ABSTRACT
Computer games can be described as assemblages which, to use a term from Science and Technology Studies, provide different scripts that set the scene for user practices. These scripts include the game world’s possibilities and restrictions and the degree of freedom provided to the users by the overall gameplay. Lately, a new genre of games challenges these specifics. So-called editor games like Minecraft or LittleBigPlanet, which entered the market with sweeping success, are not games in the traditional sense in which players follow certain rules guided by narrative elements framing the gameplay. Instead, these sandbox games – often labeled as ‘digital LEGO’ or ‘co-creative open worlds’ – afford the construction of a game world rather than playing within one. Following a praxeological approach, this essay will try to make co-creative processes in editor games accessible as a research object, by performing a critical evaluation of established methods within Game Studies complemented by an experimental focus group analysis.

Keywords
modding, co-creativity, participatory culture, affordances

INTRODUCTION
Minecraft (Mojang 2011), LittleBigPlanet (Media Molecule 2008), and, most recently, Disney Infinity (Avalanche Software 2013), and Project Spark (Team Dakota/SkyBox Labs 2014) open up action spaces for participatory practices to a wide circle of users. A process of popularizing co-creative practices is taking place; with the potential to alter and even transcend ‘classical’ forms of participative media culture (cf. Jenkins 1992/2006a/2006b). These practices are related to and emerged from the “community-based creative design” (Sotamaa 2005, 2) of the larger game modding scene, since the games themselves have their roots in editor software that is used to take part in game design and content creation. But whereas numerous sophisticated modding practices require the use of image editing and modelling software and even demand advanced programming skills (modding in the narrow sense), in editor games, which seem to be closer to the early game construction sets (e.g. Bill Budge’s Pinball Construction Set
modding found its way into the gameplay itself (modding in a broader sense). In contrast to sandbox simulations like SimCity (Maxis 1989), gameplay in editor games is not circled around a complex instant feedback system. Therefore, user-sided input is not subject to direct evaluation by the software itself and gratification is either delayed in time (LittleBigPlanet) or happens outside the game space altogether (Minecraft). In this context, online platforms for sharing user-generated creations become increasingly important and there is an extensive degree of community building around editor games. These play- or sandboxes pose new questions regarding the player’s motivation(s) and the appeal of a gameplay that consists of building a game world rather than playing within one – thus, the material agency of the game (which usually becomes visible via the rule set, the game world, or the narration) seems to dissolve. Editor games, ‘digital LEGO,’ or ‘co-creative open worlds’ confront gamers and researchers with a new level of uncertainty and contingency. In this essay, we want to investigate these issues not only in theoretical terms but within a case study of the games Minecraft and LittleBigPlanet.

After a short overview of the characteristic features of these games, we want to discuss some methodological issues before introducing a media-ethnographically informed approach, which includes participant observation and screen capturing of a sample group’s co-creativity, along with some of its results.

1 LEGO VS. PLAYMOBIL

Computer games can be described as socio-technical assemblages (cf. Taylor 2009; DePaoli and Kerr 2010; Karppi and Sotamaa 2012) which, to use a term from Science and Technology Studies, provide different scripts (cf. Akrich 1992) that set the scene for user practices. These scripts become apparent as technical manifestations of design decisions which not only include the set of rules of a game but also the enabling and restricting conditions of the game world and the degree of freedom provided to the users by the overall gameplay. To describe the scripts used in editor games, like Minecraft and LittleBigPlanet, we want to draw an analogy between the scripts of these two games and the specifics of the ‘philosophies’ of LEGO and Playmobil. In the case of Minecraft, this analogy is already advertised in the marketing of the product itself. On the LEGO Cuusoo internet platform, where users could submit and support ideas for new LEGO products, a Minecraft-LEGO-Set has been available after winning the popular vote by gaining the support of 10,000 users within 48 hours.

“Minecraft is about placing blocks to build anything you can imagine in the virtual world. You can build anything you imagine with LEGO bricks in the physical world. Minecraft and LEGO were meant to be together.”

Minecraft can be characterized as an open-world LEGO building set (cf. Schut 2014) in which the players move through blocky 3D landscapes that are procedurally generated at the start of every new game. These blocks represent different materials which the player has to ‘mine’ in order to ‘craft’ items. Minecraft offers two different game modes: the creative mode, which focuses on the creation of complex structures by providing the player with an unlimited amount of blocks (resources), and the survival mode, which compels the player to acquire and manage resources with the purpose of building a shelter to protect him/herself from the monsters that populate the game world at night. But, even the latter, more ‘classical’ gameplay mode, relies strongly on editing mechanics (Duncan 2011).
At first sight, *Minecraft* may almost look like a counterdraft to current trends in the gaming industry, since the ‘pixelated’ game world appears dated in contrast to the almost photorealistic graphics of the latest games. The action takes place in a sparse, empty, and relatively inanimate sandbox that adjusts its size according to the user’s space of action. Even the open, rather rudimentary gaming mechanic seems odd in its ‘dramaturgy’ when compared to other contemporary games, especially narratively complex worlds like the e.g. *The Last of Us* (Naughty Dog 2013).

“*Minecraft* never tells the players what to do. They do not have a story objective, whether short-term or long term [sic!]. How come *Minecraft* is not a mere level editor?” (Léja-Six 2012: s. p.)

The action in *Minecraft* is neither structured through an obvious gameplay nor prescribed through narrative paths. Rules exist, but are unclear, and the player has to uncover them through experimentation, learn them through observation, or acquire them by reading information pages (like wikis). If nothing else, it is this ‘unmarkedness’ that poses new questions for game studies regarding the player’s motivation and action.

Quite similar to *Minecraft*’s reference to LEGO, the overall aesthetics of *LittleBigPlanet*, the second game we want to analyze, resembles children’s toys. The outcome of the design decisions have been compared to miniature toy worlds and puppet theatre, featuring an avatar called ‘Sackboy’ as a reminiscence of stuffed knitted puppets popular in Japan under the name ‘amigurumi’ (cf. Westecott 2011). However, the scripts of interaction must be problematized differently since they span a different frame around the player’s possibilities for action. *LittleBigPlanet*, released for the PlayStation 3 in 2008, is one of the most prominent examples of the growing impact of user generated content on the game market, especially in the console domain. The story mode in *LittleBigPlanet* can take from six to eight hours of gameplay and can be played by up to four players simultaneously. Nonetheless, the level editor is advertised as the central feature of the game, offering a unique and ample array of functionalities – at least for console game standards. Users can publish their creations on the PlayStation Network through an easy-to-use sharing system, making them available to all members of the *LittleBigPlanet* community. The editable nature of *LittleBigPlanet* already plays a central role on the game’s box art: “Use simple tools to make whatever you can think up.” But the developers have also realized the importance of distribution – and so it continues: “Go online and share everything with the *LittleBigPlanet* community.” Finally, the desire for innovation and the constant expansion of the game are correspondingly pointed out: “Download cool new stuff created by other *LittleBigPlanet* players. There’s a different game waiting to be played every time you go online!” The website Gamasutra describes *LittleBigPlanet*’s level editor as one of the most significant innovations of 2008:

“*LittleBigPlanet* is as much about enabling gamers to participate in level design as anything else, which means its user design experience needed to at least approach the level of accessibility seen in more traditional gameplay. Certainly, creating a *LittleBigPlanet* level requires more investment of time and creativity than playing a *LittleBigPlanet* level, but it is telling that the lines between the two can be somewhat blurred. It is perhaps even more telling that, thanks to the game’s intuitive, real time nature of level editing, Media Molecule has shipped a creation mechanic that has proved enormously usable for end users while remaining standard issue for the studio’s professional designers.” (Remo 2008)
On the one hand, the meticulously organized editor structure provided by the developer appears to contradict the principle of “bottom-up modularization by users” (Jeppesen 2004, 10). On the other hand, Media Molecule’s system adopts many representative aspects of web communities, since it implements a sophisticated database system which is organized through comment sections and Web 2.0 tag clouds. In fact, one can include LittleBigPlanet in the wider category of digital mash-ups, since it lets players or users seamlessly combine popular cultural objects onto one single surface. The business opportunity for publishers lies in building markets to sell digital items similar to free-to-play browser games and sometimes, in the case of Disney Infinity, provide a whole pre-scribed setting – similar to the miniature theme worlds of Playmobil sets – that comes with the ready-made commercially sold objects and characters.

2 EDITOR GAMES AND THE SCRIPTS OF PARTICIPATION

Editor games follow a similar path as the overall networked media economy as summarized by the Web 2.0 evangelist Tim O’Reilly in his often cited paper What Is Web 2.0? (2005). For one thing, many editor games appear as perpetual beta versions: The game never becomes a ‘finished’ media object with closed borders, therefore never providing a panoramic overview over its affordances. Instead, the players can keep exploring and altering the game world in a co-creative way. This involves mashing-up existing content, combining provided building blocks or even internalizing external content, often by purchasing objects or scenarios. The content can as well be provided by the users themselves and can be included in their own game world or a shared one. In the case of Minecraft, where users build their structures with relatively simple objects (blocks), the web 2.0 factor comes in later in the process since users share their finished objects as downloads and video captures on YouTube – examples range from a true to scale Starship Enterprise to a working computer that can be fed with algorithms.7 Minecraft, it could be argued, represents an archetypical editor game. It takes some of the innovations of LittleBigPlanet, especially the ‘editor aesthetics’ (albeit graphically different), which allows the direct editing of the level using an avatar. However, Minecraft goes a decisive step further by completely erasing the boundaries between editor and game – always present in LittleBigPlanet – and, thus, transforming the constant editing of the game world into gameplay.

Consumer co-creative design has significantly opened up to the mainstream market through games like Minecraft and LittleBigPlanet – and it seems self-evident that after the rise of the Web 2.0, a movement like Gaming 2.0 would arise. Nevertheless, the question remains as to which scripts of participation – using Madeleine Akrich’s concept (1992) – are inscribed in these different forms of editor games. An analytical comparison between implicit participation inherent within the scripts of the software – users as providers of ‘raw data’ –, and explicit participation practices – users as providers of actual content – seems promising as a means to clarify the often conflicting nature of participative media cultures. In analyzing LittleBigPlanet’s editor, Christian Trapp argues:

“Though, at first glance, LittleBigPlanet’s editor seems to exhibit a strong ‘modding character’ through its in-game integration, on a second look, the level editor performs as a limited feature that only allows for a restricted and controlled degree of modification. The player essentially ‘plays’ the game as he designs levels within the boundaries of the given scope of action.” (133)
While implicit participation is part of an underlying design principle, for example the sharing of links or the semantic annotation of contents, and is not bound to the deliberate decision to contribute, explicit participation depends on motivational factors and requires further commitment from the subject, for example active participation in a modding community (Schäfer 2011). This difference between the interface analysis and the praxeological perspective implied here constitutes a demand for a stronger consideration of the tools (since they inscribe the degrees of freedom into the gameplay) and the actual practices (since they show how the scripts are to be followed, counteracted or even subverted) during the research of editor games. To date, research on the (cultural) history of co-creative games is scarce and, at best, it merely plays a role in the footnotes of texts on modding communities (Barton and Loguidice 2009). Consequently, discussing mods implies the existence of editing tools, but then again, usually just the end-products stand in the center of the debate, i.e. finished mods, instead of their development process. This “result-oriented considerations” (Gethmann and Hauser 2009, 9) misjudge the agency of modding tools and their importance in design and editing processes (cf. Beil and Hensel 2011).

3 NEW METHODOLOGICAL CHALLENGES
First of all, playing practices are not clearly separable from everyday life any more (if they ever were) since casual games, gaming communities and pervasive gaming undermine the distinction between playtime and everyday activities. Or, as Thomas Malaby (2007) notes:

“If by ‘play’ we are trying to signal a state or mode of human experience […] – a way of engaging the world whatever one is doing – then we cannot simultaneously use it reliably as a label for a kind or form of distinct human activity (something that allows us to differentiate between activities that ‘are play’ and those that ‘are not’).” (100)

Like Johan Huizinga, Malaby regards ‘play’ as an ever-present form of human experience in contrast to an activity clearly distinct from everyday life. Summarizing this point, one can state that playing and everyday life are not conceptually separable, but work as a practical distinction to locate specific experiences as a result of the script of the game. Furthermore, games can change over time, not only because of their rule sets that prescribe different outputs at decisive passage points, but also through the practice of playing itself, sometimes with unintended consequences.

“This is because any given singular moment in any given game may generate new practices or new meanings, which may in turn transform the way the game is played, either formally or practically (through a change in rules or conventions).” (ibid., 103)

This means that games are neither reducible to rules alone nor to the narrative paths that they offer. The practice of Gaming seems to be located in between the subject’s actions and the affordances of the technology in question. Affordances constitute opportunities for action which are deduced from the functionally relevant and invariable properties of an artifact but depend on the subject’s abilities to make use of these properties (Gibson 1977; 1979). Methodologically this implies a constant sway of perspective. Madeline Akrich (1992) states:

“Thus, if we are interested in technical objects and not in chimerae, we cannot be satisfied methodologically with the designer’s or user’s point of view alone. Instead we have to go back and forth continually between the designer and the user, between the
Thus, playing produces a recursive quality that reveals itself in the processuality of play which is subject to emergent changes. In phenomenological terms, it is a fundamental experience in human life that we inhabit an uncertain world that is not built by us (cf. Malaby 2007, 107). Especially in editor games, players can overcome this uncertainty to some extent – a practice which then becomes challenging for Game Studies. The environments or action spaces of editor games serve as bridges between readymade game worlds and the users own creativity that connects gaming with other aspects of live: In *Minecraft* (especially in the creative mode) and in *LittleBigPlanet* (in the building mode analogously) participation and creativity are not optional but necessary modes of interaction in order to overcome the emptiness and uncertainty in the player’s experience. Due to these characteristics of editor games – the openness, unmarkedness, processuality – there is a need for fresh thinking and new methods of research which take on a praxeological perspective to investigate games ‘in the making.’

4 RESEARCH DESIGN

Espen Aarseth (2003) argues that playing games is the only effective method to conduct research in Game Studies. He highly recommends that researchers should play to gain first-hand experience of the material. However, Aarseth also takes into account the use of paratexts, additional materials like manuals, reviews, and, more recently, Let’s Play videos. In addition, he briefly mentions “observing others play” (6) as a resource for conducting research. Since the characteristics of editor games undermine the claim of an implicit player – which Aarseth takes for granted in his writings – which Aarseth takes for granted in his writings – who is inscribed into the fabric of every game and becomes visible as the script, we believe that it is not sufficient to intrinsically analyze these games. Research into co-creative processes has to look beyond the game space at the wider spatial, social and cultural context of gaming (cf. Stevens, Satwicz and McCarthy 2008). Since there are many possibilities to play these games, the scripts in editor games are not strictly defined but are subject to negotiation processes between the player and the game time after time.

4.1 Qualitative Usage Experiment

Dealing with this forwarded uncertainty in editor games we wanted to heed Aarseth’s advice and observe other people play. Therefore, we conducted a focus group analysis with nine participants whom we split into groups: one group played *Minecraft* and the other *LittleBigPlanet*. During the course of one workshop day, the two groups used five computers and one PlayStation console. There were students and PhD candidates in media and theater studies, philosophy and history.

In order to get comparable results – in this case comparable process routines – we gave each team an objective. The task included but was not limited to, building a castle. We specified the task and narrowed it down to Castle Wahn, a late baroque style, former moated castle. The castle was the venue where the workshop took place, and, as such, it was both the gaming location and the desired outcome of play. We also limited the games modes used, prescribing the creative mode in *Minecraft* and the level editor in *LittleBigPlanet*.

We conducted the experimental case study with the two focus groups of players and one observer group. There were four people in the *LittleBigPlanet* group and five in the *Minecraft* group, while the observer group consisted of four people who were not playing
at all. The uneven distribution in the groups did not constitute an obstacle since the LittleBigPlanet group used one console with two controllers, and the Minecraft group had one computer per player. These computers were connected by a Local Area Network so that the Minecraft players could collaborate on one project. The two groups were playing in separate rooms of the workshop venue.

The observation group used various documentation techniques: camera recordings (audio/video) to document the off-screen action; audio recordings, to conduct interviews and to document the discussions within the respective groups; and screen capturing technology to document on-screen activities. The latter was only possible in the Minecraft group since it proved to be too complicated to capture the interface of a console game because expensive additional hardware would be needed in order to obtain high-quality video without limitations in the performance. Instead, in this case, we aligned a camcorder mounted to a tripod on the TV screen. In addition to the recording devices, the observer group also took notes while watching the others play.

4.2 Research Questions
The workshop was an experimental setting and a first approach to analyze the practices involved in playing editor games. It was also a first step to test and investigate different methods of data collection and evaluation. There was an overall methodological interest in the comparison between the participatory structure inscribed into the aesthetics of the game and the actual participation acted out by the participants in situ. Furthermore, there were concrete research questions we wanted to direct towards the collected data. The most general question was in which way people approach these ‘co-creative open world games.’ Where are the differences in the unmarked game of Minecraft compared to the rather prescribed world of LittleBigPlanet? Beyond that, what pre-sets, rules, and modes of production will be agreed upon in the respective groups? For example, will there be group dynamics or individual efforts to find a solution to overcome the unmarkedness of the interfaces?

5 FINDINGS AND CONCLUSION
As stated above, LittleBigPlanet and Minecraft offer different scripts for participation. LittleBigPlanet has a jump’n’run aesthetics – a gameplay mechanic that is also inherited in the editor mode of the game. Even though the interface seems to be intuitive, handling the avatars that have to be used to build structures and to assign textures proved difficult. This is largely due to the handling of the menus using a controller that involves extensive switching through all the various items, colors, and textures via left/right/up/down operations and by rotating the control stick on the gamepad. In order to learn all the different operations, the game urges users to try out all the functionalities within tutorials, which seemed helpful at first but quickly became cumbersome by delaying the time when the actual building process could begin. Since the editor mode in LittleBigPlanet was designed as a level editor for the game, there is an implicit appeal to build a playable construction. For example, because structures need to be climbable, distinct elements have to be joined by staircases and bridges. Another aspect inscribed into the jump’n’run editor is that the temporal structure is bound to causality and therefore screen space expands in a linear manner. The script urges builders to work from left to right. This is even reflected in the delete function. Instead of the possibility to delete certain isolated objects and leave the rest intact, one has to rewind (and by this means going back in time), revoking the last steps. This led to a constant movement from left to right and when the players decided to start over and build a new structure, they moved to the right and opened up a new empty space.
In Minecraft’s creative mode there is no tutorial guidance at all and only a few traces of the survival mode remain in the editor. The players are ‘spawned’ in an open and empty game space, ready to go in all directions. The handling of Minecraft seemed to pose fewer problems to the participants of the study. The menus in the building mode are clearly structured and compartmentalized. Additionally, making choices with the help of the mouse proved much easier as compared to the controller.

The main distinctions of the scripts lay in the player’s degrees of freedom, the underlying physics, and the overall orientation of the game world. LittleBigPlanet relies on jump’n’run mechanisms, which makes handling in the editor mode much harder at first. Users who want to ‘build’ something are more concerned with the mechanics of the avatar – who is subject to artificial gravitational forces – and the game space, than with the translation and transformation of their ideas onto the screen and into the game world. Choosing the right perspective is rather difficult since players have the possibility of zooming in and out with the virtual camera in order to change the distance between the avatar and the depicted objects; in addition, objects can be variably scaled to change their size. The Minecraft avatars appear easier to handle. The setting is much ‘calmer’ – there is no background voice giving instructions – and the physics are much more discreet.

In LittleBigPlanet, every element is freely adjustable; and therefore there are no prescribed sizes. This counteracts exact measuring, rendering it difficult to link different elements together to form a larger unit and to keep a consistent scale. Furthermore, nothing snaps into place, which makes it tricky to combine pieces. This holds also true for the orientation. Once an object is rotated, players showed difficulties when trying to realign it horizontally.

5.1 Realism Vs. Surrealism
To answer the question why the two games afford courses of action as different as the surreal and playful attempt in LittleBigPlanet and the realistic and analytical attempt in Minecraft, one has to look at the scripts of these games that allow or prevent certain patterns of action and that become fully visible while the game is played. The collected ‘visual evidence’ points to certain properties which are crucial for the interactional experience.

The main distinctions in the creative approach of the two groups can be described as divergent paradigms which the members of the two groups agreed on. Foreseeably, LittleBigPlanet fostered a playful approach and design decisions were made ad hoc and in a spontaneous manner. In a pragmatic way, elements were chosen because they were immediately available, which means they were visible at the precise moment, involving no further search operations in the item menus for different building blocks or structures. The names of materials in LittleBigPlanet are quite metaphorical and pictorial, resembling “digital copies of analogue materials” (Westecott 2011, 95): there are textures called “Aztec Gold” and “Aztec Jade”, “Red Deck Chair” or “Taxi Metal” (yellow framed by black and white stripes). These labels mix with rather concrete taxonomic descriptions: “Red-Painted Wood”, “Blue Glass”, “Mahagony Wood” or “Basic Polystyrene”. The elements are bundled in the “Popit” menu forming different topics: “Balls”, “Bits and Bobs”, “Cogs”, “Food”, “Tutorials”, “Wheels”. The material section offers “Sponge”, “Stone”, “Wood”, and the general category of “Accessories”. Besides, there are more abstract shapes and functions to choose from. Players can paste stickers over textures and the background. These stickers offer ready to use premade shapes to choose from: “Animals”, “Architecture”, “Body” (parts), “Colors”, “Decorative”,
“Doodles” or “Concepts”. It is possible to cite various periods of art and architecture, e.g. one player labelled a sticker “baroque in a sense”.

While in Minecraft players can also choose between different raw materials like wood, stone or sand it is generally not possible to choose between specific objects of different shapes since all the main elements are blocks of the same size. Nevertheless, when the actual building process took place, the players quickly agreed on taking a realistic approach to build the castle. Realism, in this case, does not refer to a similarity in appearance since building a castle with curved window and doorframes out of blocks would have been hard to achieve. Instead, players tried to translate the brick and mortar structure of the castle into the block language of the game. What the players tried to achieve was a mathematical realism funded on the effort to build a true to scale digital model of the structure. This was acted out by the ‘fieldwork’ of one of the participants who did not sit down at a computer right away but first looked out of the window to estimate the height and width of the building. Later, he walked outside with a pen and a paper, counting windows, bricks and measuring distances by rule of thumb and striding up and down. The results went into a sketch of a lateral view that was transferred onto the whiteboard in the room where the other ‘builders’ were. The drawing was later accompanied by a photograph of the castle which was searched for on the internet and then projected on a screen.

5.2 Co-operation and Division of Labor
In Minecraft, players started to cooperate right from the beginning. At first, they encountered several technical issues, like getting the game to work on every computer and setting up the LAN. When the actual building process started, a clear division of labor took place after a short period of time. A skilled player took command and oversaw the development without destroying the group effort to crowd-source design solutions and to work out the ideal way to transform the castle into a digital model. The analytical approach continued taking shape till the end of the experiment despite some attempts at counter-gaming where one participant tried to counteract the overall constructively minded approach of the rest of the group by experimenting with TNT and trying to destroy what the others had built. For the rest, the modus operandi was intriguing: The cooperation on the Minecraft project clearly resembled team work in a professional environment.

With LittleBigPlanet the circumstances were different. Given that the players had to work on the same screen, it was difficult to distribute tasks. Players were creating and working at the same time and were frequently distracted by their own actions. In this way it is hard to establish an overview of the overall structure. The participative environment of the game simply did not afford it (cf. Gibson 1977, 1979; Gaver 1991).

In Minecraft, the distributions of the group’s efforts led to a situation where playing was coordinated towards efficiency. There was an accepted and strictly adhered division of labor among the Minecraft builders and every member of the group had a segment to work on, e.g. details of the façade, the roof, or the interior of the castle. This becomes apparent in an amusing way during the day and night circle in Minecraft. Time in Minecraft passes 72 times faster than real-time, and in order to skip nighttime altogether, the player has to sleep, which is only possible by building a bed and lying in it at sunset. In multiplayer mode, every player in the game world has to be in his or her respective bed for the change to happen. The ‘workday’ in our experiment was structured by the rising and setting of the Minecraft sun simply because in the darkness of the night it becomes
difficult, if not impossible, to work on the details of the castle. The beds were placed right in front of the ‘construction site’ so everybody could swiftly reach them. One *Minecraft* day equals 20 minutes of gameplay and every time dusk came along, someone would announce that all workers had to go to bed immediately. If someone was missing, the person was exhorted to hurry up and “go to bed.”

5.3 The Grid – Participation and Creativity

In *LittleBigPlanet* it is the foregrounding of the jump’n’run aesthetics and mechanisms that leads to spontaneous actions and playful arrangements. This includes the building elements themselves. These are not passive entities but can fall down and move after they have been placed. For example, after having placed a crescent-shaped object on its tip it rolled over immediately. In *Minecraft* the building blocks remain static in the same spot and therefore can be placed with precision. This shows once again that the scripts of the editor games support different forms of creativity and prevent other approaches.

There were several attempts by the two *LittleBigPlanet* players to focus and structure the building efforts on the castle and to plan the outcome. When one player handed over the controller to another, she asked:

*LBP1:*  “Is there a plan?”
*LBP2:*  “So maybe, as I said, we should start again with a plan? But on the other hand – maybe not!”
*LBP1:*  “Let’s try something that maybe looks like a castle”.
*LBP2:*  “All right, we can try. And what do you want to build?”
*LBP1:*  “I’m not sure. Probably I could make the basement. Some kind of basement. Or the roof. Or the windows because I have those glass plates […].”
*LBP2:*  “Ok, so we start with what? What do you think?”
*LBP1:*  “I just think a kind of shape”.

The different predefined elements along with the selectable backgrounds lead to a ‘distributed aesthetic’ – different shapes, ornaments and colors are combined together with freestyle drawings. There are only a few auxiliary lines which facilitate the exact placing of objects. In contrast, the analytic approach of the *Minecraft* group was supported by the transparency of the editor functions and at the same time by the opacity of the participatory structure, mainly the grid-like game world. The ever visible grid and the block shaped elements serve as mediators between the templates of the real world, the model in the minds of the players, and their actions on screen. It permits and structures the translation of the imagined look of the castle into the (block-) language of the game via the building blocks. With the help of the grid, *Minecraft* succeeds in introducing a frame of reference with clear and fixed relations, thus supporting the translation of metric dimensions into blocks. In this way, *Minecraft* encouraged the group to build a true to scale digital version of Castle Wahn.

Since the conversion factor is not defined by any script, the overall scale of the project was subject to a negotiation process and in the end crowd-sourced. Talking about the entrance door the following conversation took place:

*MC1:*  “Now you count how many blocks appear large and longish to you.”
*MC2:*  “According to the motto: ‘Imagine the portal of a castle and decide how long you would make it.’”
*MC1:*  “Right. Or one length [of the castle] in general.”

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MC2: “Look here [goes to the whiteboard]. The portal down here.”
MC3: “How wide I would build it? At least four [blocks], rather more. Depending on how high it is. We also have to consider the relation to the height.”
MC2: “I suggested building it six to eight. A width of six blocks, and eight blocks high.”
MC3: “Maybe we have to go outside again, to look at the actual height.”
MC2: “Well, this you see when you take a look outside.”[...]
MC3: “I don’t know, how many blocks do you need to build a window?”
MC2: “It depends how big you want to make them.”
MC1: “You can saw out one single block and look through already. But this is not a window.”
MC3: “It’s not a window, it’s a hole!”
MC1: “Yeah, but then you install glass and then you can state, this is a window.”
MC2: “All right. And if we build it two by two?”
MC1: “That looks silly. The bigger, the more blocks we use for the windows or for anything else the nicer it will certainly look.”
MC2: “The point is, we have to start out with one size.”
MC2: “And then we look at it, and check whether it is too big or whether we continue with this.”

Similarly, the function of the basic Minecraft building blocks, which players arrange and rearrange within the game world, is subject to collective decision-making. While LittleBigPlanet contains many elements that represent known and often popular artefacts, Minecraft only offers blocks with different textures and functions, like a box of LEGO. This does not mean that there is a higher degree of participation and creativity within Minecraft. Instead, it shows that there are different premises concerning the praxeological range of participation and creativity in editor games and perhaps in the wider context of digital media. While Minecraft can be described as a digital remediation (Bolter/Grusin 2000) of analogue LEGO, the praxeological dimension is to use abstract and reduced building blocks to create structures that resemble their template’s dimensions and on-site measurement. LittleBigPlanet seems to resemble a rather loose combination of different elements that are more or less fully formed. While the creative mode of Minecraft resembles playing with toy building blocks or LEGO, the editor mode in LittleBigPlanet relies on the paradigm of compilation, remixing, and mashing-up to create collage-like surfaces associated with the content sharing platforms of the so-called Web 2.0. Since the scripts of LittleBigPlanet do not directly afford the reversal of moves, the players have to leave behind their existing structures and move on to an empty space in the game world to continue building – this shows the cumulative character of the game. It is about constantly adding things, again a similarity to participative practices in the Web 2.0, where people keep on adding content and filling in blank spaces rather than overwriting or deleting old or even outdated contributions.

5.4 Counter Gaming, Sabotage and Script Restrictions
Not all the members of the Minecraft group followed a ‘realistic’ approach. One participant worked himself into a counter-gaming strategy, trying to sabotage the work done by the rest of the group. At first, he tested Minecraft’s affordances for counteraction, digging holes and experimenting with explosive TNT blocks. After he accomplished several controlled detonations, he started building his own structure which resulted in an underground dungeon-like tunnel system with several chambers. In one of them he placed his bed so that he could stay underground even at night time. The anti-program of the player was again undermined by other group members. This happened both offline and within the game. One way consisted of verbally reincorporating the...
player by reminding him of the objective of the gaming effort. This was done by assigning the player specific tasks like building one element of the façade. Furthermore, for counteracting the attempted sabotage, one member of the group flooded the tunnel system.

Counteractions like these could not be observed in the LittleBigPlanet group. Besides the fact that only two players can build at the same time, the game did not seem to foster a strategic group effort within the game, except to overcome restrictions that the script of the game introduced. One “mangle of play” (Steinkuehler 2006) which demanded coordination and cooperation is the way the virtual camera acts since it follows only one player (controller no. 1). On that account, it happened quite frequently that one of the players disappeared and got lost outside the borders of the screen. This is a result of the jump’n’run orientation of the editor which urges the players to orient their movements and their building efforts subsequently from left to right, since the original purpose is to build a playable level similar to the levels in story mode.

6 OUTLOOK

Within the praxeological comparison of two editor games, our on- and off-screen captures and direct observation of player interaction indicated great differences in the scripts of participation. Minecraft became apparent as a multi-tool, highly adoptable, and open for social negotiation process. This was supported by the appearance of the building blocks whose design left plenty of room for the ascription of specific roles in the overall construction. At large, a cooperative script was provided by the technical structure since the game affords cooperation in an open source like manner where everybody can open up a server, which functions as a distributed co-working space, and freely share content by distributing creations via a download link. Related to this highly cooperative structure, the analysis of the produced data through a praxeological perspective also revealed a strong tendency of the Minecraft group towards a social organization based on the division of labor within the setting of the experiment that is. We traced this intermingling of play and labor back to the script that is hidden in the organization of the game space. It is the grid-like structure and the blocky elements which encourage players to take a very analytical approach using the blocks as the basis for a conversion table, to adjust and translate the ‘real’ world to the grid (cf. Gehmann/Reiche 2014).

In contrast, LittleBigPlanet is part of a rather centrally controlled platform technology for playful level design including a distribution channel for user-generated content rather than a tool of construction (Sotamaa 2010). The menus, the overall setting, and the fully formed shapes do not primarily allow building things from scratch but rather combining and mashing-up existing cultural objects. Additionally, the technical pre-sets seem to be an obstacle for working on the same project simultaneously since the automatic navigation of the virtual camera makes it hard to keep track of both avatars at once. The editor mode prescribes the design and construction of a linear structure in the form of a jump’n’run game, the depth on the z-axis is limited, and it is not possible to directly delete particular elements. Therefore, the praxeological perspective reveals a rather accumulative practice where things are constantly added while covering empty game space from left to right – just like on a weblog or on the Facebook timeline where nothing ever gets deleted but new things are constantly being added. The technical structure of LittleBigPlanet also supports sharing, but, in contrast to Minecraft, only via the central agency of the publisher, who in turn benefits from co-creative action since user-generated levels extend the lifecycle of the game.
This essay is a fraction of a work in progress. There are as yet no definite answers to the overall question “What is participation?” But research into the scripts and practices of editor games offers many starting points. A praxeological approach that included affordances and took actual user implementation into account proved valuable in beginning to define this new terrain of contemporary participatory culture.

BIBLIOGRAPHY


**ENDNOTES**

1 The concept of assemblages, as it is introduced in philosophy by Félix Guattari and Gilles Deleuze has been adopted productively within the research of computer games. T.L. Taylor introduces a broad definition of the concept as a means to define the efficacious material and immaterial components of a particular field of study. „The notion of assemblage is one way to help us understand the range of actors (system, technologies, player, body, community, company, legal structures, etc.), concepts, practices, and relations that make up the play moment” (T.L. Taylor 2009, 332). For a more in-depth derivation of the term and its use in Game Studies see Karppi and Sotamaa (2012).
“Thus, like a film script, technical objects define a framework of action altogether with the actors and the space in which they are supposed to act.” (Akrich 1992, 208).

Advertised by Sony as one of the most important titles of the year and highly praised by critics, Media Molecule’s platformer building set is still regarded as a flagship of Gaming 2.0 (cf. Carless 2008; http://www.metacritic.com/game/playstation-3/littlebigplanet; accessed Jan. 2015).

However, shortly after the release of LittleBigPlanet, it became clear that replicating the structure of modding communities on a professional/commercial level results in an inexorably limited experience. The use of many beloved, yet often copyrighted themes, promptly compelled Media Molecule to reinforce the moderation of the online community and to remove those levels which contained legally protected material. As expected, these interventions encountered little enthusiasm within the community, but appear to be symptomatic of the commercialization/professionalization of modding practices.

Being physical properties affordances are inherent to the objects in question. They are invariant to a subject’s necessities and wants but at the same time contingent upon the subject’s abilities (implicit and explicit knowledge, experience, skill) in order to make proper use of artifact. Therefore affordances lie in-between the object and the subject circumventing the subject-object dichotomy although the objects are granted primacy in the construction of meaning (Gibson 1977; 1979). Within game studies the concept of affordances has been used various contexts ranging from games for education to theories of game design to gamification (cf. Cardona-Rivera and Young 2014).

The focus group analysis took place during the “Summer Institute Cologne 2013”, http://sic.phil-fak.uni-koeln.de/19843.html (accessed April 2015).