Crimes Scenes as Augmented Reality, off-screen, online and offline

Sandvik, Kjetil; Waade, Anne-Marit

Crime Scenes as Augmented Reality On Screen, Online and Offline

Kjetil Sandvik
Ph.D. Assistant researcher, Department of Media, Cognition and Communication, University of Copenhagen, University of Copenhagen, Denmark

Anne Marit Waade
Ph.D. Associate Professor, Institute of Information and Media Studies, University of Aarhus, Denmark

Abstract:

Our field of investigation is *site specific* realism in crime fiction and spatial production as media specific features. We analyze the (re)production of crime scenes in respectively crime series, computer games and tourist practice, and relate this to the ideas of augmented reality. Using a distinction between places as locations situated in the physical world and spaces as imagined or virtual locations as our point of departure, this paper investigates how places in various ways have become augmented by means of mediatization. Augmented reality represents processes of mediatization that broaden and enhance spatial experiences. These processes are characterized by the activation of users and the creation of artificial operational environments embedded in various physical or virtual locations. The idea of augmented spatial practice is related to the ideas of *site specific* aesthetic and emotionalization of place in respectively physical, mediated and mediatized places.

Key words: *crime fiction, augmented place, mediatization*

Introduction: places and spaces

A place may be defined as a location situated in the physical world – a certain room, building, town, a forest, mountain, lake, desert – it is there and thus inhabits some kind of authenticity. It is situated here and now – unmediated; and as such it may be experienced and perceived. A space on the other hand may be defined as an imagined location, a virtual location. A space is the idea of a certain place as it is mediated and communicated to us in various ways. Simply put: places are 'real' and spaces are 'virtual'. Of course this is a much too simple approach when it comes to our way(s) of

1

perceiving the world and our main argument in this paper is that even the most authentic of places, the most 'realistic' of places are both experienced and imagined. As are fantastic locations; the fictional worlds of novels, movies and computer games are not just imagined, they are actual experiences for the reader, the spectator, the player whether we are talking about Middle-Earth in Tolkien's *The Lord of the Rings* or Azzeroth in *World of Warcraft*.

In the age of digital mediatization and especially with the emergence of Web 2.0 with its strong emphases on online communities and online worlds it becomes increasingly difficult to see places as unmediated or only as locations in the physical (off-line) world. When it comes to an online world like e.g. *Second Life* it becomes evident that we here have a computer-mediated online world, which, by its users, is experienced as an actual place (for commercial, cultural, leisure activities) and in various and complex ways is symbiotically connected to the off-line world. According to media researchers such as Lev Manovich and Jay David Bolter this is an example of how digital culture in the new millennium differs from that of the 1990s (Fetveit and Stald 2007). In the 1990s 'new media' were seen as something separate, a new and strange world, a 'cyberspace' situated somewhere else and of a completely different character than what we – using a very problematic term – call 'real life'. Today cyberspace and real life are rather part of the same continuum, which may also be seen in new forms of human-computer interaction, in new ways of exploring relationships between the physical world and computer mediated worlds as seen in new research fields like 'augmented reality' and 'pervasive computing'. There is a lot of interaction going on between online and off-line spheres: the flow of experiences, norms, ideas and so on goes both ways between these different worlds. This is – as Jay David Bolter puts it – because online worlds are part of 'real life', not separated from it:

> All these online environments reflect the physical and social worlds in which they are embedded – with all their contradictions. So it isn't surprising that there are vast economic forces at work there too... But also that individuals find ways to work around and through these forces. (op.cit. p. 149)

We would like to argue that – in the same way as with the relation between online and off-line worlds – the lines between places and spaces are blurred, that places and spaces are part of the same continuum and that when it comes to our perception, even

the most authentic of places are mediated and mediatized. On the level of reception a place is not just something in itself – it has embedded in it a surplus of meaning deriving from what we have read, heard and seen about the actual place, deriving from how we imagine this place. We do not just experience e.g. Katmandu in itself, we do so as tourists who have created an image of the Nepalese capital from Lonely Planet, travel programmes, romantic notions of Eastern culture and spirituality, and from the tales told by other tourists and thus we are part of a "mutual process of structural *site sacralization* and corresponding *ritual attitudes* among tourists" (Jansson 2006:28). The actual place is thus transformed into a *touristic space*, which is a space that is "both socio-material, symbolic and imaginative" (op.cit. p.28-29). Following this line of argument, the experience of places will always be connected to various forms of mediatization, which define and frame the way we experience and how we define ourselves and the roles we play in connection to this experience. As Jansson points out, tourists will "engage in the representational realms of marketing, popular culture, literature, photography and other sources of socio-spatial information" and use these mediations not only to develop "a referential framework for the planning of a trip, but also a *script* for how to *perform* and perhaps reconfigure their own identities within the desired setting" (op.cit. p. 13-14).

We want to propose that these and other forms of mediatization of places, which are both connected to mediation of the actual place on the one hand and to the mediatization of our experience of this place on the other, can be seen as a process of *augmentation*; an emotional enhancement of our sense and experience of place by means of mediatization: we understand places through media (e.g. Lonely Planet, Google Earth, fictions and so on), we use media to construct places (using cameras, mobile phones, GPS, maneuvering through 3D-structures by means of an interface and some kind of avatar in a computer game, and so on), and the media shape our experience of places (guided tours, theme parks, computer simulated worlds like the ones found in computer games, and so on).

Crime scenes as augmented places

To elaborate on this process of augmentation we will use the forensic term *crime scene* as a model for understanding augmentation of places. Being part of a three year Danish research project on *Scandinavian Crime Fiction and Crime Journalism* (2007-2009), this paper may be regarded as an early attempt at understanding how we

perceive and construct crime scenes as a specific type of places in real life, in fictions and other media formats, - a work in progress so to speak. We are especially interested in how places and spaces are represented and how the reality of places is both deconstructed and reconstructed in crime fiction and journalism as well as in real life police investigations. We are interested in the crime scene as a cultural concept, which is connected to a certain historical and criminological heritage as well as to popular culture. A strong sense of place and high degree of realism is crucial to crime stories. Fictional crime stories do not unfold in fantastic worlds (or they do so very seldom): they may take place in the past or in the future, but they always carry a contract of realism even when it comes to a sci-fi film noir movie like Ridley Scott's *Blade Runner*. And the most popular crime series in Scandinavia at the time uses actual places as its setting. The characteristics of these places, which are described in detail, play a crucial role in the way these crime stories are told: It is e.g. of great importance to the stories told in novels by the Norwegian author Anne Holt that they take place not in some fictional big city, but in a specific part of Oslo, with its very own demographical and historical conditions.

Furthermore, we are interested in the role played by different types of media, that is crime scenes as mediated reality (journalistic mediation through newspapers, crime magazines on TV and so on), crime scenes as fiction mediated through novels, movies, TV series, computer games, and finally crime scenes (both fictional and historical) as remediated in tourism practice. We will regard these different ways of mediatization as strategies for augmenting places, which may occur on various levels including both place-space transformations and space-place transformations. Some of these levels will be presented in the following sections.

Remediation of crime scenes as augmented spatial practice

Crime scenes are constituted by a combination of a plot and a place. The crime scene is a place that has been in a certain state at a certain moment in time, i.e. the moment at which the place constituted the scene for some kind of criminal activity. As such, the place has been encoded so that the particular actions and events, which have taken place, have left a variety of marks and traces, which may be read and interpreted. Traces of blood, nails, hair constitute (DNA) codes, which can be decrypted and deciphered, in the same way as traces of gun powder, bullet holes or physical damage are signs to be read and interpreted. Thus the place carries a plot (a narrative), which

at first is hidden and scattered and has to be revealed and pieced together through a process of investigation and exploration with the aid of different forensic methods, eye-witnesses and so on; - through reading and interpretation. During her investigation the detective's ability to perform logical reasoning and deductive thinking as well as to make use of her imagination is crucial to how the crime scene is first deconstructed and then reconstructed as a setting for the story (that is the actions of crime). By decoding this reconstructed place, the story itself is also reconstructed: the crime is being solved, the murderer revealed. Using the crime scene as a model for understanding augmented places thus implies that we are talking about a place, which has received a certain surplus of meaning, a certain kind of narrative embedded into it.

Augmentation of actual places – that is the process in which a place is transformed into a 'crime scene' – implies that the characteristics of these places have been enhanced, such that a certain mode, atmosphere or story has been added to them as extra layers of meaning. This may happen in at least five different ways.

1. Augmentation may take place as a process of *narrativization* in which the place constitutes a scene for the performance of 'true' stories. This is the case when London's East End functions as a setting for *Jack The Ripper Tours,* which allow tourists to partake in guided city walks following the blood drenched trail laid out in the actual streets of late-1800 London by the first known serial killer in history. As a result of the guide's narration and the navigation through these streets and past historic buildings like the Tower of London, the modern highly illuminated city gives way to an image of dim gas lights and dark alleys where defenceless prostitutes were easy targets for Jack's razor-sharp scalpel. But this type of augmentation may also happen in a process where an actual place constitutes a setting for new stories. This is what happens with the global art project *Yellow Arrow*. Here you are invited to put up small yellow stickers at different locations in an actual city and then upload a personal story connected to the chosen location. The arrow-sticker is provided with a certain sms-number so that others who come across your yellow arrow can use their mobile phones to read the story you have chosen to augment this particular location with.

Augmented places as places that have some narrative embedded in them may be found in different cultures and different historical periods. Native Australians (aborigines) believe that *songlines* run through the landscape telling the story of their ancestors and how the land came into being, and by following these narrative trails

5

these stories can be retold. The mnemonic method known as *memory theatre* can be traced back to antiquity. Here speeches were memorized by linking the different parts of a speech to well-known and recognizable architectural features of the hall in which the speech was to be given. By scanning the variety of statuary, friezes, articulated columns within the hall, the rhetorician skilled in this art (Ars Memori) could remember the different aspects of his speech. The hall then would provide the order and a frame of reference, which could be used over and over again for a complex constellation of constantly changing ideas. Thus the same hall could be augmented with a lot of different narratives (see Yates 1966). In today's popular culture, we also find augmentation of place by the means of narrativization in theme parks. Not unlike the Memory Theatre, the theme park becomes a memory place whose content must be deciphered:

> The story element is infused into the physical space a guest walks or rides through. It is the physical space that does much of the work of conveying the story the designers are trying to tell. […] Armed only with their own knowledge of the world, and those visions collected from movies and books, the audience is ripe to be dropped into your adventure. The trick is to play on those memories and expectations to heighten the thrill of venturing into your created universe. (Carson 2000)

Augmentation of place by means of narrativization thus implies an element of performativity: the place comes into being through our performance (actions, movement, navigation…)

2. Augmentation of place may also happen through *fictionalization.* Here the actual place is functioning as a setting for fictions as seen in Henning Mankell's use of Swedish small town Ystad as storyspace in his Wallander-books, in Gunnar Staalesen's use of the city of Bergen as a noir-setting for his tales about private eye Varg Veum, and in the way Liza Marklund constructs a Stockholmian underground as a stage for her protagonist, criminal reporter Annika Bengtzon. For the readers of Mankell, Staalesen and Marklund these actual locations, which are used as crime scenes, have become augmented: Wallander's Ystad is – as we will demonstrate later – interacting with and blended into 'real-life' Ystad and in fact changes the identity of the actual small town. Tourists visiting Ystad visit at the same time a real and a fictional town and telling the two apart is quite difficult. When tourists visiting Bergen attend a *Varg Veum Tour* they are taken on a guided city walk through parts

of the actual town but following the trails laid out not by some historical person or chain of historical events (as in the case of Jack the Ripper above) but by fictional characters and their actions and thus the actual places have become augmented as a result of fictionalization. We will investigate this further in the analysis of the touristic practices deriving from the use of Ystad as crime scene in Mankell's books.

3. Broadening this scope of augmenting places by means of narrativization and fictionalization, we may talk about how places may be simulated. *Simulation* as narrative strategy is well known in crime scene investigations through the performing of reconstructions of how the actual crime may have happened. Here the investigators are playing out the roles of e.g. the potential murderers, helpers, victims, witnesses and so on in an attempt to recap the chain of events in time and space. Simulation of actions in time and space is what we find in computer games. Here various computer generated graphical structures and animated objects, which can be manipulated by the player, allow us to explore and interact with a certain type of narrative spatiality, which is constructed – or at least comes into being – by our agency and our integrative and controlling operations. We will return to this specific strategy for augmenting space in the analysis of Liza Marklund's *Dollar*.

4. The ways of augmenting places described above relate to specific places that are emotionally enhanced either by narrativization or fictionalization. But augmented places may also be the result of certain *categories* of places being used as settings in books, movies, tv-series, which may affect how we later perceive these types of places. American suburbia, small town communities, the English countryside are examples of categories of places, which have been exposed to augmentation in the shape of displacement, estrangement and various strategies of *demonization.* From David Lynch's *Blue Velvet* to the tv-series *Desperate Housewives,* suburbia has been reconstructed not just as quiet, sleepy outskirts but as places with a dimension of creepiness added to them, their polished surfaces hiding deranged people and activities. *Twin Peaks* reconstructed the small town community as a mysterious place where things and people are not what they seem. English countryside is no
longer just idyllic houses, rose gardens, nice inns and so on; augmented by the tv-series *Inspector Barnaby* and its fictional Midsummer County, the countryside is also a potential high crime area with murder-rates exceeding those of most cities, the population taken into account.

An interesting case here would be US small town Burkitsville, which was demonized by the web-campaign and movie *The Blair Witch Project*. *The Blair Witch Project* was fiction presented as reality. The project's website told the story of three film-college students gone missing in the woods around Burkittsville, Maryland while exploring the myth about the witch from Blair, a town situated where Burkittsville is today and which was allegedly abandoned by its inhabitants after a series of mysterious murders and disappearances, believed to be caused by a witch's curse. The website reconstructs the story of the city of Blair and the myth about the Blair Witch and also contains reports on the police investigation of the three missing students, the recovery of diaries and docu-videos (which made up the *Blair Witch Project* movie, which premiered in cinemas months after the release of the website) shot by the students as they were hunting the witch (and obviously themselves being hunted). Everything here – apart from Burkittsville itself – is fiction. But this fiction surrounded the actual city of Burkittsville with an aura of mystery, which the town has since been using as a brand. Even though there has never been any witch, missing students or abandoned city, tourists visiting Burkittsville can attend guided *Witch Tours* in the area where the story about the three missing students takes place (see http://www.burkittsville.com/).

5. Finally, augmentation of places may happen in the form of the *palimpsest* that is the over-layering of an actual place with some kind of fictional universe creating a kind of *mixed reality* in which the place has a status both as an actual location in the physical world and as a story space. Here we find cultural phenomena such as different kinds of role-playing games in which a physical space is being used as a setting for the game itself. But unlike the stage-set in the theatre or the film-set in movie-productions, the place itself has not been constructed, altered or manipulated. Looking at augmentation as palimpsest, we find that the actual places (the specific town quarter, the specific street, the specific café) as well as non-participating people who happen to be present at the time of the game are included as a setting without being staged. But to the participating players the chosen quarter, street or café are more than just locations in the physical world, they have embedded in them a certain meaning (narrative, emotion etc.) and are thus part of the game fiction being played out. The use of costumes and props is also part of this augmentation. This is the case with so-called 'in-crowd' role-playing games, which typically take place in urban

areas; an example is *Vampire Live*, which is played out once-a-month in the centre of the Danish town of Aarhus:

> In April 2003 *Vampire Live* […] takes place in different locations such as Café RisRas located in the centre of the old quarter in Aarhus. The "plot" unfolds over a period of several hours in the basement around a table tennis table and some ordinary café tables and various role-players come and go. What is interesting is that not everyone is as much "in character" as you could expect. Actually we can observe different degrees of being in the game. One character, Kasper Bencke, is trying to get into contact with the Duke, while some money transactions take place between a couple of mafia-looking persons and other role-players are quite peacefully playing backgammon like ordinary café guests. A group of girls and a young man are planning their wedding, discussing the menu and guest lists, and except for the number of brides-to-be their discussion appears "realistic". (Knudsen 2006:320)

Another example of this type of augmented places, which are constituted by a kind of mixed reality, is the so-called pervasive games in which actual places are symbiotically fused with information and communication technology such as mobile phones containing instant messaging, camera, GPS and internet. An example of a game in which both the game universe and the gameplay have become ubiquitous and are embedded in the player's physical surroundings is the Electronic Arts' adventure game *Majestic* (2001). Here the gameplay and the way in which the game story is constructed include receiving mysterious phone calls in middle of the night, getting anonymous e-mails and attending fake websites. *Majestic* was promoted as the game, which 'will take over your life', and was meant to produce a game experience such as that experienced by Michael Douglas' character in David Fincher's *The Game* (1997). Even though the game actually flopped and was taken off the market not long after its release, *Majestic* forecasted the trend within game design that is known today as *pervasive gaming*, - games like *Botfighters* (2001) in which the game design contains possibilities for using physical places as game universe and offering a gameplay including a combination of tracking and site-specific interaction between players both online using advanced mobile phones and off-line battling each other in the streets. In *Botfighters*, the player "shoots" other gamers located in the same physical area with the help of mobile phones including positioning technology. A downloadable java-client also makes it possible for a radar display and graphical feedback to be shown on the mobile phone.

In these cases, the mediated, virtual space is collapsed into the physical, real place (and vice versa). Because the game is pervasive, that is it penetrates the physical world, and is ubiquitous, that is potentially present everywhere, the fictional game world becomes a part of the player's physical environment, and at the same time, the physical environment becomes part of various mediated spaces ranging from the GPS' graphical representation of the physical environment and the player's position in this environment and SMS and e-mails as communication channels for navigational information to websites containing online-dimensions of the game universe.

In the following sections, we shall use some of these strategies of augmenting places as a starting point for investigating how crime scenes may be constructed and take a closer look at aesthetical and technological approaches to crime scenes as places that are augmented through different types of mediation and mediatization, which influence how we perceive and behave when we encounter them. We will discuss mediatization of crime scenes as a touristic practice using Henning Mankell and Ystad as case. Finally, we will conclude this paper by looking at crime scenes as mediated performative and interactive spaces using the computer game *Dollar,* which is based on the characters and universe in Liza Marklund's book series about crime reporter Annika Bengtzon, and also put forward some thoughts on the relationship between body and place when it comes to interactive spatial experiences.

Augmenting Ystad

To illustrate and enhance our analytical argument and perspectives, we will take the reader to Ystad, a small place in Southern Sweden, an apparently innocent and quiet village on the coastline, mainly known as the port of departure to the Danish island of Bornholm. Some would even say it looks like a boring place with risk of being confused with any small place in the countryside where life and development stand still. This small town has become the main location of the crime fiction about the miserable Inspector Wallander written by one of the world's most popular and bestselling novelists, the Swedish author Henning Mankell.

In the following, we will explore how the use of Ystad as crime scene and crime fiction has constructed Ystad as an augmented place. In our presentation of Ystad as augmented place by way of fictionalization, we will describe the city as *tourist destination*. Our point is that the *concept* and the imagination of Ystad as a city and physical, geographical location, can hardly be distinguished from the crime

stories and the popularity of Wallander's Ystad. In support of this analytical distinction, we will focus on the concept of crime scene as one aspect of Ystad as location that illustrates this mediated and media specific spatial production. It is not crime scenes containing actual crime acts, but rather crime scenes in crime fiction and crime series about Inspector Wallander, that transform the city into an augmented place and an emotionalized and embodied spatial experiment. This is what is described as the iconography of certain places and destinations, and in tourism management literature and tourism marketing it is a question of the relations between destination image and destination reality (e.g. Ooi, 2005, Beeton, 2006).

The complex representational process and interpretation of spatial production, spatial re-mediation and mediatized places are central issues when dealing with media geography – the construction of actual spaces like cities or landscapes. In the following we will try to sort out different aesthetical and media technological elements that reinforce the complexity of how places and spatial experience are produced, mediated and imagined. In the case of Wallander's Ystad, it is obvious that it is not a simple question of what are the actual and real places, and what are the mediated, staged and fictional places, but rather this case illustrates that the novels, the movie adaptations of the novels, the tourist promotion of novels and movies and the tourist practice deal with an ongoing play with *spatial representational effects*. It represents a sophisticated play with representational levels and relations related to actual places, in which reality, fiction and tourists' performative actions are integral parts.

Ystad as crime tourism destination

When it comes to tourist practice and Ystad as tourist destination, the list of representational effects could be even doubled or tripled. In this case, the spatial imagination of Ystad shown through the Wallander films offers a certain physical, sensuous and performative action in which you are able to experience sites, landscapes, buildings, food, streets and crime scenes with your own body and you can enter the fictional universe of Inspector Wallander as if it were real. A growing tourism has followed the popularity of Mankell's stories in print as well as on screen. As we have seen in other film tourism cases, e.g. The *Lord of the Rings* and *The Da Vinci Code*, there is a market for tourists who want to visit places they have read and heard about and there are many people who want to see and experience the places

themselves. This brings embodied, ritual and performative aspects to the mediation and media-related production of places. Of course, Ystad as destination includes more than Wallander tourism, but crime fiction plays a central role in the promotion of the city.

As a tourist there are different possibilities to see and experience the place yourself, e.g. "the Wallander package" that allows you to eat in the same place as Inspector Wallander, see his home and the city he lives in, and even stay at the hotel that you have seen in the films. You can also participate in a murder-walk in which you play the role of a detective yourself, and there are guided tours of the production design of the films as well as an exhibition at Cineteket close to the Ystad film studios. There are different pieces of equipment and services to help you to recognize, remember and reproduce various sites and scenes from the books and the films, e.g. an online guide you can download to your cellphone, the local tourist information office offers a homepage with extensive material, maps, plays, films and information about the film stories, production and places. There are also several guidebooks you can get for free or buy, e.g. "In the Footsteps of Inspector Wallander" (2006) published by the local government or "Wallander's Ystad" (2004) published by the local newspaper and including nearly 60 pictures from specific sites in the city that are used as external locations in the books.

In the footsteps of Inspector Wallander: Information material and online entertainment presented on the Tourist Information site, www.ystad.se. The numbers on the map refer to sites and sequences from the books about Inspector Wallander.

Mankell's crime fiction about Wallander, as well as the films, have had a great impact on Ystad as city and destination, and as we heard when we visited a bookstore in Malmö to buy Swedish crime bestsellers, the bookseller sighed and said that "now

almost every small village and city in the region tries to discover their own local brand of crime writer, so that they can start promoting their place and make movies".

The case of Wallander's Ystad illustrates what Jansson describes as respectively *scripting*, *navigating* and *representation of* places (Jansson, 2006:11-19). Representation of places means how places are mediated and presented in media, scripting places is how places are conceptualized and imagined, and navigating places means how people operate, act and perform in actual places through their imaginations, expectations and knowledge about the place. This way of understanding and analyzing the production of media spaces, corresponds to the distinction between corporeal tourism, mediated tourism and imagined tourism (Waade 2006). Scripting places is related to imagined tourism, representation of places is related to mediated tourism, and navigating places to how the tourists perform in actual places and produce space.

The crime series of Wallander's Ystad mediates the city by using the city as film location and represents the city by audiovisual and linguistic referential codes, but the series also conceptualizes and scripts the city; it produces imaginations, expectations and virtual places in the mind of the readers and the travellers and it offers a fictional universe and narrative framing to which the physical place can be related. When it comes to navigating the place, the crime tourist and the film tourist act in certain ways in the city. The crime tourist performs like a detective, reconstructs and reproduces the place through his knowledge of the various crime stories, crime scenes and fictional persons. The crime tourist uses memories, guidebooks and maps to navigate and produce the spatial experience, as well as following certain staged *murderwalks* and guided tours to reconstruct certain sites, plots and actions. Navigating places is not only about seeing and physically experiencing places through fictional concepts, it is also a matter of consuming places in a very concrete way: when you eat the food that you have seen the murderer or the inspector eat or drink the same drinks, and you do it at the same place and at exactly the same table in the cafeteria as the inspector did, it represents an immediate, non-reflective bodily experience. Besides sensing the place (seeing, smelling, tasting, hearing, feeling) you also act and perform in relation to the place, in addition to the fact that your body digests and consumes the place.

Guided tours in Ystad Studio and the setting of the films: visitor sitting in Wallander's old sofa in his living room, reading the local newspaper (photo: Waade 2007).

Film tourists in Ystad might share with crime tourists some of the same motivation and the same expectations from visiting the city, and they might also perform and navigate in the same way as them, but instead of reconstructing the plot and the sites in the stories, they focus on how the crime films are produced: how filmic effects and locations are chosen, used and eventually manipulated, how the setting was produced, how the production team worked, how people in the city were involved in the production etc. The tourist agency, guidebooks and guided tours of film studios producing the Mankell film all offer this kind of information and experience. In many cases, you would not distinguish between the two types of visitors, but in this context one might say that they represent two different spatial productions: the former tries to reconstruct the crime stories spatially, the latter tries to reconstruct the *production* of the story and where it took place, in a meta communicative or meta productive approach. Both film tourists and crime tourists are concerned about the actual places used in the films and the stories. The augmented spatial experience covers respectively scripting, navigating as well as mediating places, and how the three strategies reinforce and influence each other.

The augmented place will always have some reference to the original place - that is the place as it was prior to the process of augmentation and thus the referential effect is related to the concept of staged authenticity. Authenticity in tourism practice is not so much a question of what is true or not about an object or a place, but rather the authentic effect one can achieve by visiting or seeing a place (Wang 1999). Morten Kyndrup analyzes films, photographs and art objects, and he suggests looking at representational effects instead of representation as such (Kyndrup 1999:161). He pinpoints different representational effects, based on the communication model of Roman Jakobson in which all the functions of communication are included: sender,

receiver, message, context and code are included. Kyndrup focuses on: a) referential representational effects regarding references to the world as material, b) creative representational effects regarding references to the producer and the artist (e.g. signature, picture of Mankell in the book etc), c) genre-specific representational effects, and d) functional representational effects regarding the *conative* function of Jakobson's communicative model (Fiske, 1990:36), e.g. the way in which the crime reader by certain narrative strategies gets involved in and investigates the plot and the crime scenes along-side Inspector Wallander. In crime fiction one can argue that all the different representational effects are at stake, but the referential representational effects play a certain role, especially when it comes to references to actual places and locations. The staging of crime scenes both on screen and off screen turns the places into emotionalized experiences, sensuous and coded places, i.e. augmented places that reinforce the referential representational effects.

When it comes to online crime scenes, i.e. crime scenes that are mediated through various types of computer games, an extra dimension has been added in that they are interactive and play-centric: In the computer game crime scene, the place is not just being experienced, here both set and plot embedded in the crime scene are being performed.

## Crime scenes as performative spatial practice: Marklund's Dollar

One of the basic characteristics of crime fiction is that solving the crime is more important than the crime itself. As readers or spectators we are engaged in the detective work of police officers from the homicide divisions and forensic experts of the Crime Scene Investigation (CSI) team. The tension-building in this type of fiction is connected with how this work is done, what challenges and obstacles are encountered along the way, the time pressure and so on. This type of fiction includes an explorative investigation of the crime scene, interrogation of witnesses and suspects which, taken together, construct a picture of the crime and who might have done it. This plot structure in which exploration and puzzle-solving are major characteristics is found in computer games and especially in the action-adventure genre. So, when computer games remediate crime fiction, we are speaking of a medium, which already shares some genre features with the crime novel, the crime movie or the crime tv-series, but with the important difference that in the computer game we are no longer readers or spectators but participating agents in the investigation.

The crime mystery *Dollar* has been written especially for the PC by Liza Marklund using the crime scene settings she uses in the crime series about crime reporter Annika Bengtzon. In the computer game though, you do not get to play the famous reporter, but become a part of the Stockholm police as the chief investigator in a case about a millionaire heiress who has been killed at one of Stockholm's fashionable hotels. In order to fulfil this task you must comb various parts of the

Swedish capital and interrogate several more or less suspicious people. By doing so, you start to reconstruct the story about the victim who was a well-known person in Swedish high society who was to inherit a large business empire. She was a person with many enemies and who many would like to get rid of. As is the case with any murder story by Marklund, the crime is intertwined in a complex web of political and financial conspiracies, power games and shady activities like trafficking and prostitution. A lot of the suspects and others you encounter throughout your investigations have plenty of reasons to keep information from you.

Even though *Dollar* may be compared to an adventure game like e.g. *Myst,* where the main gameplay is based on exploring the game world and on solving puzzles and thereby constructing the story of the game, in this game you don't get to perform the adventurous tasks yourself. You are dependent on your CSI-assistants to perform forensic work and interrogate suspects, eyewitnesses and so on. It is your task to decide what these assistants should do and to collect and analyze the various pieces of information they provide you with and by doing so try to piece together the overall picture by reconstructing the movements and actions of the victim and potential murderers, using various maps, reconstruction models and diagrams
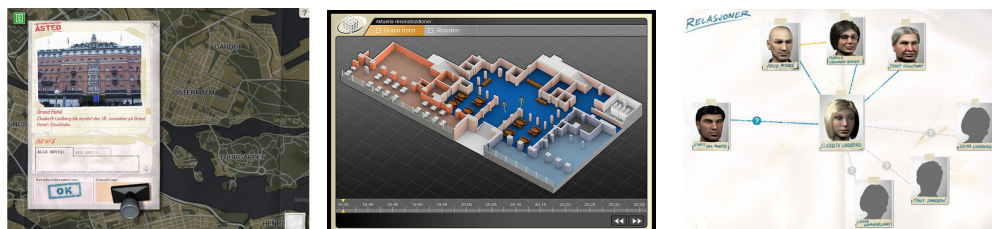
displaying how various characters are connected to each other and so on. The plot laid out by Marklund is complex, labyrinthine, uses a variety of locations and contains blind alleys, false scents and misleading information. Your choices are crucial to how your investigation develops and to whether you will succeed in solving the crime.

This is the core logic of the interactive and play-centric setup found in computer games: the story has to be performed by you instead of narrated or shown to you, and a vital element in this performative story is that your performance does not just (re)construct the story, it also (re)constructs the spatial environment in which it takes place. Even though you don't have to move around to the different locations in Marklund's *Dollar*, you use your assistants to do so and you may also use the different tools mentioned above, like e.g. a computer program to model and thus reconstruct the hotel in which the murder took place and this is how by making choices, selecting and analyzing information, reconstructing locations and patterns of action and movement, you make the crime plot, as well as its setting, unfold as a result of your partly spatial performance.

Plot and place as interaction

Taking this notion of computer games as performative spaces, which resemble touristic spatial production and the other strategies for augmenting space mentioned in this paper, we may say that computer game fictions present themselves as interactive and – to use a term coined by Celia Pearce (2002) – as play-centric. They are interactive in that they are constituted by interactions between a fictitious world and a plot structure (however complex and multi-threaded) and a player's action within, and in relation to, this world and structure. Computer games present themselves as fictitious worlds in which the player is invited to play along with the story-line and is offered a role as a character in the plot as we have seen with *Dollar*. Interactive and play-centric fictions differ from traditional fictions in that they offer a dramatic plot in which the player gets to perform a role in the plot structure contained in the game: She is no longer merely spectator, but is projected into the game's fictional world and into the player's character, which may be pre-defined like the Lara Croft character in *Tomb Raider* or defined by the player herself as in *World of Warcraft*. That a fiction is interactive and play-centric implies that the fiction is not a closed and static system brought to a reader or spectator but that it offers an open structure in which the recipient is invited inside as participant, as player. This *playing-along* is the most

important mode of reception in computer game fictions. When Celia Pearce (2002) points out that game designers are not interested in 'storytelling' and rather engage in creating a compelling framework for play, this does not necessarily imply that stories are inferior elements in game design. Rather it implies that stories in games are placed at the service of the game as tools for the game itself. Interactive and play-centric fictions are played out and the player therefore performs a crucial part in the dramatic story-line:

> Instead of narration and description, we may be better off thinking about games in terms of narrative actions and explorations. Rather than being narrated to, the player herself has to perform actions to move narrative forward: talking to other characters she encounters in the game world, picking up objects, fighting the enemies, and so on. If the player does not do anything, the narrative stops. (Manovich 2002:214)

Thus the interactive and play-centric dramatic fiction found in computer games dissolves the line between spectator and fiction, which is why it is not correct, as claimed by Brenda Laurel (1991), that interactive systems (explained by the use of theatrical metaphors) imply that the audience (the users) enter the stage and become actors. It is meaningless to talk about actors and audience in the traditional sense. There is no point outside the game from which an audience is intended to watch and therefore there is no-one for an actor to act to. A game is not meant to be watched like a theatre performance. The central issue in a game is to play. This involves different demands on the interactive and play-centric fiction than those on traditional fictions, which are meant to be read or watched. To some extent, narrative contingency, psychological character development, depth in characters as well as story play a minor role compared with the possibilities for the recipient to play a role *within* the story. The point is not to discover, reveal or to read for the plot (Cf. Brooks 1984), but to *play the plot* (Cf. Sandvik 2006).

We will elaborate some more on the characteristics of interactive and play-centric fiction and how these affect how places are constructed and performed and thus experienced. There are two types of montage simultaneously at work in theatre performances (Cf. Ruffini 1986) and which may also be found in the types of computer games described in this essay. On the one hand, there is a vertical montage (or *mise-en-scène*), which is constituted by the various visual elements offered to the eye of the recipient; landscapes, buildings, interiors, characters, clothing, lighting and

so on. In computer games this type of montage is even more complex in so far as it is also constituted by various interface features like displays showing the score, lives, ammunition and health left, maps of the game world etc. In some types of games this montage includes partly a window displaying the game world itself (the place containing the game's actions and events) in which the player navigates her character, partly a list of different skills, belongings and experience points possessed by the character and also the 'paper doll' that functions as a tool for further character development.

On the other hand, there is a horizontal montage in which the fictitious sequences of actions and events follow each other on a time line. This montage is constituted by the player-characters navigation in the fictitious world of the game and the actions the player performs herself or actions being done to her and events she may experience: The basic elements in computer game fictions are "movement through space and (…) the conditions motivating this movement" (Grodal 2003:37). Thus the horizontal montage to a great extent is created by the player herself but is controlled and framed by the interactive structure and player-position included in the game's rules, which the player has to understand and relate to in order to create the montage of actions and events on the horizontal axis. This is one of the most important characteristics of interactive and play-centric fictions: the way in which the player navigates and spatially moves through the narrative structure:

> The navigation through 3D space is an essential, if not the key component, of the gameplay. (…) In Doom and Myst – and in a great many other computer games – narrative and time itself are equated with the movement through 3D space, the progressions through rooms, levels, or worlds. (…) these computer games return us to the ancient forms of narrative where the plot is driven by the spatial movement of the main hero, travelling through distant lands to save the princess, to find the treasure, to defeat the Dragon, and so on. (Manovich 2002:214)

Putting the body into place – some closing remarks

As cultural phenomena, computer games are related both to play and games as such and to the performative arts (like theatre) and thus computer games introduce a strong bodily dimension in the way they are experienced. As fictions they are not being read or watched, they are played and as such they are dependent on the player's direct and physical actions and this is how computer game fictions in many ways simulate our

behaviour in 'real life'. Janet H. Murray has explained that computer game fictions more than anything else present themselves as dynamic, narrative processes, which are embodied by the computer and played out as a result of the player's performative agency:

> Whereas novels allow us to explore character and drama allows us to explore action, simulation narrative can allow us to explore process. Because the computer is a procedural medium, it does not just describe or observe behavioural patterns, the way printed text or moving photography does; it embodies and executes them; and as a participatory medium, it allows us to collaborate in the performance. (Murray 1997:181)

Thus the experience of plot and place in computer games relates to the human bodily conception of being situated in our surroundings, what Torben Grodal labels our "first-person experiences" (Grodal 2003:42). Here movements in three dimensions are what constitute our reception of the world and thus also our conceptualization of the world in which even non-physical events and phenomena are being conceptualized by the use of spatial metaphors (Cf. Lakoff & Johnson 1980). It follows that the way a computer game engages not only the player's cognitive apparatus but also her body is vital as to how plot and place in computer game fictions are experienced:

> Computer games and some types of *virtual reality* are the most perfect media for total simulation of our basic first-person story experiences, because these media allow a full PECMA-flow[1] by connecting perceptions, reasoning and emotions. Motor and pre-motor cortex and feedback from our muscles focus our audiovisual attention and enhance the experience with a 'muscular' reality, which produces 'immersion' in the player. (op.cit. p.38)

Engagement of the player's body takes place on several levels in computer games, ranging from the virtual physicality inherent in the player's *immersion* in the game universe and her presence by substitute (*telepresence*), which is found in the player's control over the game character and game story to the tactility in encountering and operating the game's interface. This emphasis on the body is also articulated in various forms of transgressions of the computer mediated world into the physical

---

[1] PECMA-flow: perception, emotion, cognition, motor action (op.cit., p.36).

20

place, which can be seen in the many computer games that have surround sound, which expands the fictional universe compared to what is shown on the computer screen, but also in new types of interfaces, which with the use of cameras and other sensor technology include the player's body as a navigational tool. A similar transgression may be found in so-called 'out-of-the-box' games (pervasive games) in which the game universe no only appears as computer made and mediated but also as embedded in the physical environment and in which the player's body becomes a part of this game universe. In this way, playing a game becomes a performance constituted by role-play and choreography. As such computer games may be regarded as part of a certain *performative turn* (see Jones 1998) in our culture, which – in opposition to the *linguistic turn* (see Rorty 1967), which regards the world as text and the *visual turn* (see Mitchell 1994), which regards the world as picture – regards the world as a stage for our actions and bodily investments (Knudsen 2006). Computer games thus become a certain way of representing the world – places and spaces and everything in between – which may be described as a *performative realism* (ibid.) which may also be found in the spatial practices of crime tourists described earlier and in which there are no recipients in the traditional sense, only agents, only participants whose bodies have been inscribed in the action and events in time and in space.

Literature

Beeton, Sue: *Film-induced tourism*. Clevedon: Channel View Publications, 2006

Brooks, Peter: *Reading for the Plot*. Cambridge MA: Harvard University Press, 1984

Carson, Don: "Environmental Storytelling: Creating Immersive 3D Worlds Using Lessons Learned From the Theme Park Industry"
[http://www.gamasutra.com/features/20000301/carson_pfv.htm], 2000, no page numbers

Cloudberry Communication*: Filmproduktion i Skåne*. Rapport made for Ystad Kommun and Region Skåne, Stockholm, 2006

Falkenheimer, Jesper & André Jansson: "Towards a Geography of Communication". In Falkenheimer, Jesper & André Jansson (eds.). *Geographies of Communication. The Spatial Turn in Media Studies*, Göteborg: Nordicom, 2006

Fetveit, Arild & Gitte Stald (eds.): *Northern Lights vol. 5*. London: Intellect Books, 2007

Fiske, John: *Introduction to communications studies*, 2nd edition, London: Routledge,

1990

Grodal, Torben: ”Historier for øjne, ører og muskler. Computerspil set under en mediehistorisk og evolutionær synsvinkel”. In *Mediekultur* 36. Århus: Institute for Information and Media Studies, University of Aarhus, 2003

Jansson, André: "Specialised Spaces. Touristic Communication in the Age of Hyper-Space-Biased Media". In *Arbejdspapirer fra Center for Kulturforskning* 137-06, Århus: University of Aarhus, 2006

Jones, Amelia: *Body Art/Performing the Subject*. London and Minneapolis: University of Minnesota Press. 1998

Knudsen, Britta Timm: ”Vampire Live. Performative identitetsspil og medieret hybridform”. In Sandvik, Kjetil & Waade, Anne Marit (eds.) *Rollespil – i æstetisk, pædagogisk og kulturel sammenhæng*. Århus: Aarhus University Press, 2006

Kyndrup, Morten: *Riften og Sløret*. Århus: Aarhus University Press, 1998

Lakoff, George & Johnson, Mark: *Metaphors we live by*. Chicago: University of Chicago Press, 1980

Laurel, Brenda: *Computer as Theatre*. New York: Addison.Wesley Publishing Company, 1991

Manovich, Lev: *The Language of New Media* (revised version). Unpublished manuscript, 2002

Mitchell, W.J.T.: *Picture Theory. Essays on Verbal and Visual Representation*. Chicago: University of Chicago Press, 1994

Murray, Janet H.: *Hamlet on the Holodeck. The Future of Narrative in Cyberspace*. Cambridge MA: MIT Press, 1997

Ooi, Can-Seng: ”A theory of Tourism Experience – The Management of Attention”. In O. Dell, Tom & Billing, Peter (eds). *Experiencescapes – Tourism, Culture and Economy*. Copenhagen: Copenhagen Business School Press, 2005

Pearce, Celia: "Towards a Game Theory of Game." [http://www.cpandfriends.com/writing/first-person.html], 2002

Rorty, Richard: *The Linguistic Turn: Recent Essays in Philosophical Method*. Chicago: University of Chicago Press, 1967

Ruffini, Franco: "Horizontal and Vertical Performance in the Theatre". In *New Theatre Quarterly*, vol. II, no. 5. New York, 1986

Sandvik, Kjetil: "In and out of character. Complex role-play and dramaturgy in an online world". In Morten Breinbjerg (ed.) *Working Papers*, Aarhus: Center for Digital Aesthetics Research, 2006

Wang, Ning: "Rethinking Authenticity In Tourism Experience". In *Annals of Tourism Research*, Vol. 26. Pergamon UK: Elsevier Science Ltd. 1999

Waade, Anne Marit: "Armchair Traveling with Pilot Guides. Cartographic and Sensuous Strategies". In Falkenheimer, Jesper & André Jansson (eds.). *Geographies of Communication. The Spatial Turn in Media Studies*, Göteborg: Nordicom, 2006

Yates, Frances A.: *The Art of Memory*. Chicago: The Chicago University Press, 1966