimedia. Interactivity is game-like by nature, the story is either written – or programmed online – and the players/users usually construct the story from pre-given components (from the data or the program). The game may have a single interactor, or multiple interactors – in which case several user/players are communicating the world of the digital story.

Monfort lists some of the key definitions applied in the analysis of digital media narration (2007, 176). Different writers view digitality in different ways, some regard the technology itself as part of the narration. Norwegian Espen Aarseth focuses in his writings expressly on cybertextuality, but his classification can most likely be viewed through any kinds of digital works. Aarseth described the seven dimensions of dynamics, determinability, transiency, perspective, access, linking, and user functions. (Aarseth 1997, 62-64).

Janet Murray describes how the digital medium is essentially procedural, participatory, spatial, and encyclopedic. (Murray 1997, 71-90; Montfort 2007, 176). Lev Manovich writes that the important qualities of digital interactive media are numerical representation, modularity, automation, variability, and transcoding. (Manovich 2001, 27-28). Marie-Laure Ryan considers the "most fundamental" qualities of digital media to be their reactive and interactive nature, multiple sensory and semiotic channels, networking capabilities, use of volatile signs, and modularity. (Ryan 2004, 338).

Videos are born through publishing channels used by social media – usually in a community, in a networked environment. They differ from traditional media in the very fact that their interaction takes place between humans – and not between a human and an algorithm, a machine, a technology or a script. The direction of the production is not from author (or production group) to user/player but from author or group of authors to other authors – from network to network. Here the models on multimedia narration may not necessarily apply any longer. The defining qualities of mobile social media narratives are close to the ones on Marie-Laurie Ryan's list; interactively, the user has a central role in the

structuring of the story. Mobile social media are multi-sensory, what are essential in a story are the sound, pace, image and movement – and also time and location. The semiotic channels of mobile media are verbal, aural, visual – and also tactile and spatiotemporal (Image 9). The networking capabilities are essential in mobile co-production, mobile media are often volatile – or the narratives and visual messages created by mobile phone videos are rarely timeless or eternal masterpieces – they are usually produced for rapid, impulsive communication. Co-created narratives produced mainly with mobile media are necessarily very modular. The change of point of view or change of narrator and space make the viewers, the receivers of the narrative, fill the gaps, analyze the narrative trough their own schema.

4.2. The structures of interactive narration

Ryan has certain reservations about the idea that all narratives can be presented through various, different media – and always remain the same. The variety of media has become so diverse that all media cannot offer the same narrative resources and all stories cannot be represented in media as different as literature, ballet, painting, and music. "Nor do we believe that the migration of a story from one medium to another does not present cognitive consequences. A core of meaning may travel across media, but its narrative potential will be filled out, actualized differently when it reaches a new medium." (Ryan 2006, 4).

Through the concepts of narrative discourse and narrative levels, Ryan reflects on the possibility to tell the same story with different media. She quotes H. Porter Abbott as a model example of a definition of narrative: "Abbott reserves the term 'narrative' for the combination of story and discourse and defines its two components as follows: 'story is an event or sequence of events (the action) and narrative discourse is those events as represented'. " (Ryan 2006, 7).

Montfort himself gives a description for interactive fiction where one of the actors in a story is an interactor. He defines as parts of the narrative also aspects connected with using programs, linking and computer technology, such as loading times or navigating. In Genette's view, these could be defined as different levels of diegesis. (See Genette 1988). For narratologists, all parts of narratives — characters, narrators, existents, actors — are characterized in terms of diegesis, i.e. the point of view and focalizer, who sees, who speaks in the narration. Montfort writes (2007, 180): "The levels of simulation correspond to the diegetic

level of narrative – the **extradiegetic** level at which the narrator relates a story, the **diegetic** level where the characters and settings are, and the **hypodiegetic** level that is introduced when the character in the story herself tells a story."

In the mobile videos of the Mobile Social Media research project the point of view and the narrator are usually the hero of the story her/himself – the photographers portray their own feelings and take first-person shots. In the videos produced from the remixes the diegetic level is very often extradiegetic.

5. The question of author

The speaker, writer, author and narrator in a narrative are like levels of narrative – as are their counterparts, receiver, reader, viewer, audience, when we speak about the structures of narration. The story is always told by someone with images, gestures, as Ryan states when writing about the boundary conditions of narrative (Ryan 2006, 2010). Genette writes about focalization, about the point of view, who speaks – and also who sees (Genette 1988). The question of author has been a complex problem in narratological literature – and it becomes even more problematic when speaking about co-created narratives. And at the same time the narrative is always thought to be read, seen, received, composed or understood by someone.

The author's intention and narratological relevance is to take care of the communicative intentions. The author's discipline is to serve as a conveyor of action – in the socio-cultural context of the story. However in narrative texts there is difference between the real author (writer) and the author as a narrative voice – and sometimes also as a narrator. James Phelan (2009) writes about the rhetorical approach that conceives of narrative as a purposive communicative act. "In this view, narrative is not just a representation of events but also itself an event – one in which someone is doing something with a representation of events." (Phelan 2009, 203). This forces us to see the narrative communication as a multi-layered event, "one in which tellers seek to influence and engage their audiences' cognition, emotions and values" (ibid.).

The rhetorical approach to narrative has its roots in Aristotle's *Poetics* (Aristoteles 1997; Phelan 2009). Aristotle was writing about tragedy and its effect on its audience. He defines tragedy as imitation of an action that arouses pity and fear and leads to purgation of those emotions. Wayne C Booth in *The Rhetoric of Fiction* (1961) presented a neo-Aristotelian approach, paying attention to the relations among authors, narrators, and audiences. Booth coined the concepts

of "implied author" and "implied audience". Implied author for Booth was the version of a narrator the author constructs in writing the narrative. (Booth 1983). Phelan notes the ethical aspect: "The implied author's communication can be direct or indirect, depending on the kind of narrator employed; reliable narration goes hand-in-hand with direct communication, unreliable with indirect." (Phelan 2009, 208). The layers of narration and narrative voice could be linked to Genette's structuralist approach to narrative discourse and questions of focalization (Genette 1988).

The question of narrator is more prominent in drama, and the ideas of dramatic analysis can easily be applied to the video works I am analyzing in my study. Manfred Jahn (1997) – referencing Seymor Chatman – argues that every film and play has a narrator, "the agent who manages the exposition, who decides what is to be told, how it is to be told /…/ and what is to be left out."

In his *Story and Discourse* (1978), Chatman presents a model of narrative layers where the narrative voice acts as a teller who determines the point of view in the narrative (Chatman 1978, 147). Chatman distinguishes the levels of real author, implied author, narrator, real reader, implied reader and narratee (ibid.). He writes: "To understand the concept of narrator's voice (including its absence) we need to consider three preliminary issues: the interrelation of several parties to the narrative transaction, the meaning of 'point of view' and its relation to voice, and the nature of acts of speech and thought as a subclass of the class of acts in general." The implied author is reconstructed by the reader from the narrative. Chatman writes. "He is not the narrator, but rather the principle that invented the narrator /…/ Unlike the narrator, the implied author can *tell* us nothing. He or better, *it* has no voice, no direct means of communicating." (Chatman 1978, 148). Chatman brings this concept of implied author near film – and also co-created videos – when writing: "There is always an implied author, though there might not be a single real author in the ordinary sense: the narrative may have been composed by a committee (Hollywood films), by a disparate group of people over a long period of time (many folk ballads), by random-number generation by a computer, or whatever." (Chatman 1978, 149).

Chatman defines also another concept – that of an implied reader. And like the implied author, the implied reader is always present. "The counterpart of the implied author is the *implied reader* – not the flesh-and-bones you or I sitting in our living rooms reading the book, but the audience presupposed by the narrative itself." (Chatman 1978, 149-159).
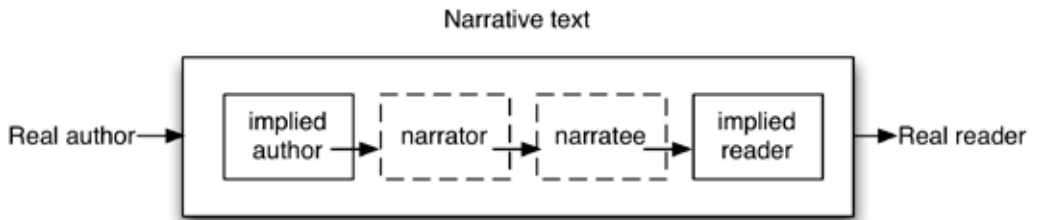
Narrative text

Real author → | implied author | → | narrator | → | narratee | → | implied reader | → Real reader

IMAGE 10. Diagram of the narrative communication situation according to Seymor Chatman (1978). Graphics: Marjo Mäenpää, 2012.

5.2. Focalization in video

Mieke Bal has identified some of the key characteristics of visual narratology, or its similarities to narrative text, through the principle of focalization, the focus. (Bal 1997, 161-163). According to Genette, the focus of a narrative text can be determined from six different angles and narrative perspectives, depending on who is speaking and who is seeing in the text (Genette 1988). Omniscient narrator means external focalization, and subjective perception of a certain character means internal focalization. In hetero-diegetic narrating the narrator is not a character in the story, while in homo-diegetic narration the narrator is one of the characters of the story. In first-person narratives, for example, the narrator's position is homo-diegetic[15]. Bal has stated that in narrative discourse the focalization is the direct content of the linguistic signifiers whereas in visual arts it would be the direct content of visual signifiers, such as lines, dots, shadows and compositions. (Bal 1997,163).

In literary texts an external narrator defines the perspective, in visual narratives the perspective of the narrator is not as self-evident. Is the position of the narrator in them even in any way clear? Russian cultural researcher Boris Uspensky has analyzed the role of focus and narrator also in single images. The composition of the image, like the "view angle" of a narrative text, can reveal the author's perspective and attitude (Uspensky 1991).

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[15] Homo- and hetero diegetic external or internal focalizaton – these are different aspects of the narrator's perspective. Focalization defines the narrator's perspective and diegesis and whether the narrator is part of the story or not (e.g. Genette 1988).

In a single photograph, the perspective is with the viewer, even though the camera has captured the photographer's view. Who is the narrator? In moving images, video and cinema the question takes on another form. According to Bal, in visual arts it is clear that the author is the focalizor, the narrator is the giver of the meaning. But it is also clear that the same text and image can be interpreted in different ways depending on the different perspectives, according to the different focalizors (Bal 1997, 164).

Attempts to discover similarities between narrative text and visual narration give rise to questions on what the basic narrative unit in film is, is it equivalent of the sentence or statement in language, is the unit of visual narration an image, a sequence of images, a shot or a scene? David Bordwell defined film narration from a cognitive or functional basis as the "organization of a set of cues for the construction of a story." (Bordwell 1985, 62). The viewer must master certain skills of receiving a story to be able to interpret it; the viewer has to be able to determine the context, the location, the goals of the characters and their values, as well as the relationships between these things. Narrative analysis of film consists of studying how the idiosyncratic resources of the medium are applied to such narrative goals. (Ryan 2004, 197).

I am now thinking of two artistic productions in visual narration. Bill Viola's video works in general tend to invite the viewer to construct some kind of an experiential entity out of slow motion, which may take on the form of a story. *Five Angels for the Millennium* (Viola 2010, at ARoS Museum, Århus, Denmark) is made up of several large-scale screens and the videos projected on them. In each projection a character either dives into water or surfaces from water. The sound and movements are unnaturally slow, the dive and the surfacing can from different perspectives produce entirely different experiences in different viewers. Someone interpreting the symbolism of the element of water could associate the images with sexuality, birth and birthing, femininity. Another interpretation, situation or cultural background would build a totally different story from the clues Viola gives.

IMAGE 11. Bill Viola, *Five Angels for the Millennium* / 2001 II. Birth Angel video/sound installation. Five channels of color video projection on walls in a a large, dark room; stereo sound for each projection. Photo: Kira Perov.

Isaac Julien's video work *Ten Thousand Waves* (Julien 2010, at Kunsthalle Helsinki) has been designed so that that the whole 50-minute video cannot in any part be seen simultaneously as a whole. The placement of the nine screens and the architecture of the exhibition work to the effect that the viewer's movements attain a choreography of their own. According to Julien, "technology has radically altered our cognitive relationship to the image, we are constantly engaged in visual multiprocessing" (Kokko, 2010. Translated from Finnish). The clues loaded in the video narrative are in a perpetually changing state. The viewer stays in motion, as do the viewers' interpretations of the story.

Isaac Julien: Mazu, Silence (Ten Thousand Waves), 2010
*Courtesy of the artist and Victoria Miro Gallery, London/ Metro Pictures,
New York/ Galería Helga de Alvear, Madrid*

IMAGE 12. Isaac Julien installaiton *Then Thousand Waves* at Kunsthalle Helsinki 2011.
Courtesy of the artist and Victoria Miro Gallery, London. Metro Pictures,
New York/ Galleria Helga de Alvear, Madrid.

6. Applying narratology to life

Fludernik asks what constitutes a narrative. The experience must be shapeable
and perceivable. Narrativity is not, according to Fludernik, a definition connected
with text but a characteristic that can be connected to the text only when the
recipient, the reader, understands or constitutes the text as a narrative. One has
to be able to give a form to an experience for it to become a narrative (Fludernik
2003, 244). A tellable experience can be transformed into a narrative if the
recalled events (story) can be organized in the mind into a causual sequence.
Fludernik's cognitive frames help to communicate human experience in the form
of narrative.

People illustrate their lives, record their own experiences, with mobile
phones. At what point do people start to perceive their (self-portrayed)
experience as a story and on what conditions? A group of people film short
videos and someone pastes them together into one remix video. A story seems to
be born from the videos when the people share a same experience or are part of a

same community. I understand Fludernik's reconceptualization of narrativity in the very sense that people's "narratives" are understandable, coherent, expressly to those who share the same experience.

Fludernik proposes that we expand the ways in which narrative transmission occurs, arguing that all mediacy (or mediation) occurs through cognitive schemata or frames and what is being mediated is not primarily a story (although in the vast majority of narratives such a series of events does indeed occur), but experientiality, a conjunction of reportability and point. With 'reportability' Fludernik means the interest which the tellers and listeners entertain in narratives, while 'point' refers to the motivations for telling the story. Since experience is closely associated with actions, event sequences underlie experientiality, with suspense fulfilling a prominent role. Other emotions or thoughts may be foregrounded, however, and some narratives (though few) actually operate without a plot. (Alber, Fludernik 2010, 23).

6.1. Media and narrative – reflecting reality

Maria Mäkelä has explored the potential of cognitive narratology in analyzing real-life events and how media offer them up for us to interpret (Mäkelä 2010). Mäkelä wants to show how little postclassical or cognitive narratology has actually met the challenge concerning the ability of narratives to depict reality and real relationships, and therefore applies models of classical narratology in her study. She analyzes the relationship between U.S. President Bill Clinton and young Monica Lewinsky, which began in 1998, in the light of the narrated texts and with an approach based in natural narratology. Mäkelä asks whether an archetypical narrative is born from everyday situations of storytelling realized in a scandal. Do the descriptions and texts serve to analyze dynamic causal relationships and changes which, in the definition of classical narratology, a narrative must do in order to be a narrative? Does the scandal entail something that organizes human experience, as a narrative should?

Mäkelä writes: "From the perspective of narratology, any narrative in order to be telleable and interpreted actually reaches out towards these archetypical ideals: narratives are produced so that they can as effectively as possible organize events into coherent and meaningful entities..." (Mäkelä 2010). The story of Clinton and Lewinsky, in the different versions, biographies and court records, strives to reflect how the story was experienced by its characters. Fludernik calls this 'experientiality'.

Mäkelä aims to prove in her analysis that "the centrifugal force drives the human mind towards cohesion", in other words, the narrative becomes a coherent story. Mäkelä asks however whether this obsession with form is a particular characteristic of narratologists. Quoting Mieke Bal, she inqures why a story should produce a picture of reality, why a compilation must serve the truth? On the other hand, one could think that narratology, same as literature, offers means to perceive real life. (Mäkelä 2010, 39).

6.2. A picture tells a story

What everything needs to be found in a single picture for it to tell a story? I believe that it is possible to pick out a sequence of events from just a single image. One picture can give an idea of the past, the present and how we have got here and a clue on the future. I am thinking about a photograph by Hannes Heikura which was chosen as Finnish Press Photo of the Year in 2007 (Image 13). In the photo titled *"Sailboat passing through a raft of blue-green algae in the Gulf of Finland, 13 August 2007"* there is a streak in the greenish brown sea, ploughed by the boat, and the still photo tells a dynamic but sad story of the state of nature, the malaise of the Baltic Sea. Practically everyone knows the beginning of the story, how we came to be here. The picture also hints that the story doesn't necessarily have a happy ending. The picture is the climax of the story, a critical moment of realization, an Aristotelian *anagnorisis* – the truth is revealed, the scales fall from our eyes.

IMAGE 13. Hannes Heikura, 2007 *"Sailboat passing through a raft of blue-green algae in the Gulf of Finland, 13 August 2007".* Screenshot from http://www.suomenlehtikuvaajat.fi/vuodenlehtikuvat2008/2007/ (reviewed 15 Aug. 2011).

We still have to also think about who the agent is, if we can find an author from this story. The change in the story is quite apparent, although it has to be constructed from the viewer's own schema – meaning memory, earlier knowledge, general understanding, culture, etc. Perhaps a viewer with no relationship to climate change or the ecological condition of the Baltic Sea is not able to recognize this story. The stories that are born in a different culture could be different and even manifest a different understanding of reality.

"A picture is worth a thousand words" is a well known saying, although it is most obvious that a picture can never be as specific or precise as a word-by-word description of something. (See e.g. Ryan 2004, 139). As in the example I gave above, the recipient, in this case the viewer, is required to have some pre-existing information for a picture to be interpreted in a certain way. To interpret Heikura's picture in the same way as I would require the same background information, an understanding of the state of environment in this specific part of the world and, for example, more detailed knowledge about what blue-green algae looks like and what its effects are. Interpretation requires certain type of schematic expectations and a narrative picture must always be placed in context with other pictures. Bernt Österman writes: "…we often know what it is we are supposed to focus upon in a picture on account of a narrative pattern we detect within it, or between it and other pictures." (Österman 2007, 268). Österman points out two other problems that are associated with pictorial narratives, the portrayal of sequence and cohesion. A temporal sequence is constituted by moments.

In Finnish the photo is titled in the form that the sailing boat "plows the Baltic sea". Metaphoric interpretations show that visual narrativity does not only mean a simple causal structure. The aspects of literary metaphors are applied here to enhance the narrativity of the picture.

6.2.1. Montage - sequenced images

When two panels of a comic strip are placed next to each other, a story is easily conjured up in the mind of the viewer. The mind builds a bridge and a continuum between the two pictures and the pictures easily settle in a causal relationship. What if there are moving images on the screen? It is clear that the task becomes more complicated, while it is obvious that a single series of video clips can also tell a story. The idea of *montage* is born from this phenomenon. It was brought to the art of cinema by Russian filmmakers Lev Kuleshov, Vsevolod Budovkin, Dziga Vertov and Sergei Eisenstein. They developed the method of putting together two or more cuts from an old film, thus creating new compositions. The so-called Kuleshov Effect is a montage effect demonstrated by Russian filmmaker Lev Kuleshov in about 1918. Kuleshov edited together a short film in which a shot of the expressionless face of Tsarist matinee idol Ivan Mozzhukhin was alternated with various other shots (a plate of soup, a girl, an old woman's coffin). The film was shown to an audience who believed that the expression on Mozzhukhin's face was different each time he appeared, depending on whether

he was "looking at" the plate of soup, the girl, or the coffin, showing an expression of hunger, desire or grief, respectively. The footage on Mozzhukhin was actually the same shot repeated over and over again. (Huttunen 1997).

In the 1920s researchers presented a hypothesis that montage is not only a phenomenon of film art, it could also appear in other forms of art. Sergei Eisenstein noted that in every form of art where two elements could be linked or connected together, one could also create the notion of "the third". (Eisenstein 1964). In his essay about the semiotics of cinema, Juri Lotman (Lotman 1989, 25) comes to the same conclusion as Eisenstein; the dynamics of the text comes from actions such as comparison, confrontation and combination – they all create the artistic meaning – or why not the tension – of the text.

A single video clip may last only a few seconds and still contain an identifiable subject, object of the action and result of the events. A mobile phone video clip lasting a few seconds is not necessarily the most exciting story, it may not be very entertaining even to the person who has filmed it – at least not for very long or after having been repeated many times. At its simplest, it reminds of the moment when it was filmed, the state of mind leading to the action of bringing out the mobile phone and filming the clip.

I have a 21-second video in my cell phone: The image pans around in a pine forest, on the sinking moss tufts, and stops at a grayish brown trumpet chanterelle. In the background one can hear the sounds of a forest machine and falling trees. For the person who has filmed it the video speaks of a beloved forest and mushroom picking site and the forest machines that are threatening it. Is this the beginning of an exciting story which the viewer can build on and complete in her or his mind? It could also be a story of the crushing of one dream.

IMAGE 14. Imagine the sound, imagine the story. Screenshot from unpublished mobile video, Marjo Mäenpää, 2010.

In all these examples the story is actually born outside the image, in the viewer's mind. The viewer constructs the story and experiencing subject and also largely determines the structure of the story, how it begins and how it ends. But what if the material is produced by several persons? A same event can be filmed by several people, but each of them may apply their own perspectives. This raises some new questions: Where is a story born? Is it born in the mind of the authors or the viewers? How do different perspectives enrich or disrupt the story? Who is the narrator? What kind of a tension does it bring to the story? (Mäenpää 2010b, 21).

V CO-CREATIONS AND COMMUNITIES

Co-creation and co-production are used to produce media, presentations, music, as well as in the film industry and content composition for social media platforms. Sharing, remix culture and mash-ups constantly produce performances / narrative media content based on several authors. One of the phenomena of social media is user-based production method. The texts, images and stories and their plots are usually almost entirely produced by the user community. In this chapter I examine how these general phenomena involving co-creation relate to collective mobile stories.

Co-creation is originally understood as a form of market or business strategy which emphasizes the role of customers in creating products and business value. Von Hippel (2005) has argued that in many industries new product and service ideas come from lead users – that is, customers who utilize the product or service in extreme conditions and effectively help the company co-create new offerings as a result. Co-creation links to the concepts of innovations and crowdsourcing, which means that the production is outsourced to a group or network of innovative people. In this chapter I present a few examples from audiovisual industry where co-creation, remix and crowdsourcing take place.

1. The creative process - how to study co-creation

There are a few overlapping methods for studying the creative process of co-creation and the building of the communities involved – as well as design and research community and community of users. The MoViE application was developed under a design process where the researchers and users joined the test and evaluated the test phases of the application. The users and test persons in my research cases also joined communities that had certain common goals, motivation to share experiences with mobile video and ability to innovate and develop the MoViE application. The creative co-creation process was complex and the methods of co-creation varied in several cases. It is obvious that there is no one single method for studying these processes outside management and practical projects.

Jono Bacon stresses (2009) that building a community really is an art. Bacon lists the skills and responsibilities of the manager of the community – the practical work and qualities. At best the manager of the community is both mother and father – a saint-like, multi-skilled background figure who doesn't let any narcissistic aspirations to be in the limelight steer him/her to take credit for the work of the community. This is something one learns to become through practical work. "Never replace practical experience with theory" (Bacon 2009, 45). Bacon warns not to fall for the lures of theoretical "buzzword bingo".

1.1. Activity theory

To some extent activity theory seems a suitable method or tool for studying the use of mobile phones as cameras and video cameras because it attempts to discover and document methods of everyday activities. (Kaptelinin, Nardi 2006). In this study activity theory is used in describing the interaction in design for digital artifacts as a process of narration, through the context of the produced mobile video clips. The process of creating video narratives collaboratively is itself important. It is a process of experiencing the content by producing the shots and reflecting on them in the community. It seems as if the outcome of the process may not be as important as the process itself. (Multisilta, Mäenpää 2008a). The method described by Kaptelin and Nardi (2006) is to examine the notion of the object of activity and describe its use in an empirical study. The aim of activity theory is to provide – among others – a comparative analysis in the framework of interaction design, using distributed cognition and networked creation.

In the Mobile Social Media project we studied how people perform activity through technology. The user community filmed videos, shared experiences and compiled remixes of the video clips they themselves or other members of the community had shot. The main emphasis in the process was in the production and the end result, the media. But in terms of the actions of the community, it is also important to examine how people act with and through technologies and especially the process of human-computer interaction (HCI). Kaptelin and Nardi point out (2006, 10) that HCI is always an asymmetrical relationship. People's actions are guided by a need to reach a specific goal and motivation, while technological applications act according to algorithms.

> "In activity theory *people* act *with* technology; technologies are both designed and used in the context of people with intentions and desires. People act as *subjects* in the world, constructing and instantiating their intentions and desires as *objects*. Activity theory casts the relationship between people and tools as one of *mediation*; tools mediate between people and world." (Kaptelin, Nardi 2006, 10).

As my aim here is to study mobile interaction, how communities produce content together, my analysis thus connects with the field of interaction design in digital media. Interaction design is closely linked to technology development, the design of technological products and applications. It is interesting for my research how a human activity, storytelling, can develop and assume new forms through digital technology. What new forms of interaction do mobile media, fast and effective mobile videos, produce? How do communities exchange images, illustrate and share experiences, tell stories together, create common memories? I subscribe to the view according to which "…interaction design comprises all efforts to understand human engagement with digital technology and all efforts to use that knowledge to design more useful and pleasing artefacts." (Kaptelin, Nardi 2006, 5). According to the writers "…the activity theory fits the general trend in interaction design toward moving out from the computer as the focus of interest to understanding technology as part of the larger scope of human activities." (Kaptelin, Nardi 2006, 5).

According to activity theory, the ultimate cause behind human activities are *needs* – either biological or psychological. The object of activity is the motive, and when "a need becomes coupled with an object, an activity emerges." (Kaptelin, Nardi 2006, 60). In the MSM project the processes were filming and sharing, creating and publishing the remixes. Each project, as described in Chapter VII, offered us opportunities to study activity – whether the need and motive

for each user was to share experiences or, more so, to tell stories, to compile remixes. As Kaptelin and Nardi remark (2006, 62): "Activity in a narrow sense is a unit of life /…/activities are not monolithic. Each activity, in its turn, can be represented as a hierarchical structure organized into three layers. The top layer is the activity itself, which is oriented toward a motive. The motive is the object, which stimulates, excites the subject. It is the object that the subject ultimately needs to attain."

On the other hand, activity theory offers no explanation for people acting mechanically in situations of interaction; human activities are not always directly aligned with their motives, for many of us, motives are hidden or unknown. We are usually aware of the goals of our activities – but not necessarily of our motives. In some of the MSM projects the goals were set externally. The motive for a participating individual could be to merely perform the task honorably, or curiosity about the process, rather than sharing the end result or telling a story.

1.2. Action research as a method of understanding human actions in narrating and sharing

In the Mobile Social Media research project the researchers themselves took part in the processes of gathering research data: We made observations on mobile culture and the usage of mobile technologies, alongside developing our operations concurrently in the course of the research project. At the same time, I was able to develop for my own part ideas on the application of narrative structures and models through the various experiments carried out during the project. As we gained more information on the use of co-created mobile videos, the research team could apply it to the technological development of the publishing platform. In my own work package I focused on examining what kind of stories are born by means of co-created publishing. In compiling the results, I partly applied methods of action research, and partly methods of design research.

Action research is a method in which the researcher temporarily joins the studied community and, with her/his theoretic knowledge (in this case, narratology), helps the community to solve its current problems. (Routio 2005, 63). Measures for improving the service under development (MoViE) are collaboratively invented and agreed upon among the whole research team and the test users, and most significantly, the persons heading and developing the research project work inside the community. Solutions developed collectively often turn out better than those developed by outsiders, since the members of

the community, the programmers and the test users are the ones who are best informed on the problem at hand and its alternative solutions. According to the model of action research (Routio 2005), when the team brings into the process of problem solving solutions and practices developed in other communities, the effective diagnoses and solving of a problem become possible.

In the MSM project the filming and sharing of the videos played an essential part. Most of the test users who participated in the project were using mobile phones to film videos, but – especially at the start of the project – many of them found the technology difficult, unpractical or too expensive to use. What seemed to be felt as most important in community co-created production processes was the possibility to share experiences through the videos. The users also used ordinary video cameras, fixed Internet connections, computers, i.e. available, appropriate technologies for sharing the videos and creating the remixes.

1.3. Design research as a method of understanding people, processes and products

Design research is often strictly associated with the research of design itself, the viewing of the history and processes of designing the built environment and artifacts. As a scientific research method, it has however actively gained popularity and obtained a growing number of proponents for its scientific validity (see Bonsiepe 2007; Cross 2007). Cross offers a list of historical distinctions between the logics of design and science. Christopher Alexander (1964) wrote how "…scientists try to identify the components of existing stuctures, designers try to shape the components of new structures." (Alexander 1964; Cross 2007, 43) Later Sydney A. Gregory (1966) proposed that "science is analytic, design is constructive". Science is a method for solving existing problems, while design strives to answer questions that don't even exist yet. (Gregory 1966; Cross 2007, 43).

Design research as a method is concerned with e.g. innovation activity, innovation in the form of inventing new affordances and innovations in the form of finding possible applications for new materials and technologies (Bonsiepe 2007, 34). Nigel Cross further elaborates (2007, 43) that the results of design do not in most cases need to be replicable, the process of design is important. Design processes often run into fuzzy situations and the designer's role as a researcher is more that of a reflecting practitioner. I myself have noted that there is hardly any conflict between the two paradigms of design research, a designer-researcher can

act as an innovator, a problem-solver and, on the other hand, as a practitioner reflecting on her/his own activities or those of others. Reflection means the studying of one's own and other people's processes and analyzing them with the aid of scientific tools. As Cross (2007, 48) defines the scientific process of design research: It is purposive, it is based on identifying a problem worthy and capable of investigation, it is inquisitive since it is seeking to acquire new knowledge, it is conducted from an awareness of previous, related research, it is methodical, i.e. it is carried out in a disciplined manner, and it is communicable since it is generative and reposts results that are testable and accessible by others.

The field of design research can be delimited to focus on people, processes and products (Cross 2007, 47). In my research people are actors who narrate stories and share them. People are also users of mobile devices and testers of new applications. Their activities can be modeled and visualized with scenarios and use-case diagrams, as I have done in this current study. The process that is in the focus of my research is, on the one hand, that of publishing and sharing experiences, co-creation, which I have viewed through literature and practical engagement. On the other hand, the designing of the MoViE application was an important task for problem solving. As a product, the MoViE service aims to answer the question of what kind of technologies and applications there could be to serve and facilitate people in sharing experiences; to encourage, create and assist collective storytelling. I view the task of producing and designing the MoViE service as a design process where I myself served as designer-researcher-user. The co-creation in turn happens in various communities, each of them acting for different goals and motives.

Digital culture has certainly brought changes to the condition of living in a digital culture and also the way how human communities operate has changed. Due to digitalization there is a significant number of opportunities to interact in real time, to be released from the restraints of time and place. In the past traditional media were bound steadfast to time and place, both in terms of production and consumption. To carry a newspaper tucked under the arm used to perhaps be the most radical form of mobile media consumption. In the even more distant past media were generated by orators, priests and bards. A radical change occurred in people's minds – Howard Rheingold (1998) quotes Marshall McLuhan (1964) – when people, the masses, attained the possibility (through media) to keep abreast with collective information on their culture, understanding, to participate in its construction. "Literate people think differently from people in non-literate or post-literate cultures, and they think of themselves differently. The telegraph, telephone, radio, and television, as Marshall McLuhan pointed out, turned everywhere and every time into here and now." Information was brought to the

use of the masses. In Rheingold's visions even a person using a phone booth is able, by depositing one coin, to be freed from the chains of time and place. This would mean that we are now entirely chainless in the face of, or actually within, a world of mobile media and ubiquitous media.

2. Social media narratives and co-creation

Remix means a newly "mixed" and edited version of a song or a piece of music. A remix song recombines audio pieces from a recording to create an altered version of the song. The concept of remix has in recent years been extended to all forms of media production. Remixes of videos or even entire films in which an old story is re-filmed or re-illustrated have become common practice. Remixes, usually co-created by a group of authors, have been made, for example, of various cult movies, such as the Star Wars series, to be published through YouTube. Mash-up videos are also reproduced and recycled media productions; the term "mash-up" refers to content that has been produced by various authors and from various sources. Productions that engage various authors are called collaborative or collective productions.

Co-production is about working together for a strong community and more effective social services. It starts from the idea that services are successful only when the people being served are involved. Co-productions are commonly deployed in the fields of filmmaking and technology, or in the joint production of new knowledge or technologies among different groups in society. Co-production also refers to the way in which services are produced by their users, in some parts or entirely.

The term co-production refers to a way of working whereby decision-makers and citizens, or service providers and users, work together to create a decision or a service which works for them all. The approach is value-driven and built on the principle that those who are affected by a service are best placed to help design it. (Csikszentmihalyi 1996; Mattelmäki 2004; CoDesign 2005; Jenkins 2007).

The appropriate size of a community in, for example, remix culture, web communities or an imaginary media community (Sumiala 2010) is predefined – it cannot be too large or too small. A "suitably sized" group reminds of Aristotle's definition of the suitable size of a story: viewable in one glance and manageable by the human memory (Aristoteles 1997, 167). A functional community or team equals the size of a family. A circle of friends on Facebook can with active collectors expand to the size of thousands of people, but more commonly

members are able to maintain a network of 100 people or so, and stay regularly in touch with a few dozen of them.

Today sharing and interacting in various networks has for most part employed westerners aged around or under 65 and become a staple part of their everyday lives. It is required by professional life, and our pastimes, too, consist more and more of the practice of sharing media, experiences, thoughts and comments. Most of us belong to some web-based community or another. The size of such communities can sometimes be hard to delineate, and many fear that the publicity required by the networks is pushing beyond control, while on the other hand, for many they have become vital forms of social interaction.
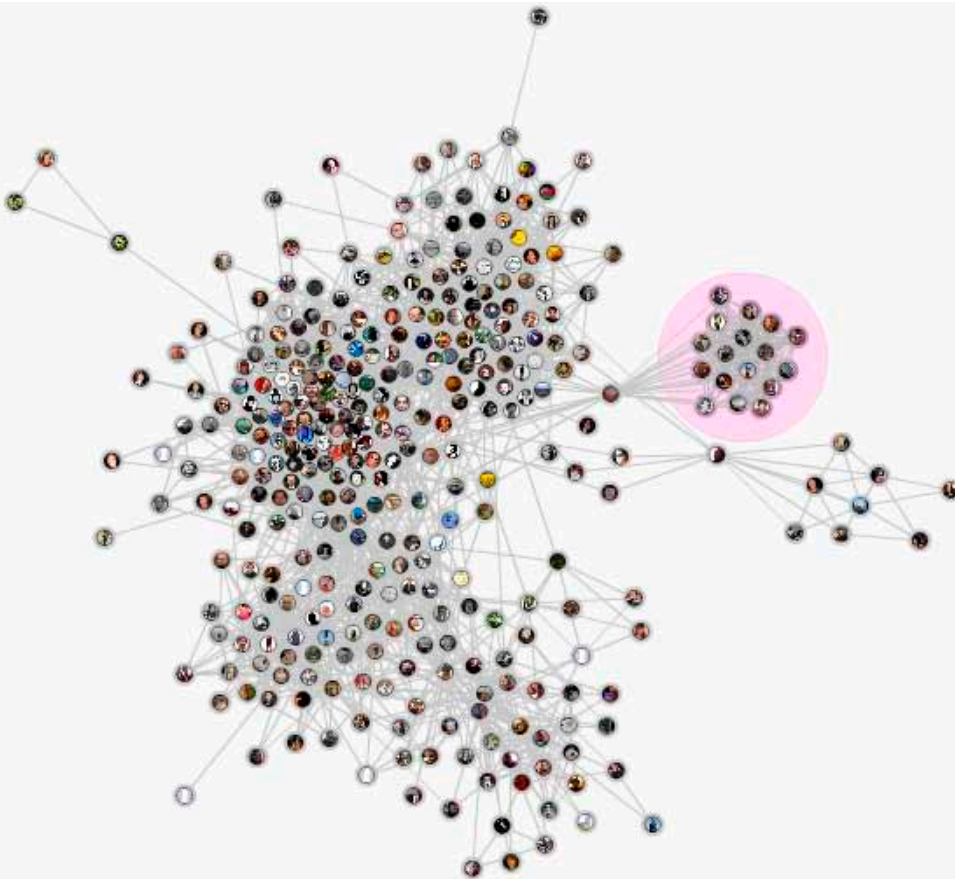
IMAGE15. My Facebook community in November 2010 illustrated by the Social Graph application. The illustration depicts a network of approx. 400 individuals. It contains within it various networked communities – smaller groups divided on the basis of family and relatives, work and colleagues, hobbies or geographical location. Screenshot 14 Oct. 2010 by Marjo Mäenpää.

In most people's everyday experience and public speech social media equal Google, Facebook, Wikipedia, YouTube and Twitter, and the activity based in them. Since the services and their operating logics are constantly changing, social media do not constitute one, coherent realm. They are better compared to a network where services, technologies, agents, discourses and individual user experiences mingle. (Multisilta et al. 2010, 8). Work and leisure blend together in Facebook updates. The transition from exchanging thoughts and communication in a professional context to, for example, exchanging baking instructions or listening to music on fan sites can take only a second and often be done with the same service.

Lietsala and Sirkkunen have defined communication from one individual to many or certain other individuals as the basis of social media. They perceive the term 'social media' as a kind of umbrella concept which extends over various social practices for sharing media and other content online. (Lietsala, Sirkkunen 2008, 18). In social media people voluntarily share content such as texts, videos, music and images through web-based social software. (Lietsala, Sirkkunen 2008, 19). Lietsala and Sirkkunen point out how social media have their own audience – same as "traditional" media. What is special about social media is that people are willing to share their experiences through media clips, images and text they have created themselves – or are interested in sharing with others "stuff" produced by other people that they have found on the web. This is the greatest change in the shift from traditional to social media: People can either generate content (user-generated content UGC), actually produce/create content (user-created content UCC) or bring content they have found for other users to view (user-driven content UDC). (Ibid.) During the past couple of years these separate communities have started to merge. Mobile devices make it increasingly easier to record events of personal life and publish them at various social network sites online.

Social media operate in many environments and through many platforms. Web 2.0, introduced in 2004 by Tim O'Reilly[16], is only one phenomenon that falls within the concept of social media. It is the very aspect of 'social' that is of primary importance in social media, the fact that people communicate and interact with each other. Without the voluntary human interaction, exchange and communication in social media would be impossible. Voluntariness means that the sharing very rarely involves chargeable operations or commerce. (Lietsala, Sirkkunen 2008, 21).

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[16] The term 2.0 – meaning a new qualitative environment developed for the World Wide Web, often used as a synonym for social media - is closely associated with author Tim O'Reilly because of the O'Reilly Media Web 2.0 conference in 2004.

So a question of interest is: What motivates people to network, publish and share? The platforms and practices of belonging in a community have decisively changed, but it is not sure if the appeal of communality has essentially changed. In the context of daily experience, social media offer a huge amount of virtual chatter, commenting and discussion, 'telepresence'. It feels that we are closer with a larger group of people now since we can share everyday experiences and stories in larger amounts and faster. It seems like we are driven to publish these more by a kind of voyeurism and curiosity than by a will to perceive stories and build entities out of the small stories of our circle of friends according to our own schemas.

User-generated content, same as user-created or even user-driven content, is found in discussion forums in newspapers and online, in blogs, wiki-pages and other sites of social media. All websites that offer their users the possibility to participate and upload material and to share information, opinions and experiences are built of material generated by the users. Image banks where users can upload mobile photos or videos, from YouTube to Flicker, are based on content produced, copied or uploaded by the users. Very few sites however construct coherent narratives from media imagery generated by several users.

So where does narrativity begin? As I quoted Ryan earlier, all media databases do not construct narrative entities or stories. Do the design principles of a narrative need to be met for us to be able to speak about narrativity in the context of social media?

It is a whole different thing for individuals to upload their own contents into the media flow than to construct performances. The production of a performance sometimes requires narrative structures. In this respect it appears that there needs to be – at least – an author, narrator and preferably also some other interesting turning point, analogy or conflict behind a good story. In other words, there has to be someone who gives the meaning to the narrative whole – either an author, a group of authors or a recipient.

2.1. Mediated communities

Sumiala (2010) has studied the media rituals of imagined media audiences. The communities of social media are integrally mediated; several people can simultaneously experience or engage with a one and same thing through a given medium. Media constitute a sphere, space or forum where a number of people can deal with and experience the same thing. Sumiala offers as examples the

sex scandal of the Finnish Minister for Foreign Affairs in 2008 that led to his resignation, or Finland's long-lusted victory in the Eurovision Song Contest in 2006. (Sumiala 2010, 80-83). Finns "gathered together" to comment on these events in different forums of social media, chat rooms were brimming with myriad opinions. According to Sumiala, imaginary communities seem to condense around certain visual presentations and performances; even though communities built around the exchange of comments in discussion forums cannot be seen as very close ones, they are loose networks in the same way as, for example, dating sites or commentaries on news service websites.

A space is born from the shared, mediated experiences. Sumiala writes about how the ritually shared material – for instance, material on the death of a public personage published online, turns into a public, virtual space, using as her example the YouTube imagery born around Michael Jackson's funeral. It is reshaped as the ritual material, such as imagery or symbols relating to a one and same topic, changes, as Sumiala mentions (2010, 88). The imaginary space is however more virtual, we can locate ourselves in it more through our memory and imagination than through the experience of physical presence. The space of "Where was I on 11 September 2001" is for me, at least, mostly mediated, I remember what I watched and heard on that day. Where I physically was is of lesser significance.

Sumiala's example of the 9/11 terrorist attack on the Twin Towers in New York is perhaps the most effective example of the birth of a global virtual, and partly imaginary, space. A large number of various online commemorative sites have been produced around the event. It is symptomatic that in their effort to depict an unspeakable event they have mostly had to rely on people's memory and imagination. The *9/11 Memorial Museum* (Make History 2010) offers a compilation of artists' recollections and impressions on the collapse of the Twin Towers and the loss of someone near and dear, the wounding of a city. The museum maintains a virtual gallery, which is still, several years after the event, growing. The most impressive aspect of the memorial sites is that they invite people to come and write or visually illustrate history.

A multi-dimensioned memory is born from the virtual space – also for those who where nowhere near the events. These types of communal or social media sites are also effective in compiling and narrativizing reality. Tellability or narrativity means that most of the communication of human everyday experience is built on people's own experiences or the experiences of others, which have been set in the form of a story. Veijo Hietala writes: "On the other hand, we (re)tell our friends and acquaintances also stories, news, TV-series, films and books produced by others. Narrativity can thus be understood as a kind of

umbrella concept that refers to the cultural practice of analyzing reality and its occurrences in a time continuum (in chronological order) on the one hand, and in causal relationships, on the other." (Hietala 2006, 91-92, translated from Finnish).
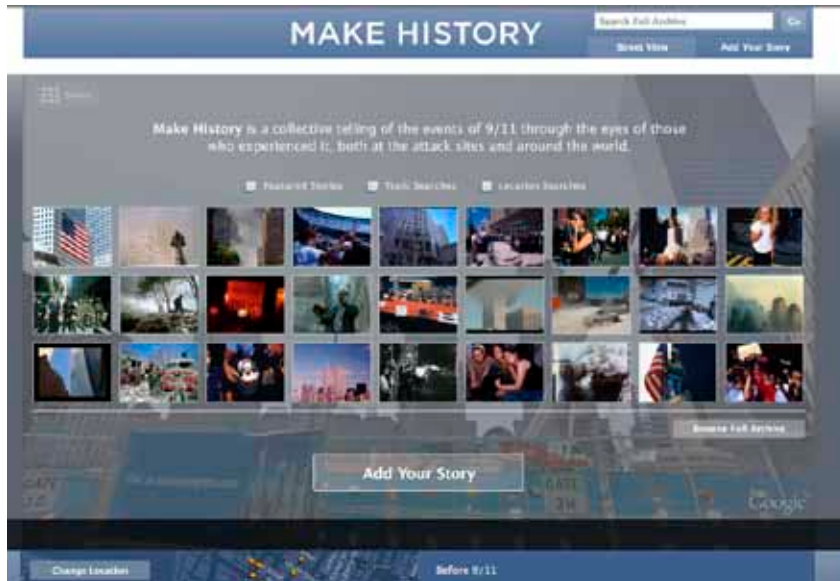
IMAGE 16. Make History, 9/11 online memorial museum.
http://makehistory.national911memorial.org/.
Screenshot. (Reviewed 22 June 2010).

The *Make History* site is paced in the form of a story – a narrative formula can be traced in people's recollections: Included are images from before the terrorist attack, images and videos from the moments when the Twin Towers were burning, and a large number of memories people wish to share with others. Everyday life is resumed, but something has irrevocably changed. No one is the same any longer, the city is no longer the same, the whole world has changed in some way. The image bank on the site keeps constantly growing, more people with memories keep emerging, and many want to be part of history and part of a community that has an experience of the event. The event becomes a story, on the basis of the information, recollections and user-generated media.

In Bruno Latour's (2005) terms, communality built around images is born of mediatized / media-based encounters between the agents, the images and the viewers. On the *Make History* site, as was the case with the mobile video

experiment in the *Mobile Social Media* project, people comment on the images and videos others have posted. There is a text link on the 9/11 site, under the images: "I was there too" (Image 17).
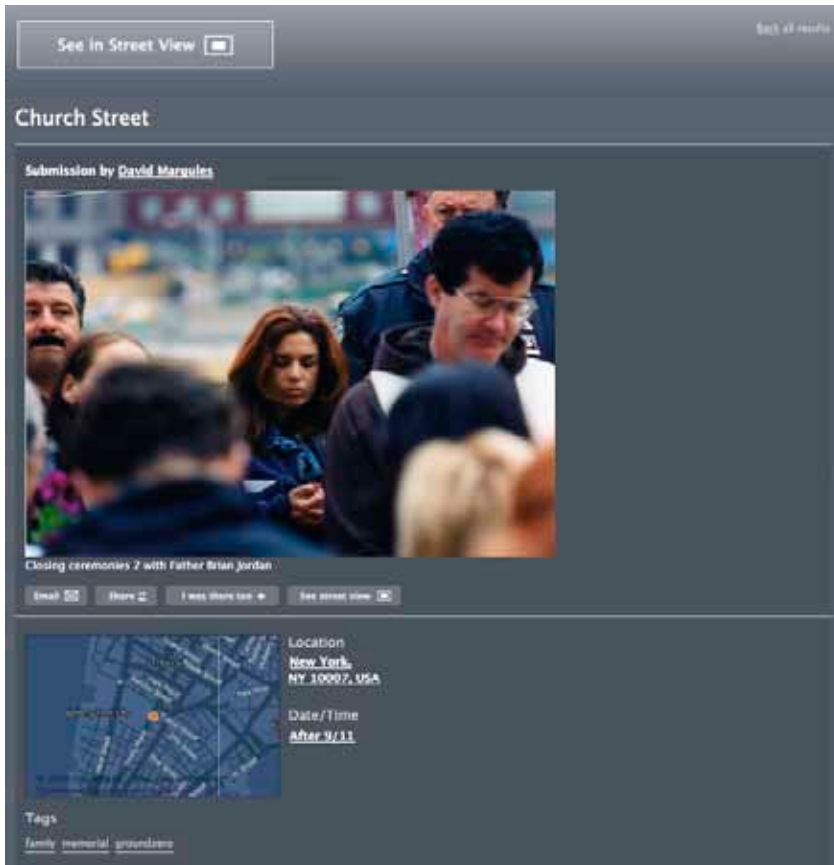
IMAGE 17. Make History, 9/11 online memorial museum.
http://makehistory.national911memorial.org/media/33227
Screenshot. (Reviewed 22 June 2010).

Another collective project for making cultural heritage known to people is the Danish *1001 stories* (2010). It is a social media site for engaging users in heritage dialogue and its aim is to activate local knowledge and encourage users to share their everyday experiences about heritage. People were invited to add video and picture narratives from various locations in Denmark. The files in this service maintained by the Heritage Agency of Denmark form a network of somewhat detached stories. The motivation for sharing and viewing the told stories stems from familiarity. Stories of places where one has physically been are interesting. No communities seem to be born around the stories to either comment on or share them. The service gets however more than 20 000 visitors monthly, and the community of writers has grown to nearly 150 members in just six months. (Bom 2010).

IMAGE 18. 1001 stories. www.1001stories.dk Screenshot. (Reviewed 27 Dec. 2010).
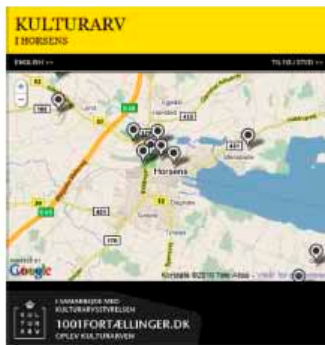
IMAGE 19. www.1001stories.dk Mobile interface - stories shared through mobile.
Screenshot. (Reviewed 27 Dec. 2010).

Wide communities that collect users' stories and images are becoming increasingly common especially in the realm of museums and cultural heritage sites. The services give rise to certain questions about what will happen to the traditional role of museums as educators and knowledge sharing organizations, is the credibility of the information undermined when the content is shared and produced by the public? In terms of narration, the question also arises can the separate texts produced by hundreds of people form into coherent, whole stories,

can a story compiled from a large number of perspectives be sketched out from the whole? One answer lies in the structure of the pages; scaffolding is needed in order to maintain credibility. The *Mobile Social Media* project experimented with a game-like situation where the community was asked to comment on the videos filmed by others, to respond to them. The responses and comments could be thematic (Jazz Story, Chapter VII, Case 2), or topic-related, comparisons, or linked to events or moments (Christmas Story, Chapter VII, Case 5). A community is born around communication that follows certain rules. In these tests also the size of the community was of key significance, the most interesting experience, at least in terms of the end result, was born around a small, intimate family-sized community.

3. The art of building communities

Etienne Wenger (1998) proposes that learning is a perquisite for motivation and the act of becoming what we are is based on commitment to social activity. He presents a theory of learning that starts with the assumption: Engagement in social practice is a fundamental process by which we learn and become who we are. Wenger's primary unit of analysis is neither the individual nor social institutions but rather the informal "communities of practice" that people form as they pursue shared enterprises over time. (Wenger 1998).

Wenger's baseline assumptions are that first, humans are social beings; second, knowledge is connected with skills, esteemed tasks such as singing, repairing, social interaction or growing up to be a boy or a girl; third, knowing is connected with such tasks or assignments through which people commit to the world; and fourth, the ultimate purpose of learning is to provide people with the ability to understand meanings in and of the world. (Wenger 1998, 4).

According to Wenger, we constantly belong to various communities of practice at work, in pastime and at home. Wenger writes about communities that are born in order for people to manage with their daily tasks – families with regard to sustenance, care and renewal or work communities with regard to the tasks they have been assigned (1998, 6). Wenger's observation about the size of these communities is interesting. The communities where members aim to support each other's activities and learning, such as a work community engaging in peer support to manage with computer programs, are of appropriate size. The family is a practical and effective unit, a group of nephews rehearsing in a garage is an operative unit which may be surrounded by an effective network.

"Although workers may be contractually employed by a large institution, in day-to-day practice they work with – and in a sense, for – a much smaller set of people and communities." (Wenger 1998, 6).

The community of the MoViE service and experiments can in some respect be called an 'innovation community'. A group of mobile phone photographers are continuously engaged in creating a user innovation for their own needs; the experiences of the filmed situations and events are different, and the need to tell others about them varies, as do the practices, techniques etc. In the tests of the *Mobile Social Media* research project the users often used the service in some way other than intended. The real needs of the users reshaped, for example, the tagging functions of the service.

3.1. Innovation communities

Von Hippel also made observations about the size of a creative innovation community. 'Linus's Law' – according to Eric S. Raymond (1999) – means that the more open and wider a community is, the more cost-efficient and effective its development of innovations is. Von Hippel cites Raymond: "Given enough eyeballs, all bugs are shallow" (von Hippel 2005, 110). When there are a number of users involved, there are also a number of perspectives and needs that the product is expected to solve. Von Hippel points out how innovations are dispersed in a community: "most of the important innovations attributed to users (in these studies) were done by *different* users". (von Hippel 2005, 111).

Von Hippel defines a community through its innovative capacity. For him, a community, or an innovation community, is a group of individuals or organizations that communicate with each other, provide a sense of belonging and share a common social identity. "Innovation communities as meaning of nodes consisting of individuals or firms interconnected by information transfer links which may involve face-to-face, electronic, or other communication. These can, but need not, exist within the boundaries of membership group. They often do, but need not, incorporate the qualities of communities for participants, the 'communities' is defined as meaning networks of interpersonal ties that provide sociability, support, information, a sense of belonging, and social identity." (von Hippel 2005, 112). Von Hippel also places emphasis on the shared task of the community, sense of belonging and trust.

In *Democratization of Innovation* (2005) von Hippel approaches production in communities expressly from the perspectives of value production, the producer.

In his work, user-centered innovation processes are communal processes, processes that aim to increase social welfare and open production. According to von Hippel, the traditional production model is based on the notion that consumers only have needs which the producers and designers try to determine and satisfy. The only role left for the consumer is to consume. "The user-centred innovation process /…/ is in sharp contrast to the traditional model, in which products and services are developed in a closed way…" (von Hippel 2005, 18).

As users, in the sense of the traditional model, von Hippel defines consumers or firms that excpect some advantage or benefit from the use of a product or service. The producers expect (financial) benefit from the selling of the product or service. However, von Hippel stresses that, often, producers are also consumers[17] – and even more often, vice versa.

The MoviE testing platform for sharing mobile videos is a typical user community where the test groups, the users, develop the service also to match their own needs. In an interview following one of the user tests especially two aspects were emphasized: Developing the (MoViE) platform to be easier to use and simplifying the task assignment. (Östman 2010, 53).

3.2. Motivation communities

Jono Bacon's book *The Art of Community* (2009) was born from the experiences of a producer of a large online community. Bacon discusses the motivations of the community. The factors that make the community work for a common goal, motivations and incentives and – from his own perspective also – the requirements concerning the network producer's working methods. Bacon writes about the particular challenges faced expressly by online networks. The most demanding communities are those that must produce something ready and complete – such as developers of open source software. Bacon reflects on what makes the communities work together, voluntarily engage in development work and voluntarily exchange information.

A community is, in Bacon's definition, a group of people or animals that interact with each other in the same environment. (Bacon 2009, 32). According

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17 Von Hippel offers as an example the Boeing corporation which commissions parts for its engines from various subcontractors. In the same way Nokia is in principle a client of various subcontractors – even if as a major corporation and monpoly it can to a rather large extent dictate the actions of its "clients".

to Sumiala (2010), however, a community can also be virtual. The community is motivated by "positive social economy" which is linked to the incentives of common values and mutual respect. Featuring as synonyms of social capital are kudos, respect, goodwill, trust, celebrity, influence, supremacy, greatness and leverage. (Bacon 2009, 34). These are motivating, empowering factors in the life of communities or individuals. Social capital means positive interaction between two or more individuals. Positive impact and positive experiences increase social capital. The possibilities and causes for doing something hold the community together, "not the end game".

To what extent did the community get satisfaction from the other members' activities in the mobile story tests of the Mobile Social Media project? In many of the game-like tests in the community (see Case 5: Christmas Story in Chapter VII) the material was filmed by a small group and the community seemed clearly interested in comments from the other participants. They also found the possibility to remix (or re-edit) the short video clips filmed by other participants interesting.

4. Narratives in communities, communication and trust

Bacon writes about how the most important thing for a community is mutual communication. He quotes: "community is fundamentally an independent human system given form by the conversation it holds with itself". (Bacon 2009, 36). Narratives are the basis of the mechanism of communication (Bacon 2009, 35-36). Bacon's own way of writing and sharing experiences is narrative, he largely describes events, or encounters, as dramatic moments, as a result of which the sudden turns of events become meaningful, a turning point takes place in the story, after which nothing will ever be the same. "Stories are the medium in which we keep the river flowing. They are the vessels in which we not only express ideas /… /but also how we learn from past experiences." (Bacon 2009, 36).

Bacon lists several elements as cohesive forces of a community, but the most important among them are open communication and mutual trust. Communication is open when it offers various alternatives and alternative paths.

In support of the motto "You are what you share", Charles Leadbeater gives examples in which openness and transparency in production have been the preconditions for collective production. (Leadbeater 2009). The ultimate success of the small co-created production of Finnish Blind Spot Pictures is in fact the transparency of its operations. *Star Wreck: In the Pirkinning* is a feature-length sci-fi parody, seven years in the making. It is the product of a core group

of five Finns, and over 300 extras, assistants and supporters. The production of the space adventure started off from a small circle and in seven years expanded to a network-like major production. The Star Wreck series had hundreds of thousands of online viewers. No other Finnish film has ever enjoyed such a degree of international success.

The production company Star Wreck Studios has been further developing its collective film productions. The Wreckamovie (production platform) is based on open and transparent activity in which the community produces 'indie' films, literature and other media productions. According to the company's operating principles:

> "Trust is central to collaboration for anything. We want WRECKAMOVIE. COM to remain a place where people work together and can build trust among each other so film projects of all types get done and seen. This trust starts with us in offering a transparency in our own work that encourages people to have fun in filmmaking. If you have any questions or comments, please do complete our feedback form so we can answer your questions and make WRECKAMOVIE. COM better." (Wreckmaovie 2010).

Cinematographers, animators and sound designers can attach themselves to any of the ongoing productions, share their material or contents. The production leader decides whether the material is suited for the production at hand. The creators and the members of the community can share the material they have created with many other members, anyone can become a production leader and realize their own film ideas, each one can in principle participate in anyone's production. (Wreckmaovie 2010).
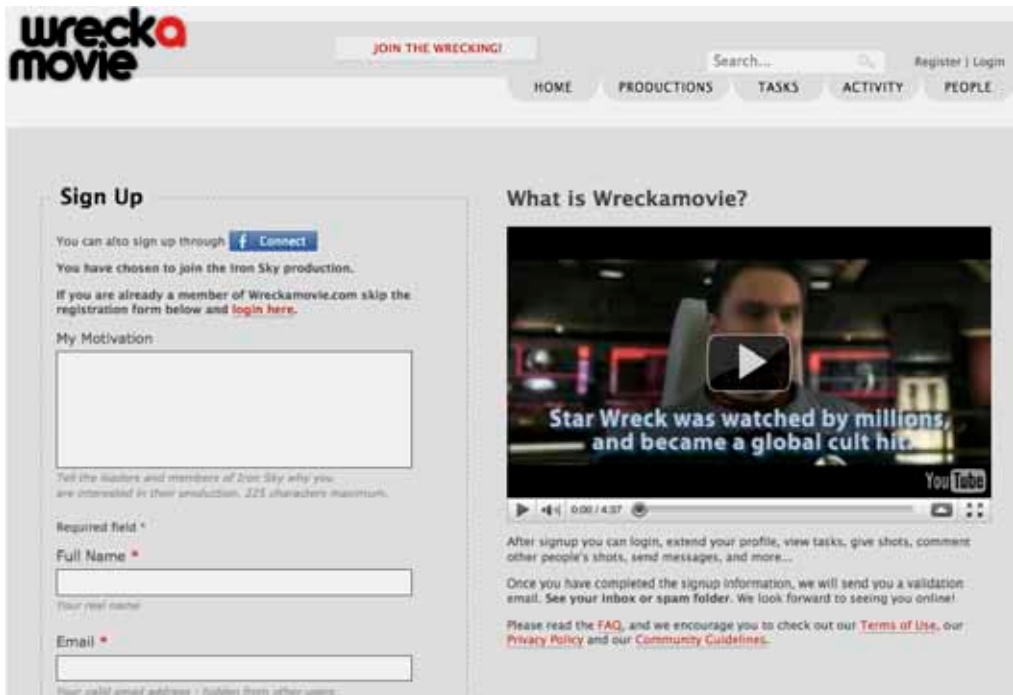
IMAGE20. Wreckamovie platform for collaborative movie productions
http://www.wreckamovie.com/ Screenshot. (Reviewed 28 Dec. 2010).

Wreckamovie productions are creative, open productions up to a certain point. For the productions to be professional and also viewable to large audiences they must contain narrativity in a wider context than that of the experiences of a small audience. The productions and narrative rely on the authority's / author's responsibility:

> "THE PRODUCTION LEADER IS A FRIENDLY DICTATOR: The best collaborative productions have someone who will make the final decisions when required. In WRECKAMOVIE.COM this power has been given to the Production Leader and Assistant Leaders. The service is designed to make it easy to get input and listen to people from all over the world making the production better. But in the end, decisions must be made to make things go forward. If you are a member of a production, trust your Production Leader, he/she is the visionary of your project and don't take rejection personally. If you are a Production Leader, be sure to both listen and make clear and final decisions." (Wreckamovie, 2010).
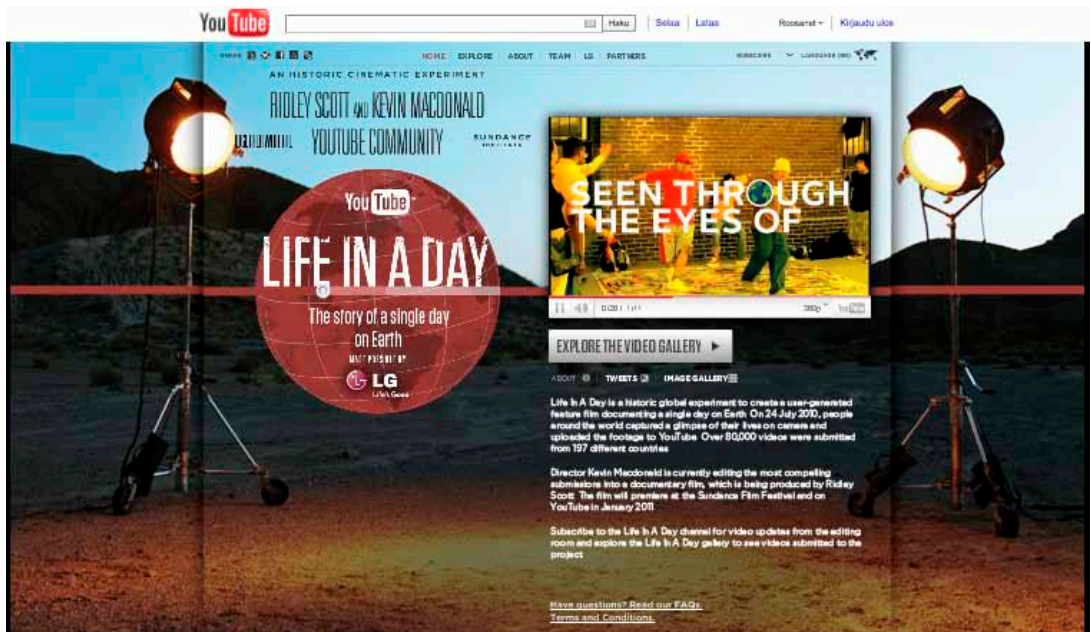
IMAGE 21. Life in a Day project presentation http://www.youtube.com/user/lifeinaday
Screenshot. (Reviewed 28 Dec. 2010).

Another, more global and commercial production, *Life In A Day*, has been collectively produced and also relies on one author in the compilation of the narrative. *Life In a Day* is a historic global experiment to create a user-generated documentary film shot in a single day on 24 July 2010. The production was filmed in different parts of the world but it was developed into its final form in the studio of the authors, Ridley Scott and Kevin MacDonald. (*Life In a Day* 2010).

Star Wreck, like all the other productions of Wreckamovie, or *Life in a Day*, is based on the principle of crowdsourcing. Crowdsourcing is community-based, distributed participatory design process proceeding from the assumption that a group or a community can accomplish more than an individual. Facebook, for example, has used crowdsourcing since 2008 to create different language versions of its site. The company claims that this method offers the advantage of providing site versions that are more compatible with local cultures.

4.1. From multi-user communities to communities of users

Multi-user communities were attempts to constitute collaborative media narration in the 1980s–1990s. Researcher and electronic literature author Scott Rettberg has written an article on the subject of collaborative fiction (2005). Rettberg mainly deals with literary media, Wikipedia and blogs that are produced collectively. Rettberg's starting point is "ancient" hypertext. The inventor of the notion of hypertext, Vannevar Bush (1945), already wrote in his renowned article "As We May Think" in 1945 about the *memex* computer system based on the idea of collecting and refining collective information. The old idea of hypertext for linking information is based on the calculation "one plus one equals more than two." Among the various forms of hypertext and collective writing at the beginning of the 1990s were MUD multi-user domains (or dungeons) and MOO – both attempts to construct imaginary spaces where the narrative is built. Rettberg describes the situation: "Insofar as writing events in MOOs constitute collective narratives, they are narratives written in the present, for a participatory audience, with the intention of provoking a response from readers who are also writing in the same space." (Rettberg 2005). Collective texts produced by many authors, hypertexts, often proceed with the pattern where one person replies to someone else's scene in a text cell by leading the story along in a new, chosen direction. The mobile stories tests of the *Mobile Social Media* project proceeded in a similar manner.

The Virtual Community, by Howard Rheingold from 1998, is a good text for checking up on scenarios and prophecies on what will happen when people start to communicate online in real time. The term 'social media' was not yet at the time even mentioned by name.

Rheingold was a pioneer of online communities. He describes how he felt the virtual community as emotionally close as his "flesh-and-blood family", which grew accustomed to Rheingold's way of sitting in his home office.

> "… early in the morning and late at night, chuckling and cursing, sometimes crying, about words I read on the computer screen. It might have looked to my daughter as if I were alone at my desk the night she caught me chortling online, but from my point of view I was in living contact with old and new friends, strangers and colleagues..." (Rheingold 1998).

Rheingold can say that he has witnessed the Whitehouse coup attempt in Moscow, the Tiananmen Square massacre and various other events accessible

through online communities, including conferences and get-togethers of his professional field in Paris or London. Rheingold writes about the rather new (from the perspective of the late 1990s) phenomenon called MUD[18].

Multi-user domain games played by various users online offer an intoxicating feeling of interaction, to which one can become pathologically addicted. In a virtual world where simultaneousness and globalness reign, people – "…on the international networks, spend eighty hours a week or more pretending they are someone else, living a life that does not exist outside a computer". (Rheingold 1998).

Rheingold writes about the appeal of virtual communities and the potential it procreates due to the technology: the leverage to ordinary citizens at relatively little cost, especially intellectual leverage, social leverage, commercial leverage, and most important, political leverage. However, Rheingold reminds that "…the technology will not in itself fulfill that potential; this latent technical power must be used intelligently and deliberately by an informed population…" (Rheingold 1998)

Browsing through my own Facebook community, I can come to the conclusion: yes. A demonstration against nuclear power gets more participants through its Facebook profile. Live video images on Facebook walls or Bambuser or Twitter tell about events – entertaining or political. The threshold of participation is low, so the feeling of having influence has at least grown stronger. On the other hand, "click activism" might have a slower and lesser impact than traditional, physical demonstrations and events. However, it is the media that are the most affected by people's online behavior. Mass-scale and public declarations of sanctions and boycotts have at least made decision makers more sensitive to the public's opinions, and in some cases even changed their courses of action.

The leap from virtual community to mobile community is not very long – mobile communities are even more mobile and based on real-time. They are physical, corporeal, personal and spontaneous – everything Rheingold dreamed about.

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18 "MUD= multi-user domain. In MUDs, participants can communicate with each other through a number of public and private channels: MUD dwellers can send each other private e-mail that is stored in the recipient's electronic mailbox to be read and replied to at the recipient's leisure; they can page each other in different parts of the MUD with person-to-person chat, like a person-to-person telephone call; they can 'say', 'whisper', and 'pose' to anybody else in the same room – a form of group chat that uses the boundaries of metaphorical rooms as social boundaries; they can turn on or off special-interest CB channels for other semipublic conversations across different parts of the MUD that take place while they are talking and emoting in a specific place. It is dizzying at first, like learning a new kind of communication gymnastics." (Rheingold 1998).

Rheingold ponders on what makes people join virtual communities, communities of many players and users. He wants first of all to look at the fascination, the allure, the reasons why people use the medium so enthusiastically. He believes that the unique features of this medium that appeal to people psychologically could be found in the changing notions of identity that were precipitated by previous communications media. "Some people are primed for the kind of communication saturation that MUDs offer because of the communication-saturated environments that have occupied their attention since birth. MUDs are part of the latest phase in a long sequence of mental changes brought about by the invention and widespread use of symbolic tools." (Rheingold 1998).

According to Rheingold, it is a question of people's will to change their identities, their personalities, and multi-user communities are actually culmination points of long development work, of mediated life. Virtual communities are symbolic tools where the users are free from the chains of their identities. On the other hand, now one may ask if identities could still be indeterminate in today's social media.

It is confusing that social media did not, after all, induce freedom of this particular type among their users. A majority of the users of Facebook, Twitter, image databases and Flickr use their own names. People produce documentary-type images and videos of themselves, of their own experiences and activities, their environment. Very few have a problem with using their own name and profile photo – for example, the appeal of Facebook is based explicitly on familiarity. Narrating daily life renders the most banal events into being a meaningful part of an individual's life story.

According to Rheingold, the most essential aspect of multi-user virtual communities is however that they offer the possibility to detach – not only from time and place – but also from identity. This is not an aspect that has actually become especially highlighted in social media. Of course usernames are common but users distributing their own pictures and using their own names behind YouTube videos are not an unusual or exceptional phenomenon – on the contrary.

5. Collaborative interactive authorship

In the early 1990s Internet speeded up the development in which collective authorship actually became distributed authorship. In the 1980s, alongside

the first Internet cafes, the capacity evolved to render video works interactive. (Arns 2004, 9). Such pioneers as Kit Galloway and Sherrie Rabinowitz[19] realized a number of events in which the audience communicated online across the continent. The onset of digital video from the 1990s onward has increased the possibilities of editing and creating interactive installations. Videos made entirely digitally, without cameras, such as videos filmed with mobile devices, have also entered the picture.

The foundation of collective authorship lies in text-based works, works structured by a user community or several authors and published on the Internet. The practice was based on the deconstructionalist idea of text as fabric where it is possible to chop up the texture. Theories of intertextuality (see Kristeva 1980) and the death of the author (Barthes 1968) laid the theoretical foundation for hypertextuality, collective interactive works where the user has an active role in the production – or at least the "consumption" of a work is dependent on the user's/viewer's choices, and along with it, the work becomes perceived as an entity according to the choices made by the user.

The interest of authors in sharing experiences, producing art and media productions in communities, collectively, was of course also met with a great deal of suspicion. German curator and writer Inke Arns (2004) quotes Adrian X about his earlier *The World in 24 Hours* and declared the project to be "historically obsolete". He stated as reasons not only the lack of a technical revolution (he was writing some five years before the Internet became widely accessible), but also – and primarily – of a revolution in interpersonal communications: "The high costs for hardware are only a part of the problem – much more decisive are the sluggishness and persistence of two hundred years of industrial culture and its consumerist aftermath. Nobody in our culture, artists included, is educated or encouraged to let others have a share in their creative activity. However, this capability for shared creative activity is a prerequisite of the interactive usage of communications technology."[20]

Inke Arns, in her article about the history of interactive media (2004), questions where the thought originated that the recipient is expected to take part in the process of giving birth to art, that receiving art would in the first place be interactive action. Arns digs out of history Mallarmé's poetry from the late 19th

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19 *Hole in Space* is described by its creators as a Public Communication Sculpture. It was the first coast to coast (NYC – LA) encounter for the 'public' to not only see each other but also communicate live, during three evenings in November 1980, using TV transmission technology. http://www.crumbweb.org/~sarah/broadcastyourself/?page_id=20 (reviewed 13 July 2010).

20 Arns quoring: Robert Adrian X, «The World in 24 Hours», in *Ars Electronica: Facing the Future*, Timothy Druckrey (ed.), Cambridge, MA, 1999.

century, with Mallarmé's notion of process-based art encompassing permutable, aleatoric elements that would, in the form of 'open artwork', reach the idea of collective interactive hypertext. (Arns 2004, 1). A couple of decades later Marchel Duchamp (1957) stressed the active role of the viewer in the face of art and experience. Art is born in the process of viewing, in the viewer. In the context of art, Joseph Beuys also introduced the concept of 'social sculpture'. Various people took part in Beuys's performances – as viewers and participants[21].

Arns quotes media researcher Dieter Daniels:

> "While in the 1960s the media were still regarded as one of several means employable in order to achieve the socio-cultural utopia of a transformed society, an about-turn took place in the 1990s, a decade in which media technology was often seen as 'the leitmotif from which all social, cultural and economic transformations [would] emanate.' However, after the notion of social interaction had been superseded by that of a primarily technological interactivity in the early 1990s, by the middle of that decade the rise of the Internet was restoring social significance to the paired notions of interaction/ interactivity, which now increasingly described media-assisted human interchange, and therefore linked up with the ideals of intermedial art in the 1960s as well as the early telecommunications experiments in the 1970s and 1980s."[22] (Arns 2004, 2).

In social media networks users typically join a community, pool or cluster sharing similar interests. The users are sharing personal videos inside a relatively closed community. Social formations are a crucial part of the users' understanding and identification towards socially composed and socially functional stories.

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21 "Beuys is famously remembered for two things: the theoretical hypothesis of "social sculpture," and the statement "everybody is an artist." A close consideration of the relationship between these two concepts reveals Beuys's program for art and his historically motivated vision for society. Both concepts have influenced participatory, socially engaged and relational art today and provide a vehicle for unraveling their historical significance, even if they claim to detach themselves from Beuys's historical moment." (Rojas 2010, 28). Similar projects for producing social community artworks (or sculptures) are being realized in many art museums together with their audiences, in the form of art education projects etc.

22 Daniels (2000), op. cit., p. 174. "The extreme form of such a technically determinist perspective is to be found among representatives of what was known as the 'Californian ideology'." Cf. Richard Barbrook/Andy Cameron, «The Californian Ideology,» in Telepolis, February 5, 1997. On the subject of «Californian ideology,» see also Inke Arns, Netzkulturen, Hamburg, 2002. (Arns 2004, 1).

It can be assumed that mobile interface users have different needs regarding the web than stationary users. People who have the need to use interfaces designed for mobile devises often have a collective orientation towards reality. The need to share instant and multidimensional experiences has become highlighted. The analysis of communities that share and compose mobile video stories is still in process. Commitment and some level of identification with the subject or the group help the user, player or learner to create more easily understandable stories that are also sharable within the existing group. People who have the same values or similar interests or share the same cultural background can more easily adopt and grasp even the loosest structures of a story.

Resting in the background of the Mobile Social Media research project was the presumption that in a social community people may film a one and same event from different perspectives and create with a structured model automated, coherent video stories that are interesting and meaningful to the community itself. The experiment showed that a prerequisite of shared experience, experiential understanding and identification is that the remix of images corresponds to one of the general narrative models of our culture, such as tragedy, comedy or heroic story.

VI MOBILE SOCIAL CULTURES

In this chapter I examine how mobility contributes to communication, the sharing of entertainment and stories. I present a few collective projects realized with mobile videos and compare them to the tests carried out in the *Mobile Social Media* project.

1. Finding a view in mobile narratives

Mobile phones are used to film photographs and videos. Video art got its name from the actual videotape which was used in the early years of the art form. Technologically, the medium has gone through many changes, and before the arrival of video recorders the artists had usually been working in the field of experimental film. Even though video art and film have certain convergences, video art is not, however, film. Video does not necessarily base itself in the conventions of drama film in terms of narrative continuum, causal relationships or other conventions of the medium. Video art does not always have actors or dialogue, a plot or a story. Videos don't usually confirm with the other established practices in film or entertainment either, and they only rarely enter cinema distribution. This difference also determines the line between video art and film and short films and avant-garde films. The intentions of video art also differ from those in film, even when it might in form resemble films.

It is interesting to consider to what extent co-created mobile video can be seen as a medium that produces stories. Mobile communication has introduced a spontaneous form of production and consumption into the production of videos, which is independent of time and location, enabling rapid sharing of material and communication through visual messages. Community-based, collective authorship is an important new quality of mobile communication.

2. Spontaneously produced media

The Helsinki Festival Night of the Arts in August 2009: A beautiful art performance took place at the Helsinki Senate Square; *Plasticiens Volantsin Perle*, by a group of artists directed by Marc Bureau, tells the story of the journey of a pearl through underwater dangers. Sea serpents, jellyfish, whales and fish dance in the air above to the tune of music composed by Phillippe Bonnet. Thousands of people saw the poetically beautiful work in the Helsinki summer night – and the performance was immortalized in their camera phones. I myself also filmed the creatures floating in the air, and afterwards noticed in the images the sea of light produced by thousands of mobile phone cameras.

IMAGE 22. The Senate Square in Helsinki, August 2009. Capture from unpublished mobile video taken by Marjo Mäenpää, 2009

What do people do with all these pictures and videos? In what kind of situations do they watch their videos? Do those who were present compare their angles of view with each other? Do they send their glimpses of atmosphere out as greetings somewhere to the other side of the world?

In 2001, in the advent of mobile images and 3G mobile phones, many envisioned that the development trajectory of digital image was building around digital cameras used by consumers. (see Koskinen et al. 2001). The *Smart Product Research Group* of the Department of Industrial Design at the University of Art and Design Helsinki performed an experiment: A group of individuals were given digital cameras and mobile phones equipped to send pictures. The experiment explored the ways in which the individuals communicated. The users produced pictures themselves and reshaped them in a web environment. (Koskinen et al. 2001, 13). The research group paid attention to how the users participated in the development and establishment of the product. (Koskinen et al. 2001, 15). In the days of the *Smart Product* study, in the early 2000s, emphasis was placed on the changes brought by digitalization to people's photography practices. What was new in the early 2000s, besides the easiness of taking photos, was also the increase in the active photographing of everyday situations. Also the editing and storing of photographs became easier. It was novel and easy to send and share photos. (Koskinen et al. 2001, 26).

Bourdieu (1990) wrote about photography as art for the middle-class imitating the elite's flare for art. Bourdieu proposed, for example, that in family photo albums the photograph serves as an instrument that tightens the family bond. The photograph documents the unity among family and relations, shared events and common history. Photographs document a family's important rites of transition: births, weddings and funerals (Koskinen et al. 2001, 21). Bordieu points out that family photo albums witness events or environments that are as common as possible. The right way of taking a photograph, in an everyday sense, is built on social practices, not on a universal aesthetics that strives for beauty. (Bourdieu 1990, 85-94; Koskinen et al. 2001, 21).

In today's context, mobile videos may record spectacles, major events or unusual phenomena. Family gatherings and family rites of transition are still documented with "ordinary" photo cameras while exceptional, impulsive material is shot with camera phones. Photographing with photo cameras has to do with skills, photographing with mobile phones is more closely linked to social situations (Poikselkä 2010, 150).

According to a study by Pirita Poikselkä (2010, 149), the key distinctive feature about filming with camera phones is spontaneity. The videos are usually meant for temporary use, and are edited only rarely. There is naturally

less interest in editing clips that are just a few minutes long. The saving of the videos is motivated by a will to share memories. In Poikselkä's view, people have a special need to share memories about situations where the events have been experienced in a group, within their close community. Stories are also more easily understood and gain meanings in familiar situations and among familiar people.

In the practice of sharing mobile photos – serving a similar function as family photo albums and home movies in the past – motivation and interest emerge as decisive questions. If the photo tells something about a person who is familiar and close to you, it is more interesting to look at, even when unrefined. Meaning is born for the very group that shares the same experiences, interests and scheme.

Pictures are however taken in enormous amounts. Millions of mobile phones contain millions of hours of experiences, memories and moments to share and watch again. Different story generators, automated video editing applications, could provide useful tools for home photographers and facilitate the experience of the viewer; an even loosely structured story presented in narrative form could be more rewarding to watch.

With traditional amateur (non-digital) photographs it has become apparent that the act of taking the pictures is more important than the act of watching them; photos in family albums are viewed on rather rare occassions (like at those embarrassing moments when the photos from childhood are shown around). In 2001 the research performed at the University of Art and Design showed that the act of taking photographs is a form of contemporary consumption rather than a link to the history of a community (Koskinen et al. 2001, 25). When photos are looked at it is usually a one-off situation. According to Koskinen's book *Mobiili kuva* (Mobile Image), the story linked to a photo is born from the situation of taking the photo rather than from the image itself (Koskinen et al. 2001, 25). Ten years ago the authors were asking how the situation had changed since it had become possible to instantly send a digital image to be viewed by another person. One could now give the answer that photographing has become more impulsive, easier and faster. Also the sharing of photos has become more common – actually, it has become part of our everyday routines in social media. The practice of sending images has replaced both postcards and in many cases also phone calls (Rantavuo 2009; Villi 2010).

The article *Understanding Videowork* explores the patterns of behavior among home movie makers through a study of 12 families and a separate focus group of 7 teenagers (Kirk et al. 2007). A number of interesting video compositions were made up of material shot during the study. Composing the videos requires

editing of the images, which is something very few of the presently available software easily support. The lack of user-friendly editing software is probably one of the reasons why people keep saving, sharing and uploading "raw material" on the web.

Among many others, Kirk pays attention to the question of usability and technology often standing in the way of storytelling:

> "As the capacity to capture video is being incorporated into increasingly diverse artefacts (such as mobile phones), the opportunities for non-professional video-makers to make, watch and exchange video have equally increased. Accompanying this rise in the prominence of video has been a surge in interest in providing editing tools. Despite this, and as one cynic has noted, '...far more amateur video is shot than watched, and people almost never edit it'." (Kirk et al. 2007).

The study for the *Understanding Videowork* article also showed that mobile videos were different by nature; lighter, more spontaneous and less serious "…what one did with a video camera was different to what one did with a camera phone. The latter was to play with, something that let them do things on the spur of the moment; the other, something you did when you were being 'serious'." (Kirk et al. 2007). However, mobile pictures or videos do not have less importance in documenting the experiences. We could also surmise that mobile audiovisual media are a radically new way of communicating feelings, experiences and events. The possibility of shooting images and sharing them everywhere spontaneously increases the possibilities and means of communication – not to mention the pleasure it brings to the ones sharing and receiving them.

In this conception, the role of the software becomes one of drilling down and distilling from users' 'raw footage', a consumable or, if you prefer, a usable product: a video that delights. Given this goal it is perhaps not surprising that some researchers have even offered automating tools for the shooting of video, unlikely though it might sound. (Kirk et al. 2007). Improved editing opportunities or story generators enable users to turn communication with mobile images into communicative, interactive situations. The generator expands the possibilities of story composition.

When comparing the production of a mobile photographer to that of a (digital) photographer, we could speak of spontaneous, lightweight photography compared to heavyweight photography, where the shots are often premeditated, composed and planned in advance.

Lightweight (Spontaneous)	Heavyweight (Intended)
Mobile Phones	Camcorders
Multi-function	Dedicated to video
Ad hoc, spontaneous capture	Intended capture
These devices are 'end use' devices, the majority of the video activity ends with the device, it can be created, stored and consumed within the device.	These devices are more focused on the capture element of the cycle, they are temporary holders of the video data.
Small clips are captured, but are ever increasing in number and size.	Relatively limited use tied to the families' lifecycle. Although the clips are longer, the collection rarely becomes unmanageable in size.
Easy to upload (small file size –USB transfer)	Upload barriers (large files – Fire-wire transfer – real time)
Less emphasis on tangibility of end result	Importance of tangibility of end result.
Focus on sharing	Focus on creativity
Users do not want to edit	Users want to edit
Sharing practices - In the moment - Face-to-face - Small clips - Internet	Sharing practices - Giving DVDs - Making gifts - Watching with family - Edited movies

TABLE1. Comparison of lightweight and heavyweight video work (Kirk et al. 2007).

People's need to share their own realities is visible in the choice of subject; what is told, or left untold, is of crucial essence, and this is something that hasn't changed with the emergence of camera phones. The photographed subjects haven't changed all that much if one compares mobile videos to, for example, Pierre Bordieu's list on the aesthetics of everyday photography. To adapt Bordieu, the central subjects of photography are almost nearly the same in home photography as they are in mobile videos:

- Family and rites of transition (weddings, funerals, graduations)
- Childhood home and first home
- Symbols of social success (summer place, boat, firm)
- Nature more often than the city (trees, animals, water, flowers)
- Pets
- Holiday and tourist photos (life somewhere far away)
- Hotel windows, landscapes, buildings, friends, picnics, local life, beach life, locals, group moments

(Koskinen et al. 2001, 22-23)

2.1. Mobile visual communication – how people are using mobile media

Sending mobile photos and videos to other phones and to be published online features today as a form of everyday communication.

The research group at the University of Art and Design Helsinki carried out tests on the use of mobile images, the interactivity accompanying digital and image processing, in its *Smart Product* project. Already at that time, of the research project reported in 2001, mobile images were shown to increase interaction and communication between the photographers. A group of photographers sent each other processed digital photos accompanied with text comments through their mobile phones. The recipients would again respond to the photos with humoristic photos and comments of their own. Image processing also provided possibilities to play around with the photos. An image was enhanced with a couple of effects. It was digitally 'shaken' and featured the added-on face of a fellow worker, painted green. Image manipulation is however an aspect of secondary importance. Through the eye of a sociologist, the pair of photos is about a challenge to a game of cleverness. The teaser tries

to get the opponent to respond with a clever move. At the same time, it is a demonstration of friendship. You don't joke like this with someone you don't know. But could the sender of the first message have predicted this round of comments? (Koskinen et al. 2001, 34).

Lisbeth Klastrup (2008) has analyzed several Danish social network applications where the users have been sharing experiences through mobile videos or photos. In her article she reflects, for example, on what kind of user interfaces support storytelling in online communities. The analyzed projects introduce different approaches and frameworks for mobile storytelling which each in their way explicitly ask of their users to tell stories about their own experiences. The Danish www-pages are based on the projects carried out in 2003-2007.[23]

Mobile storytelling is commonly associated with the category of user-generated content or citizen journalism. (Klastrup 2008). Mobile videos and especially mobile photos are used to support, for example, urban planning; user groups document and record their experiences and life for researchers and designers (e.g. Johanna Saad-Sulonen, *Urban Mediator* project at the Aalto University School of Art and Design 2010) (Saad-Sulonen 2010). Klastrup also defines in her article the conditions under which a composition of photos or videos can be turned into a story. A mobile story is structured and mediated, a presentation of experiences, in which a beginning and end can be identified. A mobile story is a completed act, a description of experiences. The meaning of the story comes or gains its emphasis from how the story is edited, what material is gathered and what is chosen to be shown to others. (Klastrup 2008). I would venture to add to Klastrup's list of storytelling conditions also the elements of agent and change – the suspense of the story is born from change and an active, conscious and feeling agent, a subject, the presence of a narrator.

Klastrup also notes that databases of spontaneously produced images, such as Flickr or the social publication channel Facebook, do not necessarily tell the whole story. "…Stories indeed are structured presentations of experience which seek to convey a sense of temporality and meaning, and as such can consider themselves as belonging to the communicative genre of stories and narratives." (Klastrup 2008). According to Klastrup, with mobile stories especially it is not easy to tell the form and content apart. The context of the storytelling, the mode

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23 www.23hq.com image databank where the user is able to add a textual story to accompany the image. www.getmoving.dk compiled encouraging experiences of physical activity among schoolchildren. www.mobilmarathon.dk centered on videos shot by the users at the Roskilde rock festival. The projects were no longer active in 2010.

of sharing, the mobile device as a medium all affect what kind of stories are told, how the shots are taken and shared. As Piritta Poikselkä has later concluded, mobile photography is spontaneous. The subject is not usually intended, ceremonious or historical. (Poikselkä 2010).

Klastrup writes that the images tell small stories of everyday life. She suggests that mobile storytelling may actually radically change the focus of the stories people tell each other. If stories used to be told of highlights of life in the past, today mobile videos record everyday life. "The mobile device has in itself changed the stories (or photographic subjects) we want to share, shifting the focus from the extraordinary to the more ordinary aspects and objects of everyday life." (Klastrup 2008). Emplotting and tellability of one's own life seem to be nearing on the tradition of Flaubertian realism. Everyday and banal things become meaningful and sharable reality narratives. (See for example Mäkelä 2010).

Life publishing, telling and representing one's own life, could be seen also, like Guy Debord, as a spectacle. (Debord 2005, 30). For Debord society of spectacles is a society of alienation because human beings are watching visual reproductions produced by others. "The more she watches the less she lives" (2005, 42). When people are publishing their own life stories, they are representing their life. Photos in Facebook on cooked meals, baked cakes and views from holiday resorts could be imaginary, illusory narratives in a display window.

On the other hand, even databases of spontaneously produced images can tell stories or repeat experiences if the agent of the story is known. It is easier for the viewer to form up a story if the experience is personal and the audience is somehow familiar to begin with. Databases of spontaneously produced images or compositions of images extracted from them can produce mininarrations, similar to comic strips. A cavalcade of birthday pictures downloaded into Facebook has a narrator and a point of view; the moderator of the image database is the downloader and she has made a choice as to what is shown and not shown. The photos are taken by one or more people, and they may possibly each have a different, individual point of view. Those who were present identify the story from the party; the climax and the goodbye hugs narrativize the event at least to those who attended it. The audience has a schematic, shared experience of "how it feels like". (See Fludernik 1996; Herman 2010).

Interactive mobile stories in turn are, according to Klastrup, more problematic. In the era of digital media users and players have become accustomed to a situation where the story doesn't necessarily have one

authoritarian narrator, or the role of the narrator has been given to the players themselves. The player is in interaction with the system and the community. The change in the structure and mechanisms of storytelling has in a way meant a democratization of narrativity. (Klastrup 2008). In an interactive game or hypertext focalization the question of focus (or focalization) on who is speaking and who is seeing the story (Genette 1988) is not determined by only one narrator, agent, author or subject. Mobile stories take a step backwards in returning authority to the author: "This author records, selects, uploads and presents some photo or filmed material, perhaps supplemented by some text which the visitor then looks at" (Klastrup 2008). In this sense the concept of implied author might help the audience (also the implied audience) to perceive the narrative as a whole, as if there were one narrative voice that presents the ethos and the point of view in the narrative.

In the *Mobile Social Media* project there were several persons filming the videos, several people could upload images to the MoViE database, and each participant could also compose a story from the videos shot by the others. In the MoViE service and its story generator the power of one author didn't gain any excessive emphasis, the entire audience could thus interact both among themselves and with the system. Yet in one remix one implied author could be seen in the role of an author, as Herman and Ryan describe it.

Klastrup also wants to redefine the concept of digital interaction. In the multimedia of the 1990s, interaction was primarily seen as occurring between humans and computers. With mobile media the users interact with each other: "The structural interaction with early digital stories is here replaced by a post-facto social interaction *around* and *about* the mobile stories; interactivity is no longer structural or formative, but social." (Klastrup 2008). Video stories on the web can be highly intertextual, the story can also interact with another story. Klastrup offers as an example YouTube videos that can comment on and engage in dialogue with other published videos. Hence Vimeo or YouTube would not mean just endless dialogue of random videos but a communicating continuum or network of stories.

The video stories created during the *Mobile Social Media* research project in 2008 and 2009 followed a very similar formula as the experiments carried out by Koskinen and his research group or *Mobilemarathon* filmed at the Roskilde festival, as described by Klastrup. The formula of the first *Mobile Social Media* tests relied especially on communication; the users commented on the videos by sending in their own videos. In the test carried out in spring 2008 the narration was modeled after a structure familiar from jazz music. The photographer of the first video introduces the theme, the

photographer of the second video develops the theme by varying it further, the photographer of the third video introduces a new variation to the theme, etc. In the end a jazz band usually introduces a synthesis of the different variations presented as solos. This was also the objective in the first mobile video story tests.

As happened in the context of sending digital photos in the *Smart Product* research project, the videos tested and planted in the jazz formula during the *Mobile Social Media* project made up a continuum in which the photographers of the videos communicated and commented on each other's shots. It was also a question of creative process, the narrative developed from communication and collaboration and the end result of the story could not be predicted in advance. The actual task of composing the story into final form remained either the responsibility of one author alone or the story could also be composed by an automatic story generator on the basis of the clues given by index references and tags. The free, democratic and spontaneous interactivity Klastrup calls out for could come true in the form of spontaneous remixes. The narrative could be also or only a schematic project of the recipient, dependent of the community, situation and expectations.

3. Mobile co-experience

At the School of Art and Design Helsinki the research of community-based experience or co-experience has been a vital part of user-centered design. Katja Battarbee and Ilpo Koskinen (2005) analyze experience in design. They list three different and well studied approaches in the field of design research and user experience studies: the measuring approach experience in development and testing; the emphatic approach, which is connected to the needs, dreams and motivation of individual users; and the pragmatic approach, which is "theoretical in nature, and shows that experiences are momentary constructions that grow from the interaction between people and their environment" (Battarbee, Koskinen 2005, 7). Experiences are linked equally to cognition or emotions as to storytelling. Stories might elaborate the experience as a meta-experience, a collection of individual experiences. Battarbee and Koskinen raise the question why all these approaches to the study of experiences are focused on individual experience, even though people as individuals are dependent of other people, the community and society.

Co-experience is always in a relationship to audience; it becomes significant when it is told to others, dramatized or narrativized. Experiences are exchanged and compared with others, and the experiences of others can also be belittled and disregarded in a community. When speaking about experiences, storytelling presents itself as a form of interaction. The narration is not necessarily always verbal, especially digital technology allows us to share experiences in audiovisual media. Battarbee and Koskinen made their observations about co-experiences with people using mobile multimedia. They studied how people are sharing meaningful experiences through mobile phones, sending text messages, pictures and multimedia messages. Experiences are social phenomena and they encourage collective creativity. "When people act together, they come to create unpredictable situations where they must respond to each other's actions creatively." (Battarbee, Koskinen 2005, 9).

In community-based sharing of mobile videos the very aspect of telling and sharing experiences is always an important motivator. In a test conducted during the *Mobile Social Media* research project in spring 2009 the photographers added tags to their shots or spoke over the video. Speech normally entails that it is addressed to some recipient. Tags are also added for a potential audience. (Haverinen 2010a, 105). The photographers of mobile videos usually already have an audience, recipient and object ready in mind, with whom the experience is shared. The group could be close and familiar, insider jokes and gestures could be shared with it in the open network. Mikko Villi makes an interesting observation when writing about mobile communication and ritual communication, "how mobile communication is used to create and maintain solidarity and cohesion within a group" (Villi 2010, 105).

Ilpo Koskinen (2005) analyzes various projects and experiments carried out with people sending mobile multimedia messages. The strongest motive for photographing and sending seems to be sharing. Multimedia messages usually are affective and social by nature: "…targeted for enriching shared experience, or communicating with absent friends" (ibid.). According to Koskinen, mobile multimedia tie in with physical and social experiences. "It is almost exclusively linked to one's network of strong relationships, where it primarily nourishes sentimental bonds." Koskinen also emphasizes that with multimedia messages people give others access to places, individual and social situations and emotions. People share images of familiar objects and people, their private lives (like objects, relatives and haunted places) and social networks. Mobile multimedia also serve as an extension of people's experiences and memory – with them, their affective world becomes reportable in a visual and shareable form. (Koskinen 2005).

Messages shared through mobile media are random, impulsive. Videos are published through two different channels; either they are sent to other, particular recipients, or they are published in, for example, the platforms of social media. Even then the videos usually have a set target, a community of friends or participants at an event.

Mobile communication has thus far been studied relatively little compared to the fact that it has increased explosively in the last ten years. In his dissertation Mikko Villi (2010, 25) points out that the mobile phone has received minor attention in communication studies, and in humanities and social sciences in general, compared to its huge popularity and ubiquitous nature. Villi suggests that "mobile communication might gather more interest when it is connected to the global information networks, such as the Internet, and goes from being a technology of interpersonal communication to being used more in mass communication." (ibid.).

Even with mobile media we should remember the meaning of the word media as in 'medium', in relationship to something that doesn't in itself portray anything.

Marshall McLuhan (1964) used the terms 'cool' and 'hot media'. Hot media give enough stimuli that the recipient can seamlessly read the message they deliver. High-definition and low-definition media are divided according to how many senses it requires for the message to open up to the viewer. Hot media offer a large amount of detailed communication that intensifies only one single sense – that of sight – in the viewer. Cool media communicate in a more ambiguous manner and intensify more than one single sense – for example those of hearing and touch. Cool media require from the recipient active participation and the ability to construct a cohesive story out of the message. (McLuhan 1964). Mobile stories fall somewhere between the two realms. Their messages are usually easy to understand but it takes some understanding to grasp their context and connecting entity, they require more effort on the part of the viewer to determine meaning and much more conscious participation by the reader to extract value from the message. (Hautamäki 2010).

In the *Mobile Social Media* project the photographers of mobile videos were given the opportunity to interact with each other. With the MoViE application they could comment on each other's videos and compose longer videos, remixes. Narrativity was realized in these remixes through interaction, if the context and audience was familiar enough. The narrative structures – the author, the point of view, the actors, the protagonists etc. – were in most of the remixes a question of interpretation. In Klastrup's mobile video experiments, as well

as in the *Mobile Social Media* tests, individual photographers would produce a shot according to their own point of view to the joint remix. Finally, one could conclude that what creates the narrative (structure) in the process is the algorithm, the set of rules defined beforehand, provided that the context of the story and the community is familiar so that the viewer can determine the meaning and structure of the story.

VII RESEARCH DATA AND ANALYSIS

The research data consist of various projects carried out during 2008-2010 in the Mobile Social Media project at the University Consortium of Pori. With these projects I tried to answer the research question; whether it is possible to create narrative social spaces and visual narrations in social networks aimed for the general audience engaged in creative arts by applying the methods of narrative structures and storytelling dramaturgy.

In my study, the mobile videophone is seen as an expressive device for self-expression and as a communicative tool for distributing the video stories and participating in the creative and collaborative process of creating expressive mobile video art stories. The main research data consist of a set of test users' videos and remixes with predefined narrative structures. Methods of narrative and video analysis are applied in the analysis of the remixed video data. I am studying storytelling rather than performing sociological narrative analysis – or narrative inquiry. Narrative inquiry is distinguished from storytelling in that the word 'narrative' implies an audience and a narrator and, also in the case of co-created videos, an author. I am interested in the shared experience of overlapping primary contexts. Because each author in the remix productions in my data has the same goal (to produce clips under a certain theme), there is a certain overlap in primary contexts. However, I claim that the primary contexts are not fully overlapping because each author reflects the clips the others have produced and this happens in a secondary context, the interaction and communication with others, producing remixes and taking part in the narrative action. (See Multisilta, Mäenpää 2008a).

However, the main attempt is to study more closely the narrative structures of community co-created videos. The process of co-creation and production in community also has certain importance, as I mentioned earlier in my introduction. On one level these video narratives could be analyzed according to their apparent structure, meaning the discursive level and the levels of story (fabula), as classical narratology defines them.

On another level the attempt to seek out a real author and an implied author, like Chatman postulates (Chatman 1978), might be more relevant in analyzing co-created video works. (See image 10 in Chapter IV.5).

Even though my main method is based on narrative analysis, the meaning of community is also important. In some cases the community was small and coherent – sometimes too small – in some cases the community was not able to share experiences at all. (Multisilta, Mäenpää 2008a).

1. Tools of analysis – the narrative analysis and process of co-creation

1. In my analysis I have examined, first, whether these co-created mobile video works fit in the definition of narrative. According to Ryan (2006, 2010), the conditions of narrativity are spatial, temporal, mental, formal and paradigmatic (see 2.2.4). David Herman (2009a) lists the design principles of narratives as events, time, action and change. The experience, 'what it is like', is important for Herman.

2. Secondly, I have paid attention to the structure of the videos. Classical (and also to some extent post-classical) narratology seeks for a story and discourse, function, authors and narrators, as well as actors, events, focalization (point of view), suspense, order of the acts, motives, themes and storylines. The author as one level of narrative structure comes from classical narratology and rhetoric of narratives.

3. Thirdly, the cognitive process of conducting narratives has a lot of potential for analyzing mobile videos. For Monica Fludernik, narrative is built on mediating functions of consciousness. (Fludernik 2003; Ryan 2006). I will look at how the participants have conducted their short video narratives through cognitive frames of action, telling, viewing and reflecting; what kind of gaps does the receiver fill when watching the composed remixes?

4.   Fourthly, I am analyzing the creative process of co-creation. The user of a mobile phone with video camera functions as an author, and several authors can produce a common narrative (i.e. remix) with one storyline that is composed by the automatic story generator.

It is obvious that mobile videos may have the same kind of roles as home videos or individual camera photos (see Koskinen 2001) but the production process and publication of a video, and especially of a video remix, requires more time and thinking, and thus the process of creating a clip may be the most important outcome for the creators of the clips themselves. With the tests with the MoViE application we wanted see whether it is possible to collectively create video stories that have significance and make sense to the viewers.

In collaborative production what is significant in terms of the process is the size and closeness of the community – whether the members know each other in advance. In the testings of MoViE within the MSM research project community-based video remixes were produced in three different ways; at the beginning in a small group, among two, three people, who all took part in filming and loading the video clips, the compilation of the remixes was carried out by one person alone. The others could watch and comment on the remix and even include the finished remix to be part of their own new remixes. The second way was to form a test group of various users – for example, during a Pori Jazz Festival concert. The members of the test group did not know each previously. They were assigned various themes in advance and asked to produce short, loadable video clips. In this test, too, the remix was however compiled by one person alone out of the material produced by the different authors. The others could watch the finished remixes and possibly add them to their own remixes. The third way was to let the MoViE application serve as the story generator; the different authors named (tagged) the clips they had shot and the compiler of the story let the application compile a story according to the given tags. In all these cases a prefixed objective was set for the activity of the community, at least one theme for filming, and they all required, in the end, one author – producer – who published the remix. In other words, a narrative requires 'scaffolding' and a person who builds the scaffolding.

As mentioned in the previous chapters, the term co-production refers to a way of working whereby decision makers and service providers and users work together to create a decision or a product that works for them all.

All the cases are presented according to the same formula: What was done, who the stakeholders were and how and when the test was carried out.

1.1. Case 1 First Proppian Scenario

WHAT – Theoretical background

A user scenario with use-case description to test how the functions described by Vladimir Propp (1968) work in an interactive mobile video application. The scenario using Propp's functions is based on a situation where two persons shooting short mobile video clips download them into the MoviE platform and name (tag) the clips after one of the 31 functions Propp defined in his *Morfologija skazki*.

Propp performed a survey of 100 folktales in his classical study *Morfolgija skazki – Morphology of the Folktales* (Propp 1968). As I described in Chapter IV 3.3.2., the central idea of his theory is that the stories (folktales) have a same kind of global structure, and therefore they could easily be translated to other languages. The conclusion one can draw from Propp's theory is that narrative structures are universal and general enough to cover all human cultures. In other words, the models of narrative structures lie deep in the human mind and behavior. (Greimas 1999). Vladimir Propp's functions, classification of actions and roles in a narration, as well as of the spheres of actions in the story, have been modified and further developed (and criticized also) by e.g. A.I. Greimas (1999), Claude Bremond (1980), Levi-Strauss (1976) and Roland Barthes (1975). (See also Multisilta, Mäenpää 2008a; Multisilta, Mäenpää 2008b).

The storyboard or a manuscript of an interactive story is usually composed from elements that follow (or cause) each other. Distinguished from linear narration, the actions in interactive narration might appear in non-linear sequence, yet the story/plot follows the same form of dramaturgy. (Example: In an interactive game the plot is to fight against the dragon and rescue the princess, the actions, tasks or fights appear according to the player's reactions; in the end the player succeeds in her task and rescues the victim or fails and loses the game). The elements in interactive narration, for example the making of choices or decisions, could be studied as functions. Propp was interested in analyzing the constant element of the compositive scheme, i.e. the paradigmatic model of the functions. It was important for Propp to analyze what the characters do, not by whom and how the text is produced. (Berruti 2005).

It is obvious that applying Propp's model to media and literature other than Russian fairytales requires a certain kind of flexibility. Like Massimo Berruti remarked in his lecture: "Propp himself was doubtful about a generalization of his system, that was derived from quite a small selection of Russian folktales. He also remarked himself that literary work is on average

more complex than a folktale; and that the morphologic study should be accompanied by other methods of historic-cultural nature." (Berruti 2005). The merit of Propp's study is that it looks for a typology of the actions in the tale. They are universal and could be found in any type of narration. (Berruti 2005). Propp's significance was in aiming at finding a unique logical model for narrativity (Berruti 2005):

1. opening for the possibility of an action – problem, enigma,
2. passage to act, and
3. conclusion of the action (success, failure).

From the narration one could separate the story and the text or/and medium, the way the story is told (like *fabula* and *sjuzet* with Russian formalists). The different variants of the story could be told in various media. In multimedia and interactive media the story could be told from several viewpoints and in nonlinear form – and the story would still remain the same.

Vladimir Propp's 31 functions could be used as a model of varying operations or points of view – acts of interactive storytelling (see Image 23). With a use-case scenario, I tested whether it is possible to compose a mobile video story – according to Propp's model – by processing morphologically varying narrative elements and dramatic actions. I tested the use of Propp's functions by having two authors name (choose the function, a tag) a video clip according to Propp's functions, to find out if it was possible to tell a coherent and intensive story using this model. The authors contributed the storyline and the sequence of acts, while the story and the plot were told by the story generator, the engine (narrator).

WHO

The stakeholders of this first scenario were researcher Professor Jari Multisilta from the Tampere University of Technology and I. We were both working as planners and designers of the MoViE application.

HOW

The test was carried out in February 2008. The Mobile Social Media research project had not actually started yet and this test was more or less piloting the coming (future) research tasks and especially the sub projects for studying narrative structures.

Use-case is a description of one interactive scene, the factors (objects) connected with it and their operating mechanisms, feeds and feedback. The word 'use-case' has its origins in the world of software design, it is used as a starting point for object-oriented programming and programming different interactive applications. (Muller 1997, 153). The use case was based on the knowledge of all the 31 narrative functions Propp described. In this scenario it is presumed that Propp's 31 functions are already to be found in the database of tags. (Propp 1968, 25).

1. **ABSENTATION:** A member of a family leaves the security of the home environment. This may be the hero or some other member of the family that the hero will later need to rescue. This division of the cohesive family injects initial tension into the storyline. The hero may also be introduced here, often being shown as an ordinary person.

2. **INTERDICTION:** An interdiction is addressed to the hero ('don't go there', 'don't do this'). The hero is warned against some action (given an 'interdiction').

3. **VIOLATION** of **INTERDICTION**: The interdiction is violated (villain enters the tale). This generally proves to be a bad move and the villain enters the story, although not necessarily confronting the hero. Perhaps s/he is just a lurking presence or perhaps s/he attacks the family whilst the hero is away.

4. **RECONNAISSANCE**: The villain makes an attempt at reconnaissance (either villain tries to find the children/jewels etc.; or the intended victim questions the villain). The villain (often in disguise) makes an active attempt at seeking information, for example searching for something valuable or trying to actively capture someone. S/he may speak with a member of the family who innocently divulges information. S/he may also seek to meet the hero, perhaps knowing already that the hero is special in some way.

5. **DELIVERY**: The villain gains information about the victim. The villain's search now pays off and s/he now acquires some form of information, often about the hero or the victim. Other information can be gained, for example, about a map or treasure location.

6. **TRICKERY**: The villain attempts to deceive the victim in order to take possession of the victim or the victim's belongings (trickery; villain, disguised, tries to win confidence of victim). The villain now presses further, often using the information gained in her/his search, to deceive the hero or victim in some way, perhaps appearing in disguise. This may include capture

of the victim, getting the hero to give the villain something or persuading her/him that the villain is actually a friend and thereby gaining collaboration.

7. **COMPLICITY**: The victim is taken in by the deception, unwittingly helping the enemy. The trickery of the villain is now working and the hero or victim naively acts in a way that helps the villain. This may range from providing the villain with something (perhaps a map or magical weapon) to actively work against good people (perhaps the villain has persuaded the hero that these other people are actually bad).

8. **VILLAINY or LACK**: The villain causes harm/injury to a family member (by abduction, theft of magical agent, spoiling crops, plunders in other forms, causes a disappearance, expels someone, casts a spell on someone, substitutes child etc., commits murder, imprisons/detains someone, threatens with forced marriage, provides nightly torments). Alternatively, a member of the family lacks something or desires something (magical potion etc.). There are two options for this function, either or both of which may appear in the story. In the first option, the villain causes some kind of harm, for example, carrying away a victim or the desired magical object (which must then be retrieved). In the second option, a sense of lack is identified, for example in the hero's family or within a community, whereby something is identified as lost or something becomes desirable for some reason, for example, a magical object that will save people in some way.

9. **MEDIATION**: Misfortune or lack is made known (hero is dispatched, hears call for help etc./ alternatively, the victimized hero is sent away, freed from imprisonment). The hero now discovers the act of villainy or lack, perhaps finding her/his family or community devastated or caught up in a state of anguish and woe.

10. **BEGINNING COUNTER-ACTION**: Seeker agrees to, or decides upon, counter-action. The hero now decides to act in a way that will resolve the lack, for example finding a needed magical item, rescuing those who are captured or otherwise defeating the villain. This is a defining moment for the hero, as this is the decision that sets the course of future actions and by which a previously ordinary person takes on the mantle of heroism.

11. **DEPARTURE**: Hero leaves home.

12. **FIRST FUNCTION OF THE DONOR**: Hero is tested, interrogated, attacked etc., preparing the way for her/his receiving a magical agent or helper (donor).

13. **HERO'S REACTION**: Hero reacts to the actions of the future donor (withstands/fails the test, frees the captive, reconciles disputants, performs service, uses adversary's powers against him).

14. **RECEIPT OF A MAGICAL AGENT**: Hero acquires the use of a magical agent (directly transferred, located, purchased, prepared, spontaneously appearing, eaten/drunk, help offered by other characters).

15. **GUIDANCE**: Hero is transferred, delivered or led to the whereabouts of an object of the search.

16. **STRUGGLE**: Hero and villain join in direct combat.

17. **BRANDING**: Hero is branded (wounded/marked, receives ring or scarf).

18. **VICTORY**: Villain is defeated (killed in combat, defeated in contest, killed while asleep, banished).

19. **LIQUIDATION**: The initial misfortune or lack is resolved (object of search distributed, spell broken, slain person revived, the captive freed).

20. **RETURN**: Hero returns.

21. **PURSUIT**: Hero is pursued (pursuer tries to kill, eat, undermine the hero).

22. **RESCUE**: Hero is rescued from pursuit (obstacles delay pursuer, hero hides or is hidden, hero transforms unrecognizably, hero is saved from attempt on his/her life).

23. **UNRECOGNIZED ARRIVAL**: Hero, unrecognized, arrives home or in another country.

24. **UNFOUNDED CLAIMS**: A false hero presents unfounded claims.

25. **DIFFICULT TASK**: Difficult task proposed to the hero (trial by ordeal, riddles, test of strength/endurance, other tasks).

26. **SOLUTION**: The task is resolved.

27. **RECOGNITION**: Hero is recognized (by mark, brand, or thing given to him/her).

28. **EXPOSURE**: The false hero or the villain is exposed.

29. **TRANSFIGURATION**: Hero is given a new appearance (is made whole, handsome, new garments etc.).

30. **PUNISHMENT**: Villain is punished.

31. **WEDDING**: Hero marries and ascends the throne (is rewarded/promoted).

The use-case description and scenario were built after discussion between the stakeholders. The case describes one situation where the users have agreed to create a mobile video narrative downloading videos to Narrative Cite NC[24] about the given themes. The themes have to be tagged or named after Propp's functions. Since Propp insisted that the functions have to follow a certain chronological order, NC publishes the videos always in the right (Proppian) order. The situation is game-like, User 1 invites User 2 to play and download videos to NC. User 1 suggests also the genre for the coming narrative. The functions (tags) could be chosen from a given list. The users might shoot the videos themselves or download video clips from a database.

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24   Note: In this first scenario we were speaking about photos, not videos, and using Narrative Cite NC, not MoViE, yet.
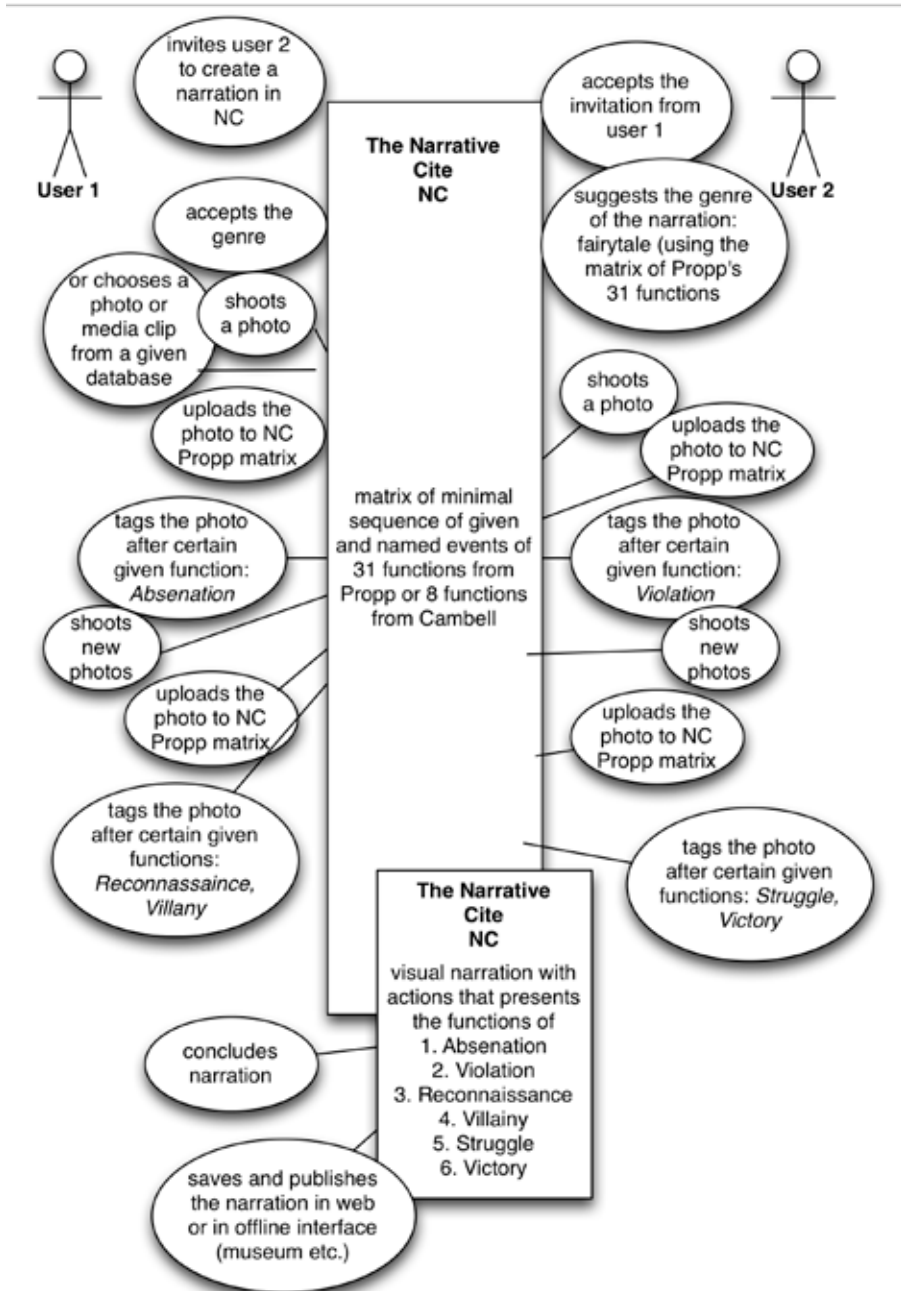
IMAGE 23. Use-case description using functions described by Vladimir Propp (1928/1968). Graphics: Marjo Mäenpää, 2008.

As Propp pointed out, all the 31 functions do not have to exist in a folktale. He insisted, however, that the functions have to follow each other in numerical order. In the use-case, the users apply only six functions out of the 31: absentation, violation, reconnaissance, villainy, struggle and victory.

OUTCOMES AND ANALYSIS

The test was never carried out in real life or with real videos due to the complicated structure and obvious difficulty for the users to adopt the whole idea. The use-case scenario proved clearly enough the need to proceed with much simpler narrative structures.

The scenario shows clearly the weaknesses of the hypothesis of using Propp's functions so literally. It was obvious that there was the opening, the possibility of an action, the passage to an act and some kind of a conclusion. However, it still remained unclear how to let the users choose without certain knowledge, and how to allow them to make choices according to Popp's structures without having a certain knowledge of the categories. This model puts too heavy a load on the users' competences and thus cannot be applied for the use of a large audience.

The question of author in this case is a complex one. The point of view in single video clips is that of an author – i.e. the user's. The user creates the action, chooses the target to shoot and also tags (names) the function from the given list of Proppian functions. The story generator (i.e. the engine) on the other hand composes the whole story. The narrative is always structured in the same way – the story follows a time continuum according to the logic of Propp's functions. According to the typology by Espen Aarseth (1997), the generator is at the same time preprocessing, corresponding and postprocessing. The "Proppian" story generator is the programmed machine, configured and loaded by a human being, producing the narrative in correspondence with the human being and, finally, letting the human select and exclude the actions – i.e. functions/tags. The "engine" is not an automatic story generator after all. In rhetorical approach, the story has a very clear human author who shoots the videos. Perhaps the engine could be seen as an implied author – though quite a boring one, telling always a structured story in the same way.

1.2. Case 2 Scenario á la Jazz – the montage

WHAT

The second scenario was much simpler, I decided to apply a narrative structure from a structured form where someone presents the theme and the others compose variations for it, the inspirations came from jazz music. The narrative is told by using a structure that begins with the presentation of the theme, in this case usually at a jazz concert – following the solos of various musicians, the variations, and finally the band playing the theme in a new, elaborated way. The structure could be formulated as: ABBBA2 (A = theme, B = variations) In the á la Jazz mobile video the first author presents the theme and gives it to the co-author to vary (see Images 24 and 25).

WHO

Again the stakeholders were Jari Multisilta and I.

HOW

The idea of a jazz-structured narrative was tested by two users in April 2008. The shooting time was decided to be one week, and during this time both of us were traveling in Finland (Pori, Tampere) and abroad in Tallinn, Estonia, and Milan, Italy. The set of rules were decided so that Marjo shot the first video and downloaded it to the MoViE platform. Jari watched the video and tried to shoot a comment, a variation, his own "solo video", which might have something in common with the first video – a rhythm, shape, image, theme etc. We wanted to test whether it was possible to create a coherent, intense and motivated storyline out of occasional video clips.

The use-case scenario describes the process where two users downloaded videos to the engine – a web-based platform – named or tagged the videos with the names "theme1" in the beginning, or "variation" or "theme 2". The engine composed the narrative according to the given structure of theme1 - variation (x n) – theme 2.

IMAGE 24. The structure of narrative with themes and variations.
Graphics: Marjo Mäenpää, 2009.
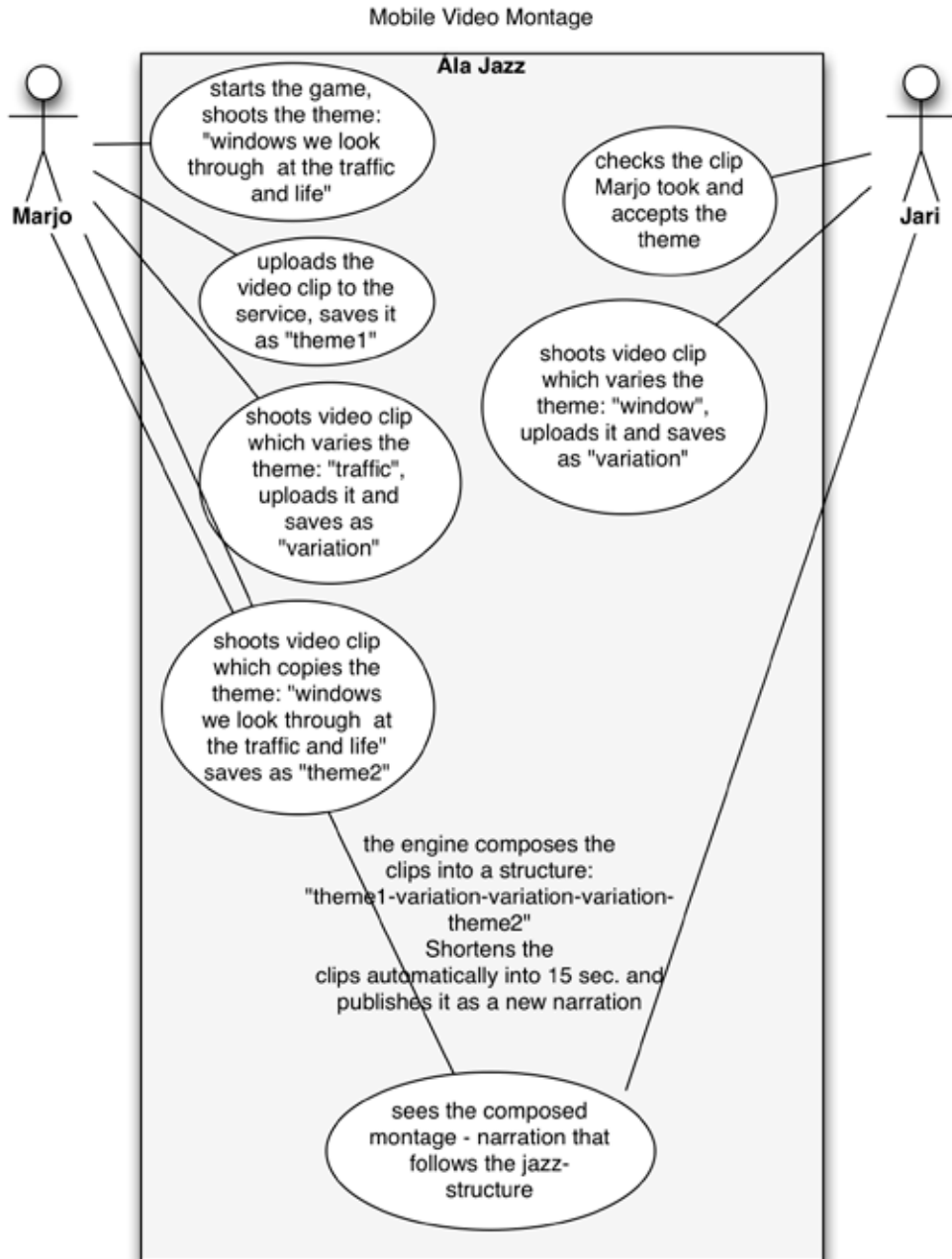
IMAGE 25. Use-case description of mobile video montage. (Multisilta, Mäenpää 2008a).
Graphics: Marjo Mäenpää, 2009.

OUTCOMES AND ANALYSIS

Our test video montage composed according to the structural model from jazz had lots of combinations, the clips varied the themes, such as 'window', 'curtain' or 'movement', and yet they created confrontation or were like visual commentaries. Also our first test with MoViE showed that, to be coherent and to create suspense, the individual video clips have to be much shorter in order to give a certain rhythm to the narration. (Multisilta, Mäenpää 2008a; Multisilta, Mäenpää 2008b).

IMAGE 26. First montage – windows from Pori, Milano, (Duomo, café and apartment), and Vantaa Airport (2:33). Screenshots from MoViE.

The montage is made up of six shots, the angle of view is from behind the window, the length of each shot is around 20-30 seconds, the pace is rather slow and doesn't in any way create an impression of jazz music. The images contain horizontal

movement behind the window, the theme of the beginning is 'window and blinds', the horizontal movement behind the window. The variations are windows where e.g. a fragmented, dispersed light, reflection or horizontal movements are repeated. The synthesis is shot from the window of an airport bus, the bus ads resemble the window blinds of the beginning. Behind the window, people are packing their things into the luggage compartment on the bus. The montage could be interpreted as a story of a trip or transition, of the viewer, views and homecoming. With a faster pace, or use of sounds, more suspense could have been included in the story. The beginning of the story, the mid-point with its views of Milan, and the end are however coincidental, a result of the work of the person compiling the remix. The video clips could also appear in a different order, and the interpretation would then be different.

IMAGE 27. Shorter version of First Remix (0:43). Screenshots from MoViE.

The shorter remix of the same shots is interesting in terms of rhythm. Certain striped elements – blinds, taped-on ads, window frames – are repeated in the images. The videos were shot in Pori, Tallinn – or on the boat to/from Tallinn – and in Milan. The remix was generated with the MoViE application, using the tags 'Theme A', 'Solo B', 'Solo B', 'Solo B', and 'Theme A2'. (Later the "solos" were called "variations".) There were two persons filming the material: Jari and Marjo.

This second montage is focused more on the windows than on the journey. The shared view, blinds, bars or even the hidden view produce different interpretations.

The result we got from the "Jazz generator" was more like a montage than a story. If examined against Ryan's definitions of conditions of narrativity, the montage narrative has several spatial settings – the videos were shot from several places and given various points of view. The change of places and rhythm creates a certain suspense. The temporal effects are tied to the horizontal movement across the shot. The movement is usually too slow to create feelings of jazz-like rhythm.

Even if it might be difficult to determine any certain individual, intelligent actor whose motivation or acts are a central factor in this remix at hand, it is obvious that there is an intentional narrator, the person who moves between the places and experiences the rhythm and movement, looks through the various windows. The *situatedness*, as Herman (2009a, 1-22) described it, in that the narrative presupposes a narrator and a presentation that is interpreted as a story about something, could be found through the viewer's imagination: The narrator is known to the users of the remix – a fellow narrator, communicator. For the larger audience the question already has more weight.

The story is built from fragments – like in sequenced narrative. There are lots of gaps between the shots and the viewer fills the gaps according to her/his understanding, previous knowledge or feelings. Under interpretation is a story about a journey; the subject, the shooting self – the eye – is an outsider, a reflector, always looking out through different windows. Also other kinds of interpretations are possible, they all depend on the frame – or in Monica Fludernik's (Alber, Fludernik 2010) words, the cognitive schemata the viewer has in her/his mind. As Fludernik writes, even without a plot, people tend to understand or interpret the experience as narrative. (Ibid. 2010, 8). The places might be familiar, there might be certain memories linked to the places, or sound, rhythm or movement. The combination and sequence of various "variations", fragments, also create meaning – like several pictures or shots in a montage.

The idea of montage was brought to the art of cinema by the Russian filmmakers Lev Kuleshov, Vsevolod Budovkin, Dziga Vertov and Sergei

Eisenstein. They developed the method of putting together two or more cuts from old films, thus creating new compositions. (See explanation of Kuleshov's Effect in Chapter IV 6.2.1.).

In 1920 researchers presented a hypothesis that montage is not only a phenomenon for film art, it could also appear in other forms of art. As Sergei Eisenstein noted, in every form of art where two elements could be linked or connected together we can also create the notion of "the third".

On the basis of the first test, the montage, it could be claimed that in this case the story is born from the viewer's interpretations. The interpretation of the journey, the transition, is one level of the narrative, the discursive level is the very shooting of the video, the mobile video, the filming community. What is essential in community-based storytelling is the giving of a structure, scaffolding; in this case the compiler, the giver of the structure, the author, places the pieces of the story, the video clips, into a certain order. The author structures the narrative. In this case it is however a real human author giving the context and actions by shooting certain objects. The human author also tags the videos – whether they are "themes" or "variations". The generator composes the order of the video clips. According to the idea of montage – or like a metaphor – the juxtaposition of images creates certain meaning, certain kind of narration.

As I wrote in the previous chapter, the narrativity lies in the structure of the pages; scaffolding is needed to maintain comprehensibility – scaffolding is also needed to create the narrativity.

Technically the test was successful. It was the first time that we managed to "communicate" with videos using the newly established MoViE generator. The test also proved that the video clips could be much shorter. We had been shooting videos lasting even as long as 60 seconds. The rhythm, information, interest and tension are easier to reach if the individual shots are no longer than 15 seconds.

It was also the first time that we tested the co-creation process. Even though the MoViE application was difficult and expensive to use abroad, it managed to mediate the visual messages from one author (user) to another. For the final outcome the existence of two authors was not that important, it was merely significant to those who knew about the test. The test was a meaningful and exciting experience to the users themselves. It was also obvious that the most meaningful – and narrative-like – remixes were constructed and viewed inside the user community. David Herman's (2009a) notion of "what it is like", the experience of living through the story world, was obvious for the community.

From the perspective of the community's activity, it is a question of communication, the messages that are mediated through the technology. The aim of the activity was to find rhythmically similar views and share them together. The

motive was to test the research hypothesis, how the sending, viewing and sharing of the mobile videos would work even over long distances. The objective was to further develop the MoViE application for sharing and editing mobile videos. The process had two stages. Jari and Marjo shot material during their travels and watched the videos they each had shot. In the second stage, they themselves compiled remixes of the filmed videos. The MoViE application served for the first time in a community-based test, where it was given the task of constructing a montage according to a given narrative structure.

Both the mobile video and the MoViE application worked here as a functional organ, a tool for combining natural human activities with artifacts that allow the individual to attain goals that could not be attained otherwise. (Kaptelin, Nardi 2006, 64).

1.3. Case 3 Barthesian structures of narrative

WHAT

Roland Barthes was the inspirer in the second scenario of the project. The hypothesis that all narrations could be transferred to different media led also Roland Barthes to the conclusion that "…all of these narrative texts are based upon one common model, a model that causes the narrative to be recognizable as narrative…" (Bal 1997, 175). Barthes' idea in brief was that there is a correspondence between the structure of the individual sentence and the whole text composed of various sentences. There are narratological structures in poetry and music that could be easily applied also to an interactive application. (Barthes 1975, 241).

As Mieke Bal remarks:

> "According to the definition used in this study, a fabula is 'a series of logically and chronologically related events.' Once we have decided which fact we want to consider events, we can then describe the relationships, which connect one event to the other: the structure of the series of events. Structuralist methodology tells us how to act. Starting from Barthes' assumption that all fabulas are based upon one model, we can begin to search for a model that is also so abstract that it may be considered universal – until, that is, the model in question is either rejected or improved. This model is then 'laid upon' the text which is being investigated; in other words we examine the way in which and extent to which the concrete events can be placed in the basis model." (Bal 1997, 188).

WHO

The Mobile Social Media research project was presented at a poster exhibition of projects and applications at The 3rd International Conference on Digital Interactive Media in Entertainment and Arts Dimea, in Athens in September 2008. The test was targeted at the participants of the conference. The Nokia N 95 mobile phone was included in the exhibition and the researchers, Jari Multisilta and I, guided the test users in the shooting and tagging (or naming of the shots).

During the Dimea conference several persons shot videos that were downloaded to the MoViE application by the researchers. The videos were tagged according to the recommendations of the previously described instructions by the people who shot the videos. MoViE worked as the story generator and it generated different kinds of narratives according to the given tags. The researchers were also using MoViE themselves.

HOW

The participants were asked to shoot short (max. 15-second) videos with their mobile phones (or the Nokia N 95 phone which was included in the poster exhibition) around the conference venue and the exhibition area. The videos were then transferred to the service and tagged. The participants had the possibility to activate the automatic generation of the video stories in the service and automatically generate videos on the booth at the exhibition (using the clips generated by the participants).

The users were asked to create the short mobile videos on four themes or tags – three of them the actor, the subject and the object based on Barthes' model – following the functions of an individual sentence. In addition, we asked the users to name the videos in a given manner – according to e.g. place, time etc. The intention was to test how the temporal or spatial element functions in social mobile video narration. (Mäenpää et al. 2009a).

In this test the participants were asked to concentrate on the object or movement they were shooting, whether it could be nabbed according to the tagging list from the given instructions. The preliminary idea was that a coherent co-created narrative could be produced from video clips that could work as structured parts of a sentence – and of a story; as in subject, place, object and verb (action).

The users were given four different kinds of instructions or guidelines in printed form:
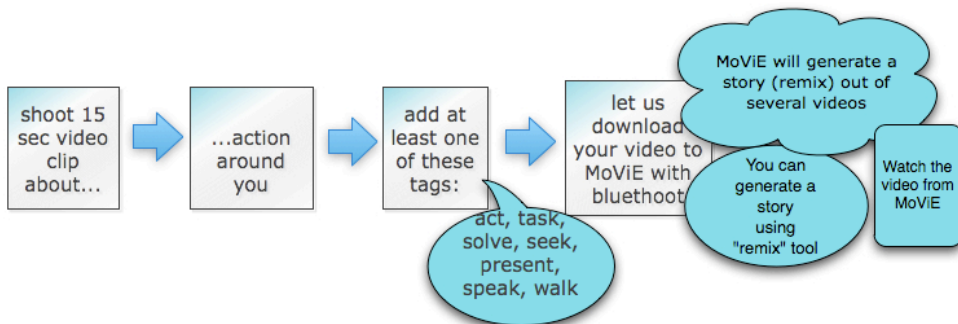
IMAGE 28. Instructions to shoot actions. Graphics: Marjo Mäenpää, 2008.
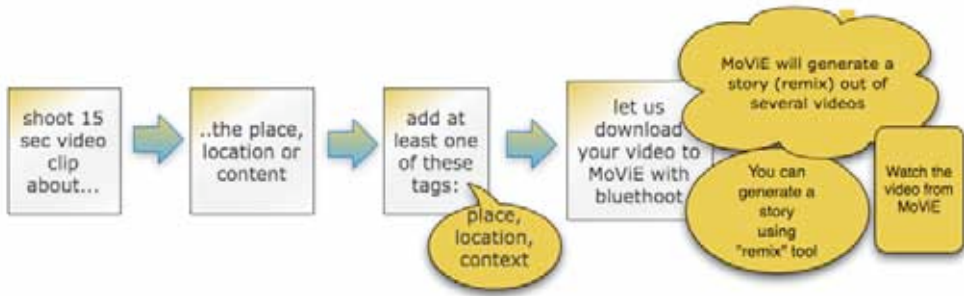
IMAGE 29. Instructions to shoot place, space. Graphics: Marjo Mäenpää, 2008.

IMAGE 30. Instructions to shoot subject, actor. Graphics: Marjo Mäenpää, 2008.

IMAGE 31. Instructions to shoot object. Graphics: Marjo Mäenpää, 2008.

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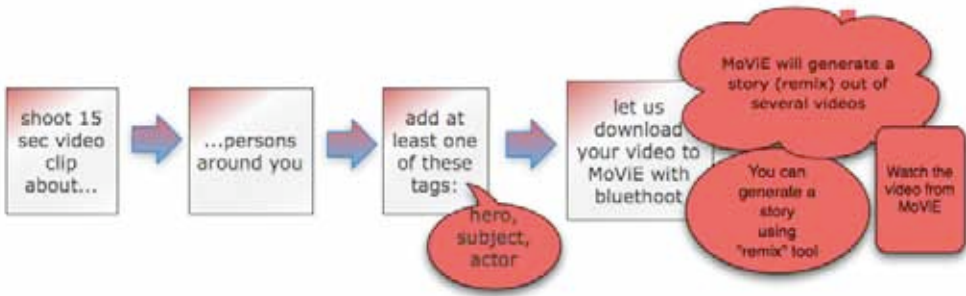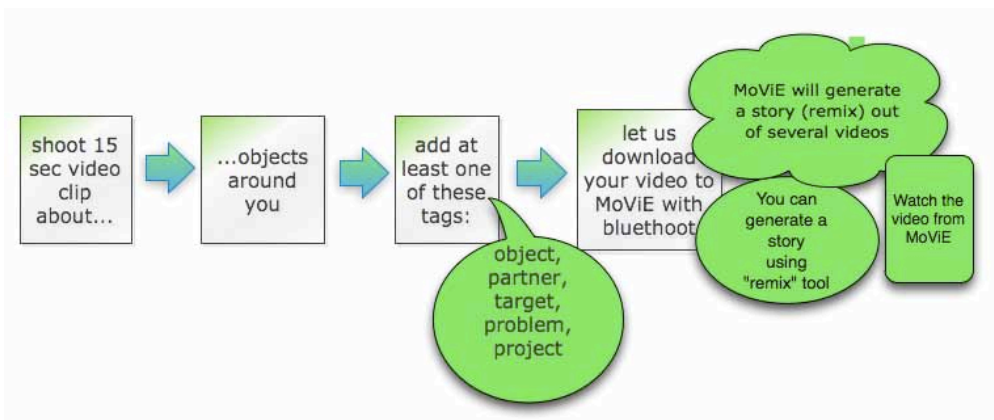
OUTOCOMES AND ANALYSIS

During one exhibition day several users shot 34 short videos. The videos were tagged after the suggestions of the users. MoViE was put to generate remixes with several variations. Below are three examples of the generated stories.

Example 1: In the editing phase the given tags were 'object', 'action', 'subject' and 'place', and MoViE generated a compilation of four video clips shot by several people:

Greek dancers coming into a hall, music
tag: object

Someone shooting the dancers with a mobile phone video
tag: action

Camera zooming to a man watching the dancer or the video shooter,
tag: subject

The dancers are disappearing to another room
tag: place

IMAGE 32. The video was afterwards named "Making movies in Dimea" (0:40). Screenshots from MoViE.

Example 2: Automatically generated remix according to the tags 'hero', 'action', 'object' and 'place'.

Video pans around the hall
tag: place

Jari sitting and speaking
tag: hero
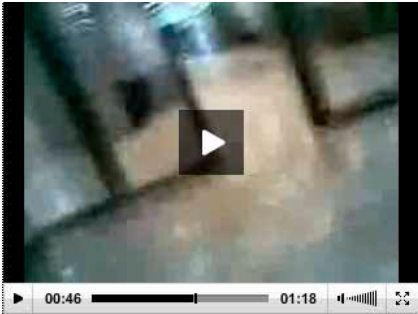
Rapid movement
tag:action

Zooming to a red fire door and the red foam extinguisher
tag: object

Cafeteria
tag: place

IMAGE 33. The video was named afterwards by the researchers as "After the lost red" (1:18). Screenshots from MoViE.

Example 3: Automatically generated remix after the tags 'place', 'space', 'subject', 'action object' and 'action'. The last video clip was surprisingly from another set from the database stored in MoViE – it was shot a month earlier during a jazz festival and tagged in a similar way.

Video pans around the hall
tag: place

Video zooms up to stairs
tag: space

Lady with the red bag
tag: subject

Rapid movement
tag: action

Two men, red trousers
tag: object

Two people dancing close to each other (jazz)
tag: action

IMAGE 34. The remix of Example 3 was named "First Floor Drama" (0:43) and it got a fictive explanation: "Dimea, entrance hall, a lady with a red bag is seeking something. Does she find it?". Screenshots from MoViE.

In the described test the authors themselves have analyzed the process of creating video clips. They discussed the thoughts and ideas the original goal and clips gave rise to. During the analysis of the remixed clips the authors/producers were in the same secondary context. (Multisilta et al. 2008b). The videos were analyzed through content, structure, and dramaturgy, and compared to the theoretical structures designed and presented earlier on. In several tests it became obvious that the final product does not come out like a common short movie or ordinary story but again, rather, as montage-like. The genre of the remixes (or narratives) is more or less documentary. The drama – e.g. seeking after red color – really is intentional.

All the Dimea remixes have story-like elements, they create the place, the situation or – in Ryan's word - the spatial setting. But as Herman argues, not all sequences of events are designed to serve the purpose of storytelling. What is needed is the experience of "what it is like" (Herman 2009a). Even if all the remixes have (at least according to the authors who tagged the shots), a hero or at least an actor, a movement or an act, an object where the action is targeted and a place, a situation when the true tension of narrative seems to be missing. Barthes' (1975) assumption might be right – the story needs the same elements as a single sentence, but it seems to also need an intelligent narrator. The abstract notions such as hero, actant, act or object might also be too overloaded or complicated notions for an average user to shoot and name. In a way the test produced the same result as the first scenario with Proppian functions. According to the Booth-Chatman model, there were several real authors, MoViE, could be seen as the implied author – which followed the given structure inspired by Barthes.

During the Dimea conference the test users, the random conference participants, shot 34 short videos which were downloaded to the MoViE database. The test with the MoViE application showed so far that it was possible to let several authors compose a video story or produce a common storyline shooting video clips independently from different places at different times. The story generator in the application served as the author or *narrator*, compiled the clips together according to a certain structure that was defined in advance. However, it became evident that, whatever the application, it shouldn't load too much data or advance information into the user's mind. The narrative structures at the generators' disposal need to be hidden or very easily adoptable by the users. The frame – or cognitive schemata, as Fludernik (2003) puts it – had also a vague phenotype. The frame was obvious only for those editors/authors who compiled the remixes. Stakeholders Jari and Marjo were aware of the context and meaning of the test conducted during the

conference. Since there was actually no community in the sense of motivation, production or action, the single video clips could be seen as a story only by the stakeholders.

However, in our first tests we tested if it was possible to set short videos composed by several authors into one universal structure so that they would automatically create a story that is enjoyable and coherent, intense and whole. After several scenarios and tests with a user group we discovered that much more complex and flexible models are needed in order to create a story. Our test video montage composed under the structural model inspired by Roland Barthes had many combinations, the clips varied the themes, such as movement, actor or place, and yet they created confrontation. Also our tests with MoViE shoved that to be coherent and to create suspense there has to be conflict. The object should be also an actor, the one that creates the tension. (Mäenpää et al. 2009a).

Again, Mieke Bal makes us step backward a few paces: "The purpose of this working method is not to force the text into a general model and then conclude that the text is indeed narrative. Such a procedure has given structuralist narratology a bad name." (Bal 1997, 188).

In this case, too, there were two stages in the process of producing the videos. At the first stage, random users shot videos on the basis of the given instructions. The users were not consciously members of any community concerned with shooting or sharing videos. Some of the participants had obvious difficulties in perceiving the objective of the activity. Apparently some of them did not necessarily have a clear goal for their activities, the shooting event lacked motive and, more importantly, need for engagement. At the second stage, instead, the compiling of the remixes was clearly goal-oriented. The researchers, Marjo and Jari, used the MoViE generator, and one of their motives was to test the hypothesis and the functioning of the generator.

1.4. Case 4 Jazz Narratives

WHAT

The most extensive and largest-scale test with the MoViE was conducted in summer 2008 during the Pori Jazz Festival. The most popular concerts at the event are major mass events attended by tens of thousands of people. They are held in a big field, people spend hours at the concerts listening to music, jamming, eating and drinking. The picnic concerts attract a wide range of visitors, including numerous large groups of friends and families. (See Östman 2010; Haverinen 2010a; Haverinen 2010b).

The aim of the test was to see how a larger group of people would video film a major mass event with a mobile phone, from their own perspectives. By delimiting the themes of the videos, the objective was to come up with a group of short clips featuring different perspectives on people arriving on the festival scene, coming to the concert site, finding a picnic place, jamming, leaving and continuing the party afterwards.

WHO

The test group consisted of 16 participants. They filmed the short videos on the given themes, either using their cell phones or digital and video cameras. The purpose of the test was to study community-based video narration – and not to test the functioning of the MoViE application yet. Afterwards, researcher Sari Östman interviewed some of the participants – researchers and planners of the project as well as close friends – for a research project of her own. (Östman 2010, 39-40).

HOW

The members of the test group had access to the concert site during four festival days. They were instructed prior to the concert to tag their short (max. 15-second) videos with words describing the acts of coming to Pori, entering the concert site, choosing a picnic place, serving the picnic, opening a bottle of champagne, listening to music, leaving the concert site and continuing the evening afterwards. The idea was that the videos filmed by the group could be turned into a chronologically proceeding description of attending the festival. The test group members were asked to film the videos themselves and transfer them to the MoViE service. They were given instruction on how to make automatic remixes.

In addition to the festival story, the participants were asked to film short videos portraying pleasant or unpleasant aspects of how the festival was organized.

'Rose' tags were used to portray good festival atmosphere, while 'stick' tags were used for such subjects as rest room queues, running out of toilet paper and rain. It goes without saying that more 'stick' videos were entered in the service.

Note to the test group[25]:

"Hello again – almost all of you have already got your wristbands, for those of you who haven't: you can fetch your wristbands from the University Center, University of Art and Design, my office. I am there irregularly during regular business hours – or you can reach me by cell phone at 044-7012836.

There is a different colored wristband for each day
Thursday: dark green
Friday: pink
Saturday: purple
Sunday: light green (lime)

In addition to the wristband, you will need a cheerful, experimental mindset. The idea of the test is to compile one festival story (or possibly more) on people's different experiences at the concert. The story will include small, short glimpses filmed by several people, allowing us to compile on video a shared experience from the various individual experiences.

Remember to present your experiences in compact form, the MAXIMUM LENGTH OF EACH VIDEO IS 15 SECONDS. Longer shots can be numbing for the viewer and the pace of the story tends to suffer.

In order to produce a dramaturgically coherent story entailing different perspectives, we will all film the same themes, e.g. coming to the festival, entering Kirjurinluoto, seeking for a picnic place, what is eaten and drunk there etc. For copyright reasons, we are not allowed to film the music or the performers closer than 100 meters apart, and the music sequences cannot last more than 15 seconds. The names of the clips, i.e. **the tags, are the themes** that are filmed. Not everyone has to film all the themes, and you need not worry about sequencing them – the generator will take care of it. When the videos are uploaded into the MoViE service, you can include a explanation for each clip, in addition to the tag – i.e. name. Include, at least, a following type of explanation:

---

25   Marjo Mäenpää's email to test users, 17 July 2008, translated from Finnish.

1) Describe the story of your visit to the festival. The story is divided into shots, the shots are downloaded into the service and tagged with the following tags (the tags can be named later, too, when you are uploading the videos into the MoViE service, you don't have to carry along the stack of instructions while filming).

Tag/name/keyword	explanation
saapfestari	coming to the festival
saapareena	entering the Arena
pnpaikka	choosing picnic place
pntarj	serving picnic
shavaam	opening champagne bottle
mk	listening to music
pois	leaving
jatk	after-party

We will all film short clips and download them into the MoViE service, named with certain keywords, i.e. tagged. Through automatic compilation, the clips will be turned into coherent stories featuring sequences filmed by different members of the test group.

In addition to the story, we will film:

2) Audience feedback using the videos. The aim is to film 'roses' and 'sticks' for the organizers of the festival. Feedback can be given by for example filming a portion at a restaurant serving excellent food and the event of eating it, transportation arrangements, neatness, length of a rest room queue, time spent queuing, etc. The filmed clips will be transferred into the service (still in moderated form, unnecessary material is sorted out). **tags:** rose, stick, food, service, neatness, transportation, program, queues.

3) VideoChallenge: Challenge a friend and film the audience's best jamming session by using the 'reply to video' feature of the MoViE service. **tags**: jamming (+own specifying tags).

The videos are transferred to the MoViE service either directly from the festival site by using the Pori WLAN network (free of charge if your phone supports WLAN), by computer by transferring a video first from your phone to a computer and from the computer to the MoViE service, or from the phone using the 3G network (3G data transferring is subject to payment, we cannot compensate for data transferal costs).

NOTE! Film clips with a maximum length of 15 sec (even shorter ones work the best with the service).

If you are not filming with a mobile phone but are using e.g. the video feature of a digital camera, the videos will be transferred from the camera to a computer and from there to the service after the concerts.

The MoViE service is operated online and it is used either by phone with browser or on a computer with browser. I will let you know before the festival the address of the service and how to create a user account.

Enjoy your sessions, if you have any problems or questions, give me a call: 044-7012836 (I'll answer if I hear the buzz).

Marjo

A use-case scenario was created on the test:
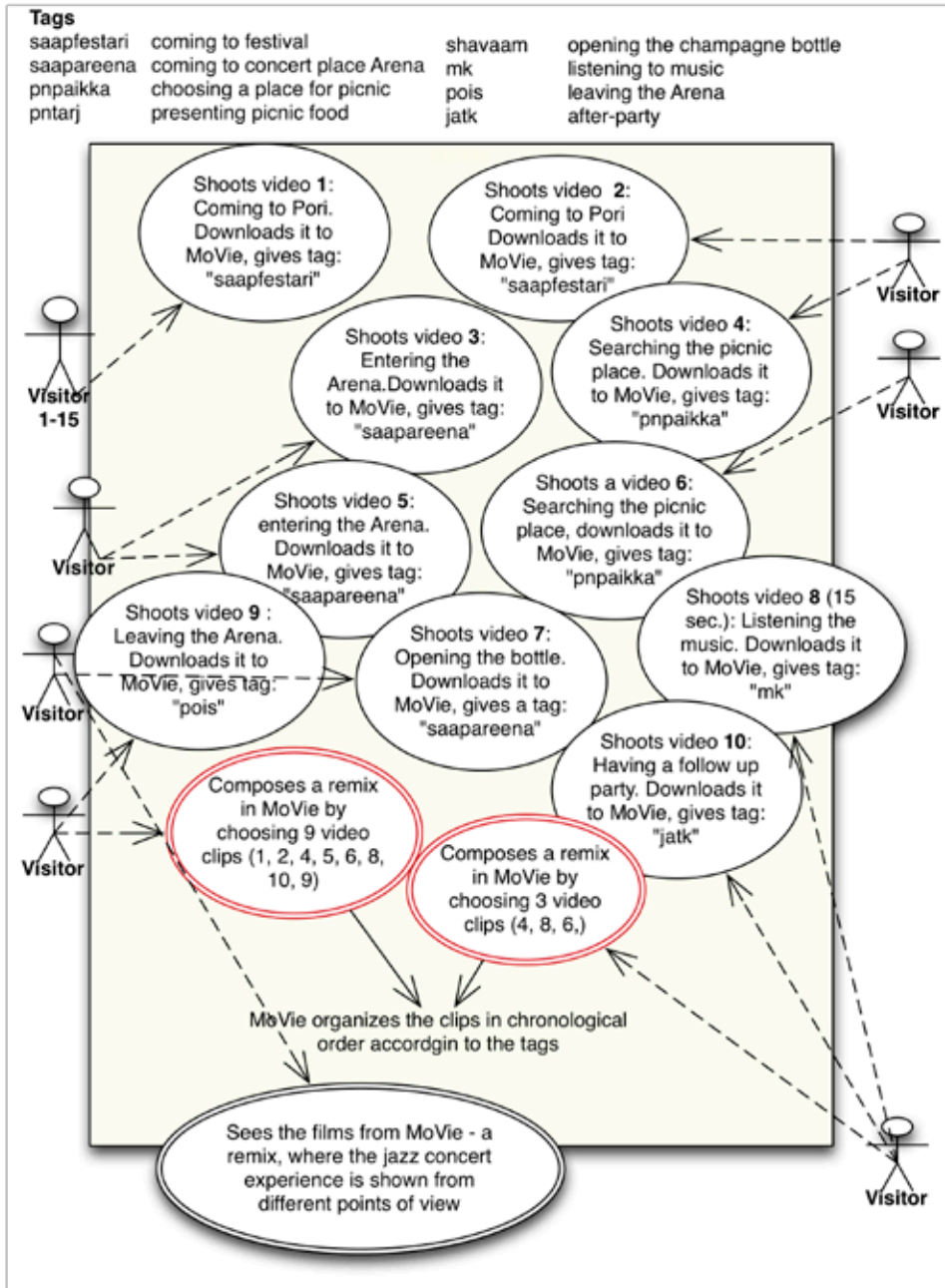
IMAGE 35. Use-case scenario describing the multiuser situation at the jazz concert.
Graphics: Marjo Mäenpää, 2008.

After the concerts the users produced themselves different remixes in MoViE.

OUTCOMES AND ANALYSIS

A user named Jari let MoViE generate a compilation according to the tags 'coming to film', 'jamming' and 'leaving'. MoViE generated the videos into a somewhat unwanted sequence – one more 'jamming' video follows after a shot on 'leaving'.

Example 1.

tag: saapareena   **tag:** mk   **tag:** mk

tag: mk   **tag:** pois   **tag:** jatk
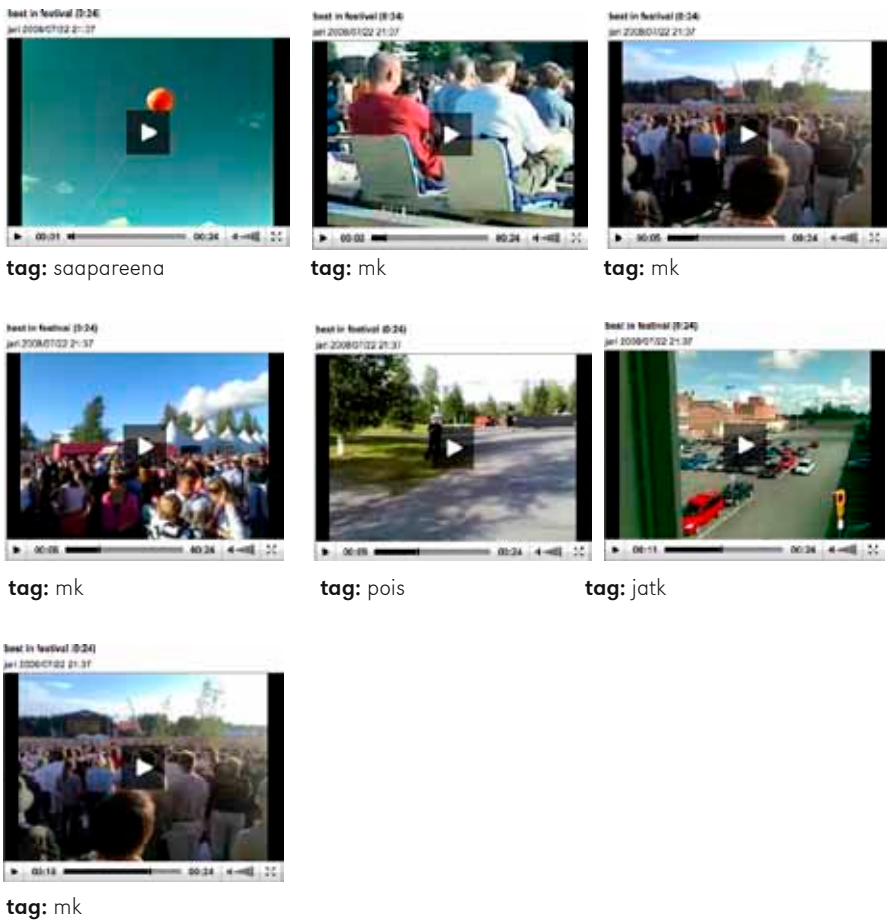
tag: mk

IMAGE 36. Best in festival (0:24) Jari 2008/07/22 21:37 generated from short videos by several users. Screenshots from MoViE.

Example 2. Jazz-remix 1:24

tag: saapfestari

tag: saapareena

tag: pnpaikka

tag: shavaam

tag: mk

tag: mk

tag: pois

IMAGE 37. The Jazz remix is generated from short videos by several users, using the narrative chronology of first coming to the city, then spending the day at a concert and then leaving the concert site. Screenshots from MoViE.

Example 3. Remix: Kooste risu (1:02) Jari 2008/08/22 10:24

I want to get to the toilet!

One bum came in for free...

Raining!

One bum came in for free...

There is a 200 m queue to the ladies' room!

It's raining and I can't see anything

Ok, now we are in a crowd

Men can go to the toilet without standing in a queue

There is no soap!

IMAGE 38. The remix is generated in MoViE using the tag 'risu' (complaint/"stick"). There was an activist who downloaded several complaints using various tag words and therefore the MoViE generator picked one shot twice. The texts are about the words said on the videos. Screenshot from MoViE.

The test group interviewed by Sari Östman reflected on the element of narrativity as conveyed by the shots: "The filmed videos, as one of the informants stated, were entire stories of their own – they cannot necessarily be verbalized as such. The experience of the test subjects is thus reconstructed in two ways: visually and verbally." (Östman 2010, 53. Translated from Finnish).

Östman's interview study (2010) sheds some light on the way in which a community operates in a situation of filming. Östman wanted to retroactively collect the user experiences from the test group (2010, 42). One difficulty in achieving this objective was that MoViE had at that stage been solely developed for research use, its usability was still poor. Östman chose four themes for the interviews: 1) getting to know the application, 2) experiences of filming and downloading the video clips, 3) experiences of using the MoViE application, and 4) developing the stories and narration. (Östman 2010). From my particular perspective, only the fourth theme was interesting, the questions and answers dealing with the usability of the application and with the filming itself touched upon the usability of the incomplete test version (and were thus valuable in terms of developing the application further).

Östman's interview results show that only the 'activists', i.e. mostly the members of the research team, wanted or knew how to compile remixes of the filmed short videos. Most of the other members of the group had gone to separately watch the separate shots and remixes filmed by other members. The objective of most of the users was secondary in terms of the test. The users were given a free ticket to the festival, and perhaps the greatest motive for taking part in the test was the chance to get to hear music and attend the concert. Sharing experiences through mobile videos may have been the motive for participation only for a part of the group. For this reason, the videos shot during the test are of very different quality. Most of the users found the artists and the music featured at the concert the most natural topic of filming. Due to copyright requirements and various recording agreements restricting the filming, these shots had to be removed from the MoViE application. So the most natural shared memory of the concerts, i.e. the music, had to be left out of the test.

The memories of the users were connected to the situations of filming, recording their own experiences and communicating them through moving image. (Östman 2010, 49). Since the test group had been given themes in advance to film videos on, the participants said that they had had to wait for the right kind of moments and atmospheres:

> *"Oikein odotin esimerkiks, mul oli hirveen hieno otos kun nuori pari suutelee niin jäin oikein odottamaan että no, no, no, toimintaa, pliis!"* (Östman 2010, 49).

> *"I actually waited, I had for example this really cool shot of a young couple kissing, so I stayed waiting, thinking 'give me some action, please'".* (Östman 2010, 49. Translated from Finnish).

Recording the experiences was easier for those users who were already accustomed to using a camera or camera phone for that purpose. The filmed events apparently left the clearest memory traces of the entire concert festival. "Through the filming, also those elements gained emphasis that might have otherwise, too, dominated the later interpretation of the Jazz experience", Östman writes (2010, 49). The overflowing urinals, the toilet queues, the sources of complaint, aroused a lot of discussion still in the interview situation. What remained most memorably in the test subjects minds was the impact of the filming and the assignment itself on their own experience.

Östman also separately interviewed the two researchers who took part in the test (of whom I was the other one) (2010, 51). "The interviewees felt that the remixes made by the other participants seemed long, like a mother-in-law's photo album or a neighbor's photos from a trip to Mallorca. They didn't interface with the maker's own festival experience nor did they tempt others to use them in remix combinations." (Östman 2010, 51). The group of 16 persons included several people who didn't know each other from before, the group members didn't get together before the start of the project and most of them had no preconceived idea of the reference group and preferences of the other members. Perhaps for that reason, part of the themes were felt as alien by some of the members. On the other hand, the strongly shared themes, especially the sources of complaint, such as the rain, the toilet queues etc., were material that everyone recalled and used in their remixes.

The narrative structures of all the remixes composed from the short video clips were more interesting than in the previous cases. Again there were several real authors – the users who shot the video clips and tagged them – who gave the meaning and context for the narrative. Also the editor, the user who edited the remix out of the clips, could be seen as a real author. The concept of implied author is more obvious; in the published remix the viewer (reader, narrateé, or implied reader) saw a story where several actors performed the concert experience. At the narrative level the story world was coherent, even if the clips were filmed during several days, the story was told about a one and same event and experience from the point of view of one narrator. The narrative parts presented the story where someone – or a group of people – is entering the venue, seeking for a place to eat and enjoy themselves, meet others, and leave the place. The mood, the circumstances and the "conclusion" could be seen in the last picture: Is the narrator leaving alone, does she have a company, is there an after-party?

Also the specific semiotic gestures that form a narrative, in Ryan's definition (2006), could be found in the story. The action was presented by various actors

– and also by the implied narrator. Temporality and causality were clear since the tags "forced" MoViE to generate the clips in causal and temporal order. The context of jazz festival was a strong building block for a common schemata. The world construction was created by the community for the community. It was obvious that for those who shared the experiences by acting, shooting and narrating, the Jazz Narratives occurred as stories.

1.5. Case 5 Christmas Story

WHAT

The test with an international user group was carried out during Christmas Eve – with users from Philadelphia and New Jersey, USA, Western and Eastern Finland and Vilnius, Lithuania. The structure of this test was more game-like. This small community was asked to create a story or montage containing communication, comments or tension between the short clips. The idea was to test how a small community could share their experiences through generated video narration. (Mäenpää et al. 2009b).

Christmas Eve follows – at least among Finns in families – a rather uniform dramaturgy and storyline: At 12:00 the official beginning of Christmas is announced from the City of Turku, the Christmas tree is decorated, kids become overwrought with excitement, television has a major role in calming down restless people. First, Christmas dinner is served in the evening, Christmas sauna might be ready already in the afternoon, and the most important event, the climax, could happen any time between 5 pm and 10 pm: Santa Claus – and the presents, of course. His appearance is always a surprise, the smaller kids are scared of him, the older ones might present a song or a poem. The adults help Santa deliver the presents. The atmosphere calms down – silence in front of the new toys, books and socks.

We wanted to test to what extent our own Finnish Christmas Eve followed the tradition, would we make critical or opposing comments? Could we share our festivity even when spending the evening far away from each other?

WHO

All the members of the test group were part of my close community. Three of them worked within the Mobile Social Media research project and all of them were well get acquainted with the subject of video screenings and media narration. The members from the US were not all that familiar with mobile media. Some of the members used a video camera instead of a mobile phone. The test group was named: Marjo, Riikka, Saija, Trish and Slavko. The group distributed the roles: Marjo made the first statement, which the others tried to oppose, ban or make controversial remarks on.

HOW

According to the instructions for the group, with the MoViE game:

1. Marjo shoots a theme story – 15-sec video – downloads it to MoviE, sends an SMS to the others, to notify that there is something to see

on the web site http://amcproject.pori.tut.fi/ in Christmas story test group folder / or in the mobile. Marjo tags the video with "theme 1" – and with other tags if necessary

2. Riikka, Saija, Slavko and Trish comment on Marjo's video – with one or more short (max 15 sec) videos. After shooting they download them to MoViE http://amcproject.pori.tut.fi/ Christmas story test group folder (with PC or mobile) and tag the video with "variation1" and with other tags if necessary.

3. Marjo can shoot another theme or video to comment and the rest of the group comment on it. Marjo tags the video with "theme 2" – and with other tags if necessary. The others shoot commenting videos and tag the video with "variation 2"– and with other tags if necessary.

4. The second phase is to generate automatically a remix out of the videos. Remix organizes the videos after the tags: theme 1, variation 1, variation 1, variation 1, variation 1, theme 2, variation 2, variation 2 etc. The result is a short movie with dialogue presenting our common Christmas Eve.

The aim was to

1. share the events and experience of Christmas Eve
2. create tension and conflict into the video dialogue in order to create a story with dramaturgical tension.

During Christmas Eve the test group shot 21 short video clips. The clips were tagged with words like 'tree', 'food', 'singing', 'snow', 'waiting', 'sauna' etc. Some people also gave titles to their videos, such as "Save the Last Dance" or "Greetings to Granny". Marjo, who served as a kind of quarterback in the remix, always named her theme shots.

Afterwards the test group was able to compose several remixes by, for example, picking up all the films tagged with 'tree' or 'food'.

An automatically composed remix of 20 short video clips presents how people spend Christmas Eve together with their friends and families. The total length of this example remix was 5:22. It more or less followed the storyline as first intended – the timeline of Christmas Eve – but since there were videos from several time zones, Christmas Day had already started elsewhere while friends in Philadelphia were still enjoying their late dinner the night before.

Marjo, "Silent Christmas morning" **tags:** 'snow', 'waiting', 'Roosa'

Slavko, "Christmas Eve Door", **tags:** 'leaves', 'newspaper'

Saija, "Silent Christmas Morning", **tags:** 'morning', 'food', 'hurry', 'too late'

Marjo, "A Nervous Christmas Tree", **tags:** 'Christmas tree', 'waiting'

Trish, **tags:** 'tree', 'cakes', 'table'

Riikka, **tag:** 'tree'

Riikka, **tag:** 'present'

Marjo, "Light My Fire" **tags:** 'sauna',

Sajia, "Light My Fire", **tag:** 'danger'
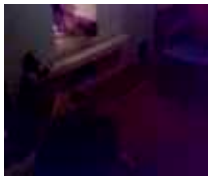
Marjo, "Sauna Is Ready", **tags:** 'sauna', 'Christmas Eve', 'Roosa'

Marjo, "Get Together", **tags:** 'Christmas tree'

Riikka, **tag:** 'singing'

Saija, "Save the Last Dance", **tags:** 'wine', 'relaxation'

Riikka, **tags:** 'food', 'porridge'

Slavko, **tags:** 'pizza', 'food'

Slavko, **tags:** 'greetings', 'conversation'

Marjo, "Eating a Lot" **tags:** 'food', 'salmon'

Trish, **tags:** 'cat', 'tree', 'supper'

Slavko, "Preparing for Dinner"

Marjo, **tags:** 'home', 'solitude', 'Roosa', 'winter', 'peace'

IMAGE 39. Christmas remix with 20 video clips. Screenshots from MoViE.

OUTCOMES AND ANALYSIS

The structure of the story varied in the different remixes. In the example story one can distinguish the main character as the dog Roosa. The remix could be shown as a visualization of a story about a little dog who travels home from the forest, to find there the fire and sauna and peaceful Christmas morning – and discover what the others have been doing in the meantime; preparing for the feast, singing and eating.

In this case, the story was again built in the mind of the one who saw it. Also other kinds of variations or interpretations of the narrative were assumable. Even if the construction was created like a dialogue between Marjo and the others, the narrative did not contain any extra tension or special suspense. The story resembled stories in life publishing.

If one tries to draw a flowchart or visualize the structure of the Christmas Story, it comes out looking like the model Claude Bremond drafted when evaluating and developing further Propp's functions:
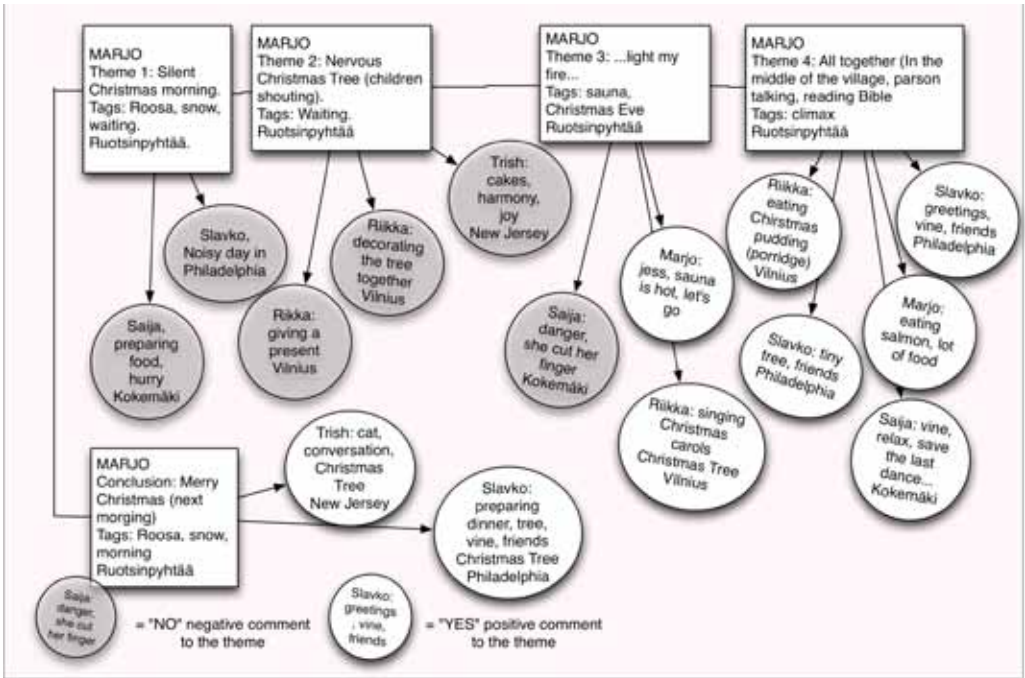
IMAGE 40. Flowchart of the narrative structure of Christmas remix.
Graphics: Marjo Mäenpää, 2009.

Building on Propp's methodology for analyzing folk tales, Bremond also breaks down the narrative into a lowest common denominator of elements. However, where Propp divides the tale into a series of functions, sequentially dependant on each other, Bremond groups these functions into a more general and flexible categorization. Furthermore, where the 31 functions presented by Propp are sufficient in and of themselves regardless of who carries them out, Bremond insists on the importance of the role of who carries them out. He defines a function in terms of the action a character takes and its effect on the story. (Bremond 1980, 387-411).

Bremond's functions refer to the discernible, separate sequences of narratives. Bremond does not, contrary to Propp, presuppose that the functions would always appear in the same chronological order. The narrative is comprised of different sequences of actions, which, when joined together, make up a coherent whole. Each separable sequence answers in some way the question 'yes or no'. The connection between Claude Bremond and scriptwriting

for games or interactive storytelling is obvious. Each 'yes' and 'no' answer leads to a new alternative.

The Christmas Story remix can be further described through Bremond's model of functions. The themes initiated by Marjo are sequences of events, which the other participants in the story comment on by either giving an affirmative answer or presenting a different alternative (in the flowchart, white actions for 'yes' and gray actions for 'no'). The different answers give the story its tension. Answering 'yes' or 'no' does not necessary lead to an alternative solution, since all the comments were real-time answers and affected the themes somehow. Afterwards, when composing remixes from the clips, each comment can open up new interpretations and paths. In an interactive model, the viewer could even steer the story so that only the 'yes' comments would be chosen into the remix, creating a fully harmonious and positive representation of Christmas Eve.

The actual author in this special story was Marjo, the implied author set the context and story world – the story that was narrated through the experiences of little dog Roosa. The acts (video clips) were targeted at the community – and at the narrative level more virtual and implied. The real audience took actively part in the narrative process.
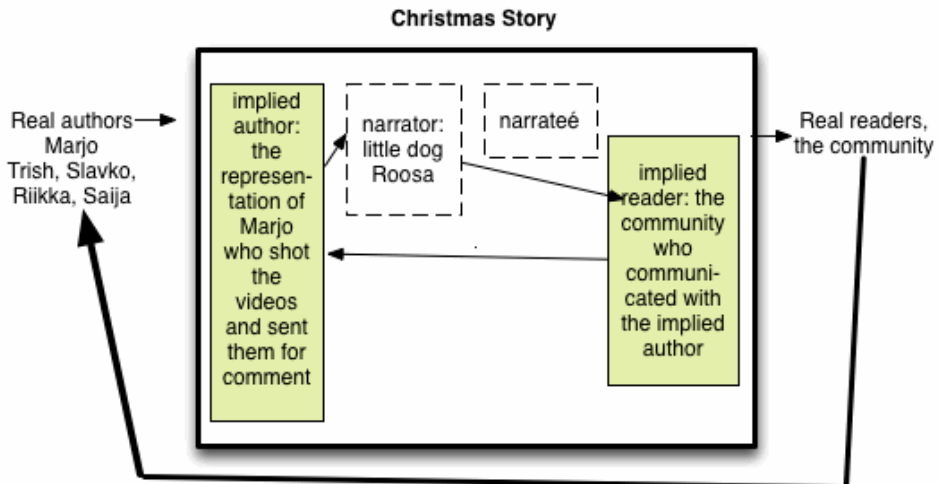

IMAGE 41. Booth-Chatman model in applied interactive structure. The authors – real and implied – communicated with each other and acted also like readers. The audience of the story remained more or less passive or "silent". Graphics: Marjo Mäenpää, 2012.

When looking at the narrative in another way, the discursive level – the context, the attitude, the space and the time continuum were the same for the whole community in all the remixes. The level of story (fabula) varied in the different remixes.

It is obvious that the different interpretations of a single remix are born in the viewer's mind. Construction of the story is easier and more natural for members of the creating community, in this case, the test group. It is facilitated by a mutually agreed-upon context, a shared social reality. The remixes are very random and the order of the different clips may vary, depending on what kind of tags one lets MoViE generate – and in what order. The Christmas Story test started from one idea of presenting and commenting on the way Christmas Eve is spent among a designated group. The method of commenting was established to bring the element of tension into the remixes, which was lacking from the previous tests. However, the narrativity was not so much born from the separate comments (the 'no' answers, in accordance with Bremond's model) as from the sense of communality and the communication between the members. In our experience, the short video clips shot on Christmas Eve are not enough by themselves to attract any great amount of interest in anyone falling outside the community. As opposed to the Jazz Festival test, the Christmas Story test group was more closely connected. At least one of the members was known by all the members. In compiling the video clips into a story, this person served as a kind of director, keeping the structure together (scaffolding).

The role of social media and community was important. One of our hypotheses before the Christmas Story test was about the experience of entertainment being more obvious if the community that shares the mobile videos – and in our case also composes them (several different authors) – is already connected. The role of the actor or narrator remained – at least in this first remix – with Marjo, the quarterback, the constructor of the story. The dialogue between the different members took easily place because everyone knew Marjo and at least two other persons in the group. The members were motivated to shoot and share their clips, and they were also motivated to see the others' clips beforehand and to compose other kinds of remixes. Different combinations on the food that was filmed and eaten during Christmas Eve were shown in various remixes, and also variations of the Christmas trees were featured in one of the remixes.

Furthermore, my research in this respect also derives from the field of community analysis. It can be seen that groups, institutions and agents are the crucial elements when it comes to creating new cultural, coherent and immaterial social patterns that can be helpful in the process of understanding and grasping

the story which is produced via these mobile social platforms, such as the MoViE application. Social formations are included in people's understanding of and identification with a socially composed and socially functional story.

However, the individuals in the community had the ability and need to act. Here the functional organ was the MoViE application, the site for saving and editing remixes and sharing videos within the community. Everyone in the community had relatively easy access to the tool and people could use the tool according to their own special competences and recourses. As Kaptelin and Nardi write (2006, 64), "*Tool-related competences* include knowledge about the functionality of a tool, as well as skills necessary to operate it. *Task-related competences* include knowledge about the higher-level goals attainable with the use of a tool, and skills of translating these goals into the tool's functionality." In the Christmas Story test the whole community shared the same kind of knowledge and competences in using the tool (MoViE) and performing the task – the goal was interesting and desirable for everyone and the members were highly motivated to work together. Here the technology itself remained in the background in shooting and downloading the videos to MoViE. Again, creating remixes was more challenging; only Marjo, Riikka and Saija composed various remixes, but everyone in the community watched and commented on the remixes.

The Christmas Story was composed by a group that shared a common goal. The members were committed to taking part in the test and their actions focused on the need to share their own experiences of that Christmas Eve. The task was made easier by its structured nature the members were required to comment on the videos sent by Marjo and to send their comments over to be viewed by the others. Each member of the group was familiar with the technology, although some of the members recorded their comments by some other means than the mobile phone.

VIII CONCLUSIONS AND FINDINGS

1. The most prominent findings

The objective of my research has been to study narrative elements in mobile videos that were filmed and shared within a community. I have sought an answer to the question how people tell mobile stories using their mobile phones and how a community creates narrative through mobile phones, using video. One of my main hypotheses was that mobile and collective story production is a creative process where the end result is unpredictable. I have examined whether new methods and technologies are changing the way in which we narrate our everyday reality. In this sense my first conclusions are more or less external and societal mainly due to the development of mobile technology and trends of using social media in everyday life. During the Mobile Social Media research project I studied if a community was able to create a tense story with mobile videos by itself, or if it needed structured guidance. Through literature and tests carried out during the research project with a specifically developed MoViE application, I investigated how mobility changes the structure of a collective story – by eradicating the limits of time and location.

1. The practice of sharing and publishing visual life stories (photos, videos) within a community has become increasingly common.

2. Media, experiences and stories are increasingly shared in a mobile context.

3. The motivation to share images, videos, experiences and observations is higher if the community shares the same reality and has common goals. Media content shared in a community is more easily perceived as a story and a coherent entity the closer the community is, and if the members have a common horizon of expectations, schema.

4. Community-based narration requires accessible and usable structures for people to be able to perceive the published fragments as stories. In the design process of new applications for sharing and publishing the users are often the best producers and designers.

5. Co-created narration in social media is creative, active engagement where the publisher and viewer take part in telling the story.

6. The marginal conditions and design principles of narrativity are met in co-created mobile videos at the moments of editing, publishing and reception.

7. Co-created narration, production and publishing of remixes require an author – a producer, a compiler, a cohesive force – scaffolding means the construction of a ladder, a creator of the structures. These obvious roles in co-created narrations are author, narrator, narrateé (or viewer), users and community.

8. The mobile medium has several tasks – transmitting information, forming the support of information and forming the sense of community.

9. A community that shares media and publishes content together is a typical community of innovation based on trust.

1.1. Sharing experiences

The practice of sharing and publishing visual life stories (photos, videos) in communities has become increasingly common

I proceed from the basic idea that people perceive both their own lives and the world and its events through narratives. Narrative provides one model of explaining the world, by analyzing the experience of time, place and changes in human life. The element of *emplotment* is always operating in life. David Herman (2010) and Monika Fludernik (1996; 2003), among others, have written about how people perceive reality through narrativity.

As the use of social media has increased, I have noticed that structures of narrativity and storytelling can be found to a remarkably high degree in people's daily communication. People post their observations on Facebook and Twitter, share experiences, reveal things about themselves selectively and in dramatized form. People have also increasingly started to tell their stories visually as well – through images and videos.

Mobile media increase people's opportunities to tell others about different events and their own thoughts to an unlimited extent. In December 2011, for example, during one minute on the Internet, more than 98 000 postings were published through Twitter, over 600 videos were uploaded to YouTube and 695 000 new Facebook status updates could be glimpsed by friends in the network.[26]

Publishable contents are constantly "launched online" to be viewed by the whole world and a few, lucky videos published on YouTube, have, in fact, given their authors the proverbial fifteen minutes of fame. Most of the messages and images published in social media services are however meant to be read and viewed by the user's close circle of friends. The people in the – gradually growing – community receive, register and sometimes comment on each other's contents.

The tests carried out within the Mobile Social Media research project showed that people are most interested in filming moments of their life and experiences if they are familiar with the publishing channel and have a common theme. The mobile video images from the Jazz Festival (Case 4) and the Christmas Story (Case 5) were connected more closely to each other; the authors were sharing the same

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26 *Lubin, Gus, 26.12.2011 Incredible Things That Happen Every 60 Seconds On The Internet, Business Insider:*
http://www.businessinsider.com/incredible-things-that-happen-every-60-seconds-on-the-internet-2011-12?utm_source=twbutton&utm_medium=social&utm_campaign=sai#ixzz1hv51VhBL
(reviewed 28 Dec. 2011).

experience. In contrast, the shots filmed by random conference participants (Case 3) were more difficult to perceive as coherent stories for the designers and for the random audience at the conference. The authors were, in a way, "playing around" with their mobile videos, without the motive of sharing and publishing content.

1.2. Mobile sharing and publishing

Media, experiences and stories are increasingly shared in a mobile context

Life publishing has become a part of people's everyday lives, extending gradually to more and more distant acquaintances. The sharing of mobile images and videos has essentially become a practice that moulds people's daily behavior. (See Östman 2010; Östman 2012).

The test conducted in the Mobile Social Media project during the Pori Jazz Festival (Case 4) showed that people were apt to change their own, traditional way of acting in a festival situation as they sought objects to film for their mobile videos. (Östman 2010, 49). During the various tests we also noted that the task of filming and publishing may change the way in which we act.

Mobile pictures are however taken in enormous amounts. Millions of mobile phones contain millions of hours of experiences, memories and moments to share and watch again. Different story generators, automated video editing applications, can provide useful tools for home photographers and facilitate the experience of the viewer; an even loosely structured story presented in narrative form can be more rewarding to watch.

The article *Understanding Videowork* by Kirk et al. (2007) also points out that mobile videos are different by nature; lighter, more spontaneous and less serious "…what one did with a video camera was different to what one did with a camera phone. The latter was to play with, something that let them do things on the spur of the moment; the other, something you did when you were being 'serious.'" (Kirk et al. 2007). However mobile pictures or videos do not have less importance in documenting the experiences. Mobile audiovisual media offer a radically new way of communicating feelings, experiences and events.

The possibility of shooting images and sharing them everywhere spontaneously increases the possibilities and means of communication – not to mention the pleasure it brings to the ones sharing and receiving the content.

In today's context, mobile videos may record spectacles, major events or unusual phenomena. Family gatherings and family rites of transition are still

documented with "ordinary" photo cameras, while exceptional, impulsive material is shot with camera phones. Photographing with photo cameras has to do with skills, photographing with mobile phones is more closely linked to social situations. (Poikselkä 2010, 150).

With mobile images it has become apparent that the act of taking the pictures is more important than the act of watching them. It is obvious that the act of taking photographs is a form of contemporary consumption rather than a link to the history of a community. (Koskinen et al. 2001, 25). The taking of a photo presupposes that a group of some kind gathers together to be photographed.

1.3. The schema

The motivation to share images, videos, experiences and observations is higher if the community shares the same reality and has common goals. Media content shared in a community is more easily perceived as a story and a coherent entity the closer the community is, and if the members have a common horizon of expectations, schema.

In social media networks users typically join a community, pool or cluster sharing similar interests. The users thus share, for example, personal videos inside a relatively closed community. Social formations are a crucial part of users' understanding and identification towards socially composed and socially functional stories.

People who have the same values or similar interests or the same cultural background can more easily adopt and grasp even the loosest structures of a story.

Personal experience motivates people to try different technologies and also helps them to understand the complex operating mechanisms introduced by new technologies. If the rapidly increasing and developing technologies and media publishing channels should remain only in the hands of a small group of "technology freaks", a significant amount of our cultural heritage, both oral and written, and foremost, of our visual experience, will be left unshared and unrecorded.

Even though in all of the cases described in Chapter VI the participants were acting in a test environment, we can still examine whether their primary need and motive, in each case, was to share experiences or, more so, to create a narrative, to compile remixes. In most of the cases the participants had been given a pre-

structured assignment, the themes, topics and context for the mobile videos were collectively known (Cases 2, 4 and 5), and the participants were motivated to film the events and experiences in certain pre-given contexts.

In the first actual mobile video test (Case 2) there were only two persons doing the filming; the assignment was relatively open but the theme and the structure familiar from jazz music were clear. The test users had the task of commenting on the experiences they each had had during their trip. The results were several different montages from the shared videos which the two testers published. They both created their own stories largely on the basis of a common schema, the horizon of expectations was set in the themes of travel, windows and changing pace of images.

In the test carried out at the Jazz Festival (Case 4) there were more participants and they didn't all know each other in advance, but the context was the same for them all. They all knew to expect in advance stories and video material on a concert at a Jazz Festival, getting there, enjoying picnic food, jamming to the music and leaving the concert site to continue the party elsewhere. The filming of both the good experiences and the sources of complaint in the festival arrangements, the likes and the dislikes, was a task everyone could easily identify with. (Östman 2010).

The Christmas Story (Case 5) images were shot by a group of people who didn't all know each other in advance but were, however, united by the universal idea of a holiday and how it is celebrated. The differences in the celebrating traditions was also a uniting factor for the group, the members knew to look forward to different views and ways of spending Christmas Eve. Even in clumsy remixes, the videos produced stories on e.g. preparing Christmas food, the Christmas tree, the atmosphere of Christmas.

The main interest that motivates people to network, publish and share is common experience and understanding, a same context and theme – or I would call it, borrowing from Fludernik (2003) and Herman (2010), a narrative schema. The platforms and practices of belonging in a community have decisively transformed, but the appeal of communality has not essentially changed. In the context of daily experience, social media offer a huge amount of virtual chatter, commenting and discussion, 'telepresence'. It feels that we are closer with a larger group now since we can share everyday experiences and stories in larger amounts and faster. It seems like we are driven to publish these more by a kind of voyeurism and curiosity than by a will to perceive stories and build entities out of the small stories of our circle of friends according to our own schemas.

1.4. Co-creation and narration in a community

Community-based narration requires accessible and usable structures for people to be able to perceive the published fragments as stories. In the design process of new applications for sharing and publishing the users are often the best producers and designers.

Among many others, Kirk et al. (2007) pay attention to the question of usability and technology often standing in the way of storytelling: "As the capacity to capture video is being incorporated into increasingly diverse artifacts (such as mobile phones), the opportunities for non-professional video-makers to make, watch and exchange video have equally increased. Accompanying this rise in the prominence of video has been a surge in interest in providing editing tools. Despite this, and as one cynic has noted, '…far more amateur video is shot than watched, and people almost never edit it.'" (Kirk et al. 2007).

It does in fact appear that the traditional models of multimedia narration, where the users/players create their own paths in a story dramatized into the medium do not necessarily apply to the publishing of mobile images in social media. Networking capabilities are essential in mobile co-production, mobile media are often volatile – or the narratives and visual messages created by mobile phone videos are rarely timeless or eternal masterpieces (like in Case 4) – they are usually produced for rapid, impulsive communication. Co-created narratives produced mainly with mobile media are necessarily very modular. The change of point of view, or change of narrator and space, make the viewers, the receivers of the narrative, fill the gaps, analyze the narrative trough the schema of their own (as in Case 2).

In my research I explored how a community creates narratives through mobile phones and the videos filmed with them. With the MoViE application developed within the project users could share and edit the mobile videos they themselves or the other members of the community had filmed. MoViE was a project still in progress. In most of the tests, the greatest obstacles to the use and sharing of material were caused by the fact that the application was still under development and the interface was difficult to use. Slow and unreliable mobile connections often also hindered the sharing and publishing of the mobile videos (Case 4). (Östman 2010). Christmas Story (Case 5) was realized using several different types of equipment, the participants in the test used not only mobile devices but also other equipment they were more familiar with, such as digital cameras and fixed broadband connections. The contents of the images and the goal of sharing them were seen as more important than the use of new mobile technology.

Any story generator, when intended for mobile use, has to be adaptable to spontaneous, impulsive use. It has to be usable and accessible to ensure that the threshold for using it remains as low as possible with as wide a range of users as possible.

The videos of the Mobile Social Media project produced fragmentary, short scenes from events and actions in people's lives, which the recipients – and especially the publishers themselves – were able to perceive as narratives. The videos were born in a collective and networked environment through publishing channels used in social media. The stories were constructed according to the model of interactive, digital media narrative; the users of the MoVie service had an active role in the story. Mobile video narratives differ from traditional multimedia in the very fact that the interaction takes place between humans and not between algorithms, machines, technologies, scripts and humans. The production of stories does not follow the direction from author, the creator and publisher of a video (or in multimedia, the production group), to user/player, but from author or often group of authors to another author and her/his community – from network to network. The interactive and communicative model makes the structure interesting; the author is usually the one who shoots the videos and edits the remixes. The one who creates the story world, defines the context, point of view and finally constructs the story could be seen as an implied author. Even if there could be several real authors in a single remix there is only one implied author. The community who acts in the interactive process of shooting, editing, tagging and viewing the videos has in most cases the double role of real reader and real author.

In all the cases and especially in Cases 2, 4 and 5 the users were aware of the stage of the design process with the MoViE application. In the course of the test use and publishing the users came up with various innovations and suggestions for how to develop the application further. The use and importance of tags became more clear and relevant after the Jazz Case (Case 4), the length and rhythm of the single video clips were specified by the users (Case 2), the nature of an easy and clear structure became evident already in the first case (Case 1). The design process involved/forced users to become producers and designers of the application.

As users, in the sense of the traditional model, von Hippel defines consumers or firms that expect some advantage or benefit from the use of the product or service. The producers expect (financial, ecological, ethical, moral) benefit from the selling or delivering of the product or service. However, von Hippel (2005) stresses that, often, producers are also consumers – and even more often, vice versa. The users of the MoViE application in most cases acted like *prosumers*, user-producer-consumers.

1.5. Creative interactivity

Co-created narration in social media is creative, active engagement where the publisher and viewer take part in telling the story.

The tests carried out in the Mobile Social Media project confirm the conclusion that mobile, co-created narratives are a creative process where the end result is impossible to foresee in advance. Story generators can bring structure to their publishing, make it easier to view and share the story. But because we are speaking of spontaneous publishing, where people film and share content using very different criteria and in a wide range of situations that they happen to be in, the end result is always unpredictable. The aim when working with the different test groups and cases of the Mobile Social Media project was to define the structure of the published content in advance, the participants were given tags, topics or themes as guidelines, which they filmed and loaded to the service. Still, the process and end result was unpredictable.

The video narratives of the Christmas Story (Case 4) were compiled among groups that shared a common goal. The members of the group were committed to the test and their action focused on a need to share their own experience of Christmas Eve. The Christmas Story test was easier due to its structured nature; the participants were given the task of commenting on the videos Marjo had sent and of sending their own comments to be viewed by the other members. All the members in the group were familiar with the technology (although some members recorded their material using some other technology). In both cases, the content and number of the videos was unpredictable.

I would conclude that the same unpredictable outcome occurred with the YouTube production *Life in a Day* (2010), directed by Ridley Scott. The producer and the director sent out a worldwide invitation for people to film scenes of their lives during one day, 24 July 2010. The predefined task was to answer a few key questions with the videos: What do you fear the most, what do you love, what makes you laugh and what do you have in your pocket? (*Life in a Day*, 2010). The result was a film of what it feels like to live on 24 July 2010 in different parts of the world, in different cultures. The producers had no way of knowing in advance what kind of a remix would be born from the videos filmed by thousands of people, even if they most obviously had a general structure, storyline from morning to evening, life to death, in mind for the film.

Mobile storytelling is commonly associated with the category of user-generated content or citizen journalism. As Klastrup (2008) suggests in her cases, mobile storytelling may actually radically change the focus of the stories people

tell each other. If stories used to be told of highlights of life in the past, today mobile videos record everyday life. "The mobile device has in itself changed the stories (or photographic subjects) we want to share, shifting the focus from the extraordinary to the more ordinary aspects and objects of everyday life." (Klastrup 2008). Emplotting and tellability of one's own life seem to be nearing on the tradition of Flaubertian realism. Everyday and banal things become meaningful and sharable reality – narratives (see e.g. Mäkelä 2010).

Like Klastrup (2008) I also want to redefine the concept of digital interaction. In the multimedia of the 1990s interaction was primarily seen as occurring between humans and computers. With mobile media the users interact with each other. The change of paradigm in media production is evident, the social interaction with co-creation brings together various creative actors, unexpected points of view and an unpredictable result, even if the goal and structure of the activity is predefined. In community-based sharing of mobile videos the very aspect of telling and sharing experiences is always an important creative motivator.

1.6. The design principles of co-created mobile narratives

The marginal conditions and design principles of narrativity are met in co-created mobile videos at the moments of editing, publishing and reception.

As I quoted Ryan earlier (Ryan 2010), all media databases do not construct narrative entities or stories. The design principles of a narrative need to be met for us to be able to speak about narrativity in the context of co-created mobile videos. According to Herman (2009a, 1-22), narration is a human strategy for understanding events, time, action and changes. These principles of narration explain people's ability to distinguish storytelling from other kinds of communicative practices. Narrative presupposes a narrator and a presentation that it is interpreted as a story about something. Herman also argues that the interpreter can make a conclusion from the presentation that takes place in a specific time continuum. A story also needs human-like intelligent agents who present the experience, live through the story world.

Even with mobile media we should remember the meaning of the word *media* as in 'medium', in relationship to something that doesn't in itself portray anything. The text and message of a story can be the same, but as I argue, narrative structures and interaction bring in additional value to presenting a message

about something – experiencing a journey (Case 2), a jazz festival (Case 4) or the atmosphere of Christmas in different cultural contexts (Case 5). The interpreter, the remix editor, the designer of structures, the producer, or the person involved with the scaffolding – and also the community as the receiver of the remixes – have made the conclusion, filled the gaps of the fragmented video narratives and constituted the story. The story is born in the mind of the authors or the viewers. It was obvious that the different perspectives could enrich or, on the other hand, also disrupt the story. The multiple points of view brought a certain kind tension to the story (Mäenpää 2010b, 21). The structures of interaction, the designed structured models in most cases (Cases 2, 4, 5), allowed intelligent agents to construct the story.

In the research project the functioning of the MoViE application was developed through different tests. I designed a different structured narrative model for each test, for the participants to use when loading their videos to the generator. In most of the cases the structure was realized through tags – the participants defined in the different situations of filming which structure in the narrative their videos represented. In the first Proppian Scenario (Case 1) the participants named their videos according to the different functions. The test with Barthesian structures (Case 3) was based on the principle that the participants named their video clips either in the form of act/task, place/context, hero/subject or object/target/problem. In both cases, the model of interaction turned out too complex and put too heavy a cognitive burden on the users. Abstract structures are difficult to perceive, which became especially apparent in the situations of filming in Case 3. The task of compiling the remixes was also too open to interpretation for the result to actually produce narratives. In contrast, the tests (Cases 4 and 5) where there the level of interaction was higher succeeded better at producing narratives. The participants in these tests were given as their task to film themes or topics that were closer to their own world of experience and more concrete and clearly defined. The narrativity was pre-structured into the form of life-like communication (Case 5) and according to the continuum of events (Case 4).

I suggest that the story is constructed in co-created mobile narratives in the same way as the "reality" is born out of short travel accounts posted by one person on Facebook. The result is often an illustration of an idyll, a fictional fantasy of the sweeter sides of the trip, the uncomfortable things are usually left *unposted*. The travel companions together provide images for their Facebook album, tell the story through the eyes of several users. The story does not necessarily correspond to the underlying reality but it is still a story. The parallel, virtual reality is born from the fragments produced by different individuals.

1.7. Scaffolding as the role of the author

Co-created narration, the production and publishing of remixes, requires an author – a producer, a compiler, a cohesive force – scaffolding means the construction of a ladder, a creator of the structures. These obvious roles in co-created narrations are author, narrator, narrateé (or viever), users and community.

In an interactive game or hypertext *focalization* – in Genette's words, the question of focus on who is speaking and who is seeing the story (Genette 1988) – is not determined by only one narrator, agent, author or subject. Mobile stories take a step backwards in returning authority to the publisher: "This author records, selects, uploads and presents some photo or filmed material, perhaps supplemented by some text which the visitor then looks at." (Klastrup 2008).

The publisher of mobile videos has an important role in structuring, scaffolding the story, mobile social media are multisensory; sound, rhythm, image, movement – also time and location – are essential to the narrative. Ryan (Ryan 2006, 8; Ryan 2010, 22) defines story as a discourse that conveys narrative into mental images the components of which are 'spatial' (setting, characters, objects), 'temporal' (changes caused by effects), 'mental' (intelligent agents) and 'formal and pragmatic' (meaningfulness and closure).

It is a whole different thing for individuals to upload their own contents into the media flow than to construct a narrative. The production of a narration (or performance) requires narrative structures. In this respect it appears that there need to be – at least – an author, narrator and preferably also some other interesting turning point, analogy or conflict, behind a story. In other words, there has to be someone who gives the meaning to the narrative whole – either an author, a group of authors or a recipient. In these cases, MoViE was given a role of story generator or engine, the authority or role of real author remained with the human actors. The engine could be seen as an implied author.

In the tests of the Mobile Social Media project (Cases 2-5) the short, separate video clips loaded to MoViE are the story elements of the co-created video narrations which present the world of the story, including agents and objects and describing events, changes. Even though many of the separate videos contain 'intelligent agents', since most of them feature people, it is only the compiler of the story, the editor of the video clips, that becomes the functional, conscious narrator. In MoViE each user had the opportunity to create remixes of their own videos or those filmed by others. The users of the remixes had the power to choose points of view to the stories, they were actors who decided what was included

in a story and what was left untold. In the video narratives on the Jazz Festival different narrators told different stories (Case 4). Some of the stories focused on complaints on the festival arrangements, in some the story was a chronological narration of a jazz concert. The message of the stories was born from the author, the editor, the publisher of the remixes.

It would be too simple to presume that a video narrative published in the form of a remix would be a discourse that conveys the narrative and the short videos would be the elements of a story, spatial, temporal, mental and formal. Only some of the videos produced during the research project fulfill the marginal conditions of what we call narrativity and make up a coherent whole that contains both a narrative and a plot – *sjuzet* and *fabula* (for example Cases 2, 4, 5). The jazz montages (Case 2) were turned into stories on the basis of the shared understanding of the filming community, the shared schema. The elements were space and changes in it, rhythm and sound. The active, feeling agent was the author of the remixes. It could be called real author or, in a more elaborated sense, implied author who gave the meaning to the positioning, editing and rhythm of the images. The compiler also presented an interpretation by remixing the images into a specific order, but this could also be done by the story generator by using MoViE and giving orders by different tags.

In my research I focus on examining mobile media and narratives also from the viewpoint of production. In software development, solutions are, at their best, developed by the user community. In the narration and publishing of stories the production process is largely a result of the work of the community, but it appears that decisions on the dramaturgical progress, the narrative structure, are normally made by one producer, author or generator (according to the instructions given by the author). The role of the real author is significant in the telling of the story – in co-created productions the producer, the author, plays a key role – in creating the structure, the scaffolding. The concept of implied author is needed to understand the construction of the narration.

1.8. Mobile media

The mobile medium has several tasks – transmitting information, forming the support of information and forming the sense of community.

I have tested Ryan's (2006; 2010) definition about medium, which lends itself well also to mobile interactivity. The medium (plural media) can be seen as a channel system of communication, information and entertainment and on the other hand also as a material or technical means of artistic expression. Ryan sees the medium as a "pipeline" and producer – on the one hand transmitting the information and on the other hand giving form and structure to the information. (Ryan 2010, 18). Co-created narratives in mobile media can be seen also from a semantic approach (verbal, aural, visual, spatial, tactile) and technological approach (bits, language, human body) as cultural practices, such as mobile culture and mobile interaction. The mobility has changed the way we act and express ourselves. Mobile interaction is also a special form of an expression.

Networks have brought us new and efficient ways of taking part in co-creations and making remixes. The examples I presented earlier, such as the virtual memorial museum of 9/11 (Make History 2010) or movies like *Life in a Day* (2010), could not have been produced and published without networks and virtual communities. The leap from virtual community to mobile community is not very long – mobile communities are even more mobile and based on real-time. They are physical, corporeal, personal and spontaneous.

In Cases 2, 4 and 5 it was shown that the use of mobile publishing channels has changed communication and publishing practices, as also Poikselkä has noted (Poikselkä 2010, 148). Spontaneous, random images from a journey, jazz concert or other special occasions convey a very different message from the posed images in old photo albums. (See Koskinen et al. 2001). In the Mobile Social Media project researcher Pirita Poikselkä (2010) also noted that the threshold for filming was lower and the videos that were published were unedited (ibid. 149). The consumption and production of audiovisual media can essentially be divided into professionally refined production maintained by various large institutions on the one hand and, on the other, personal, spontaneous publishing in social media or through mobile interaction technology. Mobile technology is an institutional, technological tool that keeps shaping communication and the content and structure of the messages sent through it.

1.9. The communities

A community that shares media and publishes content together is a typical community of innovation based on trust.

The term 'co-production' refers to a way of working whereby decision-makers and citizens, or service providers and users, work together to create a decision or a service which works for them all. The approach is value-driven and built on the principle that those who are affected by a service are best placed to help design it.

Scott Rettberg (2005) wrote that collective texts produced by many authors, hypertexts, often proceed with the pattern where one person replies to someone else's scene in a text cell by leading the story along in a new, chosen direction. The tests of the *Mobile Social Media* project proceeded in a similar manner; the communities were born around the communication that followed certain common, agreed-upon rules. The tests proved that there needs to be a certain amount of trust and motivation to join, communicate and interact in the community.

Von Hippel (2005, 112) argues that a community is able to innovate if a group of individuals that communicate with each other provides a sense of belonging and shares a common social identity. In the *Mobile Social Media* project the community gets satisfaction from the other members' activities in the mobile story tests best when it is motivated to accomplish the task and its members share the same kind of understanding of the given task. In many of the game-like tests (Cases 2 and 5) in the communities the material was filmed by a small group and the community seemed clearly interested in comments from the other participants. They also found the possibility to make remixes of (re-edit) the short video clips filmed by other participants interesting.

It also became apparent that the test users formed a typical innovative user community where the users develop the service to match their own needs. The users were in many cases engaged in developing MoViE to be easier to use and in simplifying the task assignments. (Östman 2010, 53).

The designing of the MoViE application and structures for producing co-creative mobile narratives (the content) was a typical process used in design research. The process is innovative in terms of inventing new affordances and innovations in the form of finding possible applications for new materials and technologies.

In several of the tests in the Mobile Social Media research project mobile video narratives (Cases 2, 4, 5) were based on rapid, instant communication. My understanding of Jono Bacon's (2009) theory is that the provision of alternatives

and trust support one another. Members of a community can trust that they have the right to also produce their own solutions, and that these solutions will be respected, too. In a creative process trust that one's own creations are meaningful is of crucial importance. When using the MoViE service, people needed to have the courage to offer up their own videos, to create remixes for other members to view. Trust and courage are at the core of co-created narratives – which can also be a significant motivational factor.

Trust within a community also creates an interesting effect / factor. A majority of the users of Facebook, Twitter, image databases and Flickr use their own names. People produce documentary-type images and videos of themselves, of their own experiences and activities, their environment. Very few have a problem with using their own name and profile photo – for example, the appeal of Facebook is based explicitly on familiarity. Narrating daily life renders the most banal events into being a meaningful part of an individual's life story.

2. To infinity and beyond

In December 2011 the social networking service and website Facebook published a kind of "life story generator" of its own. *Timeline* is the new Facebook profile. Users could tell their life story through photos, contacts and personal milestones, such as graduating or traveling to new places.[27] The idea is that a person's life becomes a story that anyone can go and view. The publishing of one's life story in the Timeline is conscious dramaturgical activity, the updaters decide for themselves what to tell publicly and what to leave untold in their profiles. Thus, the question arises how much public 'posting' influences people's lifestyles and choices. In a same way as how the use of mobile phones changed people's behavior, lifestyles are now also being reshaped along with a new medium. (Poikselkä 2010, 153).

The design principles of narratives are sequences of events, cognitive schemas. I have used here narratology as a tool to analyze the use of mobile media and a way of publishing through mobile media in the context of using co-created videos. Both structuralists and post-structuralist views are used in this analysis, mixing these ideas with texts on technology and theories of co-creation and communities. When Herman (2009b) and Hyvärinen (2006) wrote about

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27   https://www.facebook.com/about/timeline (reviewed 28 Dec. 2011).

the multidisciplinary nature of narratological approaches, I could add to their list the fields of psychology, education, social sciences, political thoughts, policy analysis, health research, law, theology and cognitive science – or technology, human interaction and user-centered design research.

Marie-Laure Ryan lists the essential questions needing to be answered in further research:

> "(a) Which structural types of plot are particularly well suited to individual media? (b) How does the medium affect narrative techniques (e.g. which media allow discourse features such as temporal reordering, evaluation, digressions, effects of suspense and surprise, irony, unreliability)? (c) How do media compensate for their narrative deficiencies? (d) How do newly developed media progressively free themselves from the influence of older media and discover their own narrative "language"? (e) What social practices are generated by the "cult narratives" of mass media (e.g. practices such as the creation of fan communities on the Internet, fan fiction, spoiling, online discussions of plots)? (f) In which media, besides language, does fictionality exist? (g) What forms does (or will) narrative take in interactive environments?" (Ryan 2010, 41).

My approach was directed mainly at such questions as a) How do narrative structures work in co-created narratives – and b) Do new types of media still use "old" types of narrative models and structures?

A much deeper narratological research could yield sophisticated results in the analysis of co-created narratives.[28]. Game research and research of interactive media have, as far as I am aware, so far only come a little closer to the traditional research of narratology and communication. The merging of different research approaches and traditions is necessary if we wish to understand new forms of communication – where, concurrently, different traditions of communication and publishing blend together happily and vigorously.

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28 For more literature about narrativity through various media, see for example: Wolf, Werner (2002). "Das Problem der Narrativität in Literatur, bildender Kunst und Musik: Ein Beitrag zu einer intermedialen Erzähltheorie." V. Nünning & A. Nünning (eds). Erzähltheorie transgenerisch, intermedial, interdisziplinär. Trier: WVT, 23–104.2002, Wolf, Werner (2003a). "The Lyric—an Elusive Genre. Problems of Definition and a Proposal for Reconceptualization." Arbeiten aus Anglistik und Amerikanistik 28, 59–91.2003a, Wolf, Werner (2003b). "Narrative and Narrativity: A Narratological Reconceptualization and its Applicability to the Visual Arts." Word & Image 19, 180–97.2003b, Wolf, Werner (2004). "'Cross the Border—Close that Gap': Towards an Intermedial Narratology." European Journal of English Studies 8, 81–103.2004; Vera & Ansgar Nünning (2002). "Produktive Grenzüberschreitungen: Transgenerische, intermediale und interdisziplinäre Ansätze in der Erzähltheorie."

Many areas have fallen outside the scope of my study that could lean more heavily on existing research of narratology, technology and community-based communication. Subjects for future research include, for example, new publishing technologies of the future, cloud services and open source services.

The use of mobile media today is making that which still at the start of the century was referred to as the possibility of ubiquitous media real. Media are now everywhere, the sharing of experiences and the consumption of services and entertainment independent of time and location are now part of everyday life. Wherever we are, on a moving train or sitting on a sofa, we can sort of jump into the 'worm hole', another space and context, to discuss and share things – usually with the people who are close to us, our community.

I wrote as my motto on my first homepages in 1995: "...I am the sum total of my links". Digital publishing in HTML language enabled for the first time hypertextual references. The images on my life contain references to the past and also to the future – I can see how my daughters have grown since my first makeshift homepages. Now, in 2012, my clickable user interface has expanded and leaped off the computer screen, I can link in virtually and in mobile environments – thankfully still with my daughters as well.

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IMAGE 14. Imagine the sound, imagine the story.Screenshot from unpublished mobile video, Marjo Mäenpää, 2010. Video available in http://marjomaenpaa.blogspot.fi/2012/09/mobile-videos.html

IMAGE 15. My Facebook Community in November 2010 illustrated by the Social Graph application. The illustration depicts a network of approx. 400 individuals. It contains within it various networked communities – smaller groups divided on the basis of family and relatives, work and colleagues, hobbies or geographical location. Screenshot 14 Oct. 2010 by Marjo Mäenpää.

As a comparison, my social network in Facebook as of September 2012 has 563 friends and here is how the Social Graph application illustrates it. (On the right, screenshot from 8 Sept. 2012 by Marjo Mäenpää).
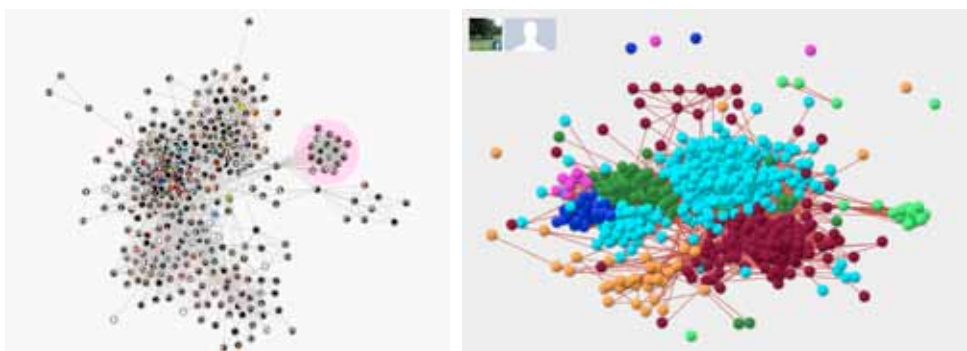
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IMAGE 28. Instructions to shoot actions. Graphics: Marjo Mäenpää, 2008.

IMAGE 29. Instructions to shoot place, space. Graphics: Marjo Mäenpää, 2008.

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IMAGE 32. The video was afterwards named "Making movies in Dimea" (0:40) Screenshots from MoViE.

IMAGE 33. The video was named afterwards by the researchers as "After the lost red" (1:18) Screenshots fro MoViE.

IMAGE 34. The remix of Example 3 was named "First Floor Drama" (0:43) and it got a fictive explanation: "Dimea, entrance hall, a lady with a red bag is seeking something. Does she find it?" Screenshot from MoViE.

IMAGE 35.   Use-case scenario describing the multiuser situation at the jazz concert. Graphics: Marjo Mäenpää, 2008.

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IMAGE 38.   The remix is generated in MoVie using the tag 'risu' (complaint/"stick"). There was an activist who downloaded several complaints using various tag words and therefore the MoViE generator picked one shot twice. Screenshot from MoViE.

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IMAGE 41.   Booth-Chatman model in applied interactive structure. The authors – real and implied – communicated with each other and acted also like readers. The audience of the story remained more or less passive or "silent". Graphics: Marjo Mäenpää, 2012.

TABLE 1.   Comparison of lightweight and heavyweight video work (Kirk et al. 2007).