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»Now let's continue testing«. ›Portal‹ and the Rat in a Maze

GLaDOS: »Cake, and grief counseling, will be available at the conclusion of the test.«◂1

The two games of the Portal series are games about playing. The environment of *Aperture Science Laboratories,* the permanent testing of the »thrown« (»geworfene«) subject is a coherent analogy of playing with the computer as »equipment« (»Zeug«) itself.◂2 Reward, rules, breaking of rules, the potential option of dissidence or questionable gratifications are not just qualities of the ›test games‹ that the test subject Chell has to deal with, but also qualities of computer game(r)s.◂3

Portal – that is the main thesis of this text – spells out the situation of playing computer games: an isolated subject finds itself in a situation that demands coping with a series of tasks that become more and more complex and difficult. The reward for an accomplished task is yet another task. The motivation for accomplishing more and more tasks derives from the questionable promise that in the end, something awaits that will make dealing with the tasks seem reasonable in retrospective – while, at the same time, the actual (and iterative) work on the tasks itself is experienced as a kind of pleasure. While working on the tasks, this very promise of a meaningful ending and the pleasure of iteration provide the subject's motivation to just keep going. At the same time, this constellation ensures that an immanent discomfort rises within the subject and that this very subject reflects its (heteronomous) status. But the subject's potential realization of hegemonic control or gouvernemental conduct does not necessarily lead to forms of dissident action – which furthermore in turn can/do not lead to an appropriation of power structures or out of heteronomy. The partial cognition of (heteronomous) conduct rather leads to a regulated and ritualized form of (pretended) dissidence.

Based on this general perspective, I want to elaborate on a reading of Portal which conceptualizes the series as a meditation on playing computer games and which proposes that playing computer games can be seen as a ›governing‹ control technique as we can find in critical readings of contemporary discourses like *gamification* and *serious gaming*. My reading of the test chambers of the *Aperture Science Enrichment Center* proposes to see the Portal games as an ›al-

Fig.1: Cover of the comic *Lab Rat*

legory‹ on playing as a culturing technique, an allegory that, first and foremost, conceptualizes playing as an ideologically powerful process. To reinforce this thesis, I want to analyze Portal in order to show how computer games become functional as discursive mechanisms that basically generate, provide and process ›adaption concepts‹. These mechanisms can be understood as governmental techniques (at least within the domain of the *society of control*).

As a next step, it is my concern to show that such an understanding of governance must not claim to be all embracing. Cracks punctually emerge within the society of control where governing is mainly an intersubjective procedure of a massive affiliation of subjects. Although the agency of the individual subject becomes marginal within an intersubjective procedure, it does not disappear completely. If the society of control interpellates the masses, the last agency of the individual subject is a specific dissidence in terms of oppositional micropolitics. Using the example of the computer game The Stanley Parable, this ambivalence of ›tuning in‹ to adaption concepts and a punctual opposition to ›resonate‹ within the ›discursive cavity‹ can be demonstrated.

Thus, and this will be the next step of my argumentation, it becomes evident that the momentum of permanent demand for action provides the effectiveness of playful adaption concepts and mechanisms of interpellation. From this perspective the question of ›the counterpart‹ of the player comes into focus. Within computer games this counterpart can be found in the algorithm. Chell's struggle against GLaDOS is a struggle against the algorithm (in terms of an omnipresent AI of the game Portal and the society of control). Winning is not possible, the cake is always a lie. However, there is the option of tactical action. But this tactic is not dissident per se: the one who is tested is also subordinated to control. Tactic is rather a kind of jamming. Jamming makes media visible, jamming infringes the place of the other, jamming interrupts protocols.

Rats in a maze

Wheatley: »But the real point is – oh, oh! You know what I've just remembered? Football! Kicking a ball around for fun. Cruel, obviously. Humans love it. Metaphor. Should have seen this coming.«

The Portal series does not picture a player on a playing field. It pictures a test subject within an experimental arrangement. Or even more explicitly: it pictures an arrangement that is supposed to transform a test subject into a test object. The obvious approach to the scenario of the Portal series is the metaphor of a ›rat within a maze‹. The common reading of this image supposes to transfer a living organism (a rat) – that is being transformed into an object by the epistemic arrangement of the experiment – into a sinister test situation in which the object can (and should) accomplish an improvement of its living conditions by learning resp. by adapting patterns of action. All the various narrations of such a test scenario come down to evoking positive behavior modifications that bring the object ›rodent‹ to a state in which it can accomplish a given task (more) effectively.

In the 1920s in Harvard, the ›father‹ of maze-rat-testing, William McDougall, studied the ability of rats to find their way out of mazes. He found that rats, after other rats before them learned to find through the maze effectively, found through the maze faster, too (McDougal 1927).◂4 A kind of ›antithesis‹ to the evolutionary and generative improvement stated by McDougall can be found in the work of Robert Yerkes. Yerkes lets earthworms crawl through test courses and observes at which point in time the earthworms begin to avoid the arranged traps and pain inducing objects (Yerkes/Dodson 1908). The gist of Yerkes research is a learning theory that contradicts the model of learning through observation and the resulting understanding. It rather conceptualizes learning as a process of practical training and gradual adaption of behavior. Yerkes' earthworms in the maze of sandpaper and electric shocks learn by repetition, rehearse their behavior, and gain knowledge through behavioristic conditioning (cf. Goppelsröder 2014, 97f).

Hence, the test object within the test arrangement points to the question how knowledge, behavior, and perhaps even reason and intersubjective action can be learned by observing an object acting desperately and which conclusions must be drawn from this. Yerkes' earthworm is ›formed‹ by the discipline of pain and punishment. McDougall's rat internalizes its experience and ›infects‹ other objects of the collective that were not able to participate in its experience in an almost magical process. Rupert Sheldrake (1981) sees the experiment of McDougall as evidence for the existence of a rather transcendent »morphic

Fig. 2: »The Teach with Portals program offers free content, information and tools to help educators build innovative curricula. Games and tools are delivered through STEAM for SCHOOLS, the school-friendly version of our game distribution service. Educators can learn about and share compelling, engaging and creative content by accessing lesson plans and resources on the Teach with Portals website, and join a teachers-only community forum for peer support and problem-solving. Become part of a movement that shares ideas, methods and experiences to teach students in profound new ways.«

field« that integrates beings into a community beyond symbols and communication. From his perspective, the rats that crossed the maze first created a learning pattern within a »rat field« that the following rats could access, even though they were not akin. The rather esoteric momentum of the morphic field becomes much more plausible, however, when we conceptualize the morphic field as a discursive field.◂5 Seen this way, the crucial question of the maze test is not only about learning or adapting patterns of action but also (and probably in any case) about how such knowledge can constitute and operationalize itself beyond the boundaries of the subject. This reading of this kind of experiment does not focus on the single rat and its learning aptitude but on the intersubjective structures that transform knowledge into a discourse that constitutes culture itself.

Yet, we need a third test maze and its animal test-inhabitants to provide the allegory of the rat within the maze with the dimension that is necessary to prove helpful for an understanding of Portal and computer games. Within the machine called *Theseus*, built by Claude Shannon in 1950, a mechanical mouse finds its way through a maze. The machine works completely on an electromechanical basis and is constructed on 110 relays (Pfeiffer 1952). Shannon presented the mouse and the maze at the Macy conferences on cybernetics in the 1950s (Shannon 2003). In this constellation, the self-controlled mechanical mouse leads to the question of the difference between autonomy and heteronomy: although the mechanical mouse seems to find its way ›on its own‹, the relevant question is according to which specific knowledge it does so. The learning and the knowledge of the relay-mouse are not adaptive, discursive, behavioristic (or morphic) ones. It is the ›knowledge‹ of the algorithm that is ›implemented‹ in the mouse. The rat in the maze ›functions‹, driven by the idea of cybernetic self-control in terms of a discrete epistemological pattern.

The rat in the maze raises the question of the agency of the tested subject. It is commonly accepted to conceptualize the test subject as an object (that is meant to be passive) that is being formed and formatted according to the rules of the test and that generates knowledge for the observer by performing within the test arrangement. The rat, the earthworm (and also the mechanical relay-mouse) only generate knowledge by subordinating to the power structure of the test. The test object can only regain its status as a test subject by defying the test (or at least reconfiguring it actively).◂6

Hence, the test not only raises the question about the power conditions under which the knowledge is produced, but also how the subject can achieve *agency* within the test. Portal broaches the issue of control and self-control. It concerns itself with how the subject acts within a space of adaption and accommodation according to rationalities of control. Ostensibly the rat in the maze and the test subject Chell in the test chambers of *Aperture Science Laboratories* as well as the individual player in front of the computer raise questions about learning. Although reasoning about Portal in terms of forms and functions of learning, teaching, and instruction suggests itself (and the discoursive field around the games of the Portal series suggests such a perspective, too; see fig. 2), the learning aptitude of the rat shall not be the issue of further considerations.◂7 Thus, I would like to argue within a much wider context – under the premise that learning is a functional part of governance in terms of a greater subjective and societal technology of control.

Portal & postscript

The concept of control and of a society of control, as sketched by Gilles Deleuze within his *Postscript on the Societies of Control* (1993[1990]), is the framework of these considerations, following Foucault's observation that power is no longer (exclusively) exercised in terms of repression or disciplinary training of individuals or institutions. Totally in line with the gouvernemental self-conduct that the late Foucault describes, power within a modern society is first of all seen as a continuous process that produces and diversifies knowledge, regimes and normative systems without namable or identifiable actors. In the society of control, a dominant and homogenous knowledge that is stabilized by ideologies does not exist anymore. Power and knowledge rather emerge from a distributed and diffuse hegemonic and no longer identifiable system of control.

While, according to Foucault (and also to Deleuze after him), the disciplinary arrangements of instances and architectures controlled the subject and the

body within the disciplinary society of the 18th and 19th century, the exercise of power within the society of control diffuses into a kind of non-controlling control by the incorporation, interpellation, and integration of subjects into an assemblage of control, power and knowledge that is mainly produced and functionally stabilized by the subjects themselves. It is no longer the master that governs over the slave by exercising power and repression towards his body and soul – the subject subordinates him or herself under the ›rationality‹ of the discourse and a truth of norms and values that appear to be natural.

»The socio-technological study of the mechanisms of control, grasped at their inception, would have to be categorical and to describe what is already in the process of substitution for the disciplinary sites of enclosure, whose crisis is everywhere proclaimed. It may be that older methods, borrowed from the former societies of sovereignty, will return to the fore, but with the necessary modifications. What counts is that we are at the beginning of something« (ibid., 7).◂**8**

Within the society of control computer games (and their predecessors and extensions) are both culturing techniques and machines of control.

»Types of machines are easily matched with each type of society – not that machines are determining, but because they express those social forms capable of generating them and using them. The old societies of sovereignty made use of simple machines – levers, pulleys, clocks; but the recent disciplinary societies equipped themselves with machines involving energy, with the passive danger of entropy and the active danger of sabotage; the societies of control operate with machines of a third type, computers, whose passive danger is jamming and whose active one is piracy and the introduction of viruses. This technological evolution must be, even more profoundly, a mutation of capitalism, an already well-known or familiar mutation that can be summed up as follows: nineteenth century capitalism is a capitalism of concentration, for production and for property.« (ibid., 6)

Whereas Deleuze associates the machines of a society of control with ›jamming‹, I want to propose that we have to assume that those information-machines have a much more differentiated potential of agency. The machines of the society of control are constitutively involved in organizing the affiliation of the subjects to the discourses of self-conduct and therefore have to be seen as essential actors of societies of control. From such a perspective theoretic and analytic reflection no longer have to focus on the actors or instances of power and authority, but rather the structures and processes that generate this very regulating and governing hegemony. Hence, within the framework of the society of control we have to consider gaming machines in terms of generating specific ›medial selves‹ that are connected to technical and symbolic machines by

means of specific forms of agency. By this, they produce and permanently reconfigure specific configurations of discursive subject-concepts.

Gamification

The games of the Portal series are such agents of the society of control. Portal proliferates and criticizes the exercise of control and self-control by using information machines in a dialectic way. Portal subordinates the playing subject to a routine of permanent testing that invokes specific patterns of agency and at the same time inherently and bluntly addresses the complex of problems this brings with it in a critical way. The promise that there might be cake has to be seen as a completely absurd model of gratification and it resembles a perfect analogy to the idea of playing computer games as a subordination under and internalization of specific patterns of action for a digital and post-democratic society of service sector work. Addressing this subordination bluntly is, at the same time, an invitation to conceptualize the conditions of a ›playful‹ society as a political rationality of control by ›marginal‹ instances and actors. Thus, Portal initially sheds a clear light on a gamified society.

GLaDOS: »Enjoy this next test. I'm going to go to the surface. It's a beautiful day out. Yesterday I saw a deer. If you solve this next test, maybe I'll let you ride an elevator all the way up to the break room, and I'll tell you about the time I saw a deer again.«

In this context, it seems reasonable to take a brief look at the concept of *gamification*. Currently, *gamification* can be seen as one of a number of ambivalent *buzzwords* within the domain of computer games but also within the domain of a neoliberal economic culture of managerial optimization and self-optimization. At its core, *gamification* can be conceptualized as a technique that implements the ›serious‹ components of the governed life into the space of action within games that is supposed to be free of consequences, to be ›magical‹ and pleasure-oriented. To put it simply: *gamification* is »the use of game design elements in non-game contexts«.◂9 In respect to the argumentation of this text, *gamification* can also be conceptualized as a process in which subjects are playfully stimulated to self-conduct by means of marginal formal and narrative parameters.◂10 In contrast to the gratification systems of early capitalism (employee of the month, piecework, …) *gamification* might be (just like the assessment center, the managerial self, the Kaizen or monitoring) one of the central constellations of the society of control. The effects of *gamification* profess to aim at maintaining the ›trial action‹ of the game (that is: its osten-

sible limitation to the symbolic level). Gratification systems explicitly take elements from the repertoire of symbolic capital (achievement, high score, eye candy) – but on a discursive level they implement politics of neoliberal self-optimization. In this context, *gamification* stands for a rationality that permanently focuses all kinds of action on gratification and the correlation between reward and the action according to rules and winning conditions.◂**11** (Self-)Optimization and (self-)control are evoked in terms of a practice of the self. Discipline and repression become naturalized and are no longer perceived as a heteronomous framework.

With *gamification* resp. with the slightly broader concept of *serious games*, we address a field of action that refers to procedures for the improvement of efficiency.◂**12** *Serious gaming* can be seen as an extensive (technological and societal) control fantasy in terms of regulative politics between modes of decision making (a culturing technique for reducing the complexity of the real world) and forms of trial action (a culturing technique for opening spaces for trial action and suspending consequences). These fundamental culturing techniques make clear that the concepts of serious gaming primarily aim at suspending and undermining the assumed ›seperatedness‹ of the game (idealized as an action-structure within a magic circle) from the ›real world‹. In this context, playing becomes a form of action that constitutes a subject with a form of agency. But at the same time this very agency is directly linked to a logic of control that primarily aims at making contingent spaces of reality supposedly controllable by implementing certain discourses of rationality.

Gamification also refers to the (theoretically rather obsolete resp. always improperly used) concept of immersion (understood as involvement). In this recourse, however, the concept of immersion gains new qualities – especially when we no longer conceptualize it as a mere ›effect‹ of the game (in terms of being ›drawn into‹ narratives and action settings) but rather as a Foucauldian subject-technology. The constitution of the »entrepreneurial self« (Bröckling 2007) initiates a specific dynamic of ›being drawn in‹. Hence, immersion can also be conceptualized as an ideological effect of the computer game dispositif – an effect that emphasizes self-management in the context of the computer as working equipment within and by means of the game (cf. Neitzel / Nohr / Wiemer 2009). Thus, immersion (and *gamification*) can be seen as a form of human-machine-interface.◂**13** Such an immersive interconnection is the precondition for the production of a compliant test object: only rats that cross the maze willingly (through operant conditioning or learned on a voluntarily basis) can be interpellated. But how can this interconnection or adaption be described in terms of micropolitics? As a routine repetition of the test!

Adaption to the test

On different levels, computer games can be seen as machines that are driven by discursive mechanisms and which function primarily by providing and processing adaption concepts. Hence, the human rat within the maze is being ›formed‹ – not by the esoteric ›morphic field‹ but by the power of the discourses that connect the subjects to games in terms of micropolitics. In this process, not only the narrative patterns but also the patterns of action and control connect the playing subjects to symbolic and technological systems – transforming this connection into a ›natural‹ experience at the same time (cf. Nohr 2008).

> Announcer: There is a framed painting on the wall. Please go stand in front of it. This is art. You will hear a buzzer. When you hear the buzzer, stare at the art.
> [BUZZER]
> You should now feel mentally reinvigorated. If you suspect staring at art has not provided the required intellectual sustenance, reflect briefly on this classical music.
> [MUSIC INTERRUPTED BY BUZZER]
> Good. Now please return to your bed.

Particularly within a game like Portal, which formally consists of riddle and *jump'n'run* elements, an example for aspects that provide this kind of interconnection are the routines of repetition. In a *jump'n'run* it is crucial for the game that the player repeats certain moves (e.g. jumps, runs or adopts movement patterns that avoid or activate certain *trigger points*) until they are in accordance with an ideal routine that is given by the game. These repetition procedures – which in most cases have to be discovered and learned by the player in *trial & error* procedures – are defined by parameters within the software that have to be activated (or avoided). The visual representation of a successful jump is the reward for achieving the underlying winning condition – to cope with a set of requirements that are defined by the algorithms of the game. At the same time, these routines of repetition also influence the narrative and intersubjective levels of meaning. This becomes quite evident in failure that is always reversible and can be suspended anytime (›You are dead! – continue?‹). The player subordinates himself or herself voluntarily to a process of optimization – a self-optimization. The experience of the Tayloristic ›one best way‹ hints at a discourse-analytical interpretation of ›narrations‹ within computer games. Such an insistent ›invitation‹ can be described as an interpellation. Interpellation has to be seen as ideological – even in the most ›innocuous‹ meaning of the word – as it urges the player to deal with perpetually reoccurring variations of known patterns of action and to permanently work on similar tasks in constant repetition.

»The interpellation at work in these situations is intriguing. By design, computer games try to capture player attention and hold it for extended periods of time. This is not like the subjectivity of ›criminal‹ into which one is likely to be interpellated, when a police officer calls out ›Hey, you there!‹. Instead, when a computer game hails a player, it is (a) only into a play subjectivity, (b) primarily focused on interpellating the player more deeply into the player subjectivity, and (c) always an inauthentic hail.« (Ruggill / McAllister 2011, 42f)

Within the game, this is most evident in the function ›save – try – load‹ resp. ›try – fail – try again‹.◂14 A concept that has also been described by Deleuze: »In the disciplinary societies one was always starting again (from school to the barracks, from the barracks to the factory), while in the societies of control one is never finished with anything…« (Deleuze 1992, 5). However, this experience of interpellation can also be described as an ideological form of governance and as a strategy of normalization in which the playing subject (that also follows a ›narration‹) applies and stabilizes techniques of self-adjustment.

From such a perspective, the ›one best way‹ to do the Portal-jump can be identified as the crucial element of any *jump'n'run* that, in its core, is the adjustment of the player/avatar to both the control of the game character using the input device and the improvement of this character within the game narration according to the general discourse of ›self-optimization‹. Emphasizing the relation of game and technology within the analysis, this arrangement can also be described as a dispositif – which is not only represented in the narration but also in the structure of the Portal games. Such *reentry*-structures◂15 are common standard in most computer games. However, Portal makes this concept of an adjustment of the playing subject (as well as of the narrative character Chell) to procedures that can be related to scientific management an explicitly addressed momentum. Here, urging the player to enter a routine of repetition becomes obvious. And it is also explicit that the subordination to such a routine of repetition is the only option to stay ›in the game‹. The only way to gain self-efficacy and agency in Portal is to subordinate to the control mechanisms and routines and to optimize oneself permanently. Even escape from the system of test chambers can only be accomplished by repetitively learning a complex system of precisely measured and timed jumps.

However, Portal is not a completely closed system of self-governance. Particularly by the explication of the rigid forms of control that the player has to subordinate to in order to finally gain pleasure, Portal latently undermines this model of governance. Addressing the structures of governance demystifies and denaturalizes the artificial and the ideological qualities:

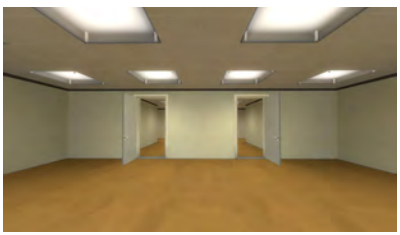
»Learning and winning (or, in the case of a non-competitive ›software toy‹, ›reaching one's goals at‹) a computer game is a process of demystification: one succeeds by discovering how the software is put together. The player molds her or his strategy through trial-and-error experimentation to see ›what works‹ – which actions are rewarded and which are punished.« (Friedmann 1999, 3f.)

The left door: The Stanley Parable

The crucial difference between the disciplinary society and the society of control is that in the latter governance and power are no longer omnipresent and invulnerable but pervaded by breaches. The empowerment of the subject is on the one hand necessary for the functionality of the society of control and its stabilization – on the other hand, though, it enables the subject to act in a self-empowered fashion.◂16 Particularly this ambivalence is a central issue of the Portal series. Both the player and the test subject have to decide which way to act: whether to go for the promised cake or to try escaping the test arrangement. Of course, this choice is an idealized one: the game itself forces the player onto a defined path that has to be taken and that can't be left. There is no way to get the cake, just as the step out of the test arrangement into the image of wavy fields of grain remains flat and empty. The actual breaches within the power structure are not to be found in the dissidence against an unchangeable narration or against the path that is determined by the algorithms of the program. Within the rigid form of computer games, dissidence can only be in micropolitics.

One game that makes these micropolitics its actual topic is The Stanley Parable. In this game, the player takes control (from an ego-perspective) of the character Stanley, a low employee who processes tasks in a completely alienated, Kafkaesque world of office cabins within a system of total control and surveillance. The game begins just as this totalitarian system collapses. Superficially, the game is about a subject that is released from the conduct of a repressive regime, makes his way through the structures of repression, gains insight into the functionality of power and finally terminates the machine by a concluding act of

Fig. 3: »When Stanley came to a set of two opened doors, he entered the door on his left«



»Disobey the Narrator to the end; take the right door, go into the warehouse, take the lift and jump onto the catwalk. Take the blue door 3 times. Stanley will walk into a large room that the Narrator had not finished building yet; Developer textures (orange and dark-gray tiles) can be seen along the walls around Stanley.

The Narrator will show some prototypes of videogames that he had been working on, due to Stanley's apparent distaste for the Narrator's intended game. They include the original two doors room, this time with a third door to the far right, featuring a wooden door and orange hallway, starkly contrasting with the other two doors.

Stanley will then play a ›baby‹ game, preventing a baby from crawling left into fire.

If Stanley fails the game, he is sent to a Minecraft lookalike game. He watches the Narrator create a house, and then walks into a cave in order to mine diamond. As Stanley walks further into the hole, the lighting dims and the Narrator laments on how open-ended the game is. Stanley is then sent to the first level

of Portal. He completes the first puzzle with ease. However, the Narrator closes the elevator and sends it away. Stanley falls through the hole into a remnant of the original office building, but it's actually the office from the original source mod. If Stanley walks back after going to his office, the screen turns to black and the Narrator closes this ending with some thoughtful dialogue.Stanley can also ›break Portal‹. Bring the radio into the puzzle room, use it to keep the double doors open, and then force the Companion Cube

self-empowerment. At least, this is the narration of the game if the player subordinates to the repressive politics of the game itself – that means: if he or she does exactly what the game expects and demands. A core element of the game design of The Stanley Parable is the *voice over* of the narrator. The voice, though without any visual representation, is a central character within the game that suggests to the player the ›one best way‹ for navigating the game. The player who follows this guidance becomes completely interpellated by the game mechanics, passes through a rather simple narration and is ›rewarded‹ after about 20 minutes by Stanley stepping out of the office complex and into the light – completely losing his last piece of agency in this very moment.◂17

However, the actual idea of The Stanley Parable is to withdraw from this very interpellation in the first instance. Only if the player consequently turns against the orders given by the narrator, the game shows its original potential. Only the dissidence (that is, of course, only ostensible, too) against the path that is determined by the program enables the player to have fun in finding the alternative endings that constitute the charm of the game. In these endings the game provides a meditation on the pitfalls of narrating within computer games. The central metaphor for this is the choice between a left and a right door: Only when you consequently choose the other, the ›wrong‹ door, the one that seems to lead you away from the path of the narration, you enter the real narration of the game (see fig. 3). The player that consequently acts against the invocations of the game is rewarded by escalating witty humor, references and recourses to game history, game theory and the ambivalence of power and powerlessness within com-

puter games. And it is not without reason that one of the alternative endings leads the player into a level of Portal (see text box). The immersive energy of The Stanley Parable lies in the permanent suggestion of the effectiveness of dissidence.

through. The Narrator will then keep Stanley in the room, since he had ruined his only escape«.
The Stanley Parable Wiki [http://thestanleyparable.wikia.com/wiki/Endings], last access 1.6.2014)

Hence, one could say that Portal is a game about dissidence that suggests but does not allow for dissidence, whereas The Stanley Parable is a game about power that permanently calls for dissidence. But that would be a mistake, as both games are formally and functionally linear path-structures, constituted by decision trees that provide parallel ways and detours but finally lead the player to a defined ending (or: several endings). Both games bind their playing subjects to the form of control. Both games allow action in terms of self-configuration, suggest agency and self-efficacy although there is none. However, both games also demonstrate that particularly by the pretension of an effective dissidence, the actual lack of dissident modes of action becomes obvious to the playing subject. Both games only provide an experience of agency and pleasure when players adapt to the pattern of the game.

Test-algorithms: ›Press the Button‹!

Announcer: However, thanks to Emergency Testing Protocols, testing can continue. These pre-recorded messages will provide instructional and motivational support, so that science can still be done, even in the event of environmental, social, economic, or structural collapse.

The player acts on the basis of the algorithm. The algorithm is not supposed to be and cannot be controlled – it rather tries to establish hegemonic control over the subject.◂18 This emphasis on the algorithm can also be found in the work of Alexander Galloway (2006). His methodological purpose tries to conceptualize the computer (and computer games) as the key technology and key media of an »algorithmic culture«. Galloway, too, sees the Deleuzian society of control as the leading metaphor for this culture (ibid., 87). Computer games fetishize the mode of control: in terms of narration as well as in terms of the inherent logic of information processing (ibid., 102). The core of the game is not the developing narrative but the work of the playing subject on the basis of the algorithm of the game – the continuous effort to understand the algorithm of the game and to ›use‹ it correctly in order to win the game.

Fig. 4:
»Wheatley: *cough* Button.
Wheatley: *cough* Button. Button.
Wheatley: *cough cough* Pressthebutton.
Wheatley: *cough* PRESS THE BUTTON.
Wheatley: *cough* Press the button,
would you?«

The test subject tries to beat the graded mechanisms of the *Aperture Science* test chambers from inside and outside and by a passage through the archaeology of testing (into the historic depths of the *Aperture Science Testing Facilities* and Cave Johnsons biography). In this process, the possible or imagined idea of dissidence is not only thwarted by the adaption to routines of repetition and the sublime approval of the entire game and the underlying program – but perhaps most vehemently by the interpellation to act. The algorithmic arrangement of a computer game constitutes a most powerful evocation of action. What kind of player could withdraw a call for action emerging from a situation in which he or she steps into a room in which an ostentatiously exposed button on the wall (discreetly enlightened by a table lamp) is the only visible object to be manipulated (see fig. 4)?

Quite similar to the earthworms in Yerkes experiment, the player has only two options: the reward for pressing the button (continuation of the game) or the punishment (disruption of the game). In a practical training the player learns that playing exclusively emerges from permanent action. The core of the society of control within computer games becomes manifest in the urge for action. Only the one who acts does play; only if there is action, there will be a computer game. Governance starts with the action of the player. Action leads to gratification: the one who presses the button is permitted to continue playing and to be tested. The one who acts is permitted to walk through an opening door, the one who acts is rewarded by high scores, achievements, extra lives. The one who acts works.

The computer game is a discursive ideological system that is far from being a playful appropriation of working equipment, but rather a variation of an adjustment to forms of scientific management.◂19 *Gamification* as a process of adapting and accommodating knowledge on action and control that affects the society as a whole becomes explicitly perceptible as a form of governmental subjectification. The crucial aspect of such an accommodation is most certainly the invisibility of the ›working equipment‹. And this aspect not only addresses the transparency of the computer as a medium but also the transparency of the player's own ›acting-body‹.◂20 *Gamification* is – in this concep-

tualization – the consequent integration of the subject into a naturalized form of governance. Within the society of control, discipline and control no longer address the body (and no longer define the factory as the central site for subjectification), but the soul (and make the enterprise and the ›entrepreneurial self‹ the central site of governance).

»...the factory was a body that contained its internal forces at a level of equilibrium, the highest possible in terms of production, the lowest possible in terms of wages; but in a society of control, the corporation has replaced the factory, and the corporation is a spirit, a gas. Of course the factory was already familiar with the system of bonuses, but the corporation works more deeply to impose a modulation of each salary, in states of perpetual metastability that operate through challenges, contests, and highly comic group sessions. If the most idiotic television game shows are so successful, it's because they express the corporate situation with great precision.« (Deleuze 1992, 4)

In line with this argumentation, Eva Horn (2002) conceptualizes the test as a formation of scientific management that not only evaluates but constitutes the subject's ›aptitude‹ for work:

»Hence, the test can be described as the final developmental state of the Foucauldian disciplinary society that provides the total integration of the individual into the functionalism of society, work and war by a continuously refined individualization. This integration is in line with a highly functionalistic anthropology, an anthropology that conceptualizes the human being as radically constructible, ›modifiable‹ and as an element of a constellation, in which it is located as one module amongst others.« (ibid. 124f; transl. by A.W.)

The test (and its continuation in form of the »theatre« of the games in assessment centers that deal with stress and flexibility) aims at the constitution of aptitude by the evaluation of abilities, routines, resistance to stress, permanent panoptic self-observation, and the certification of the behavioral potential for further development (ibid., 121pp). From this perspective, Portal (and according to Horns argumentation probably especially its multiplayer mode) would be nothing more than a gamified assessment center within the society of control.

Test and tactics

GLaDOS: There are 5000 other two subject teams in direct competition with you. But don't worry, you are in the lead.

Of course, such a reading of a computer game in general and of the Portal series in particular is too rigid, too monocausal, and too much biased in terms of conceptualizing the computer game as a mere articulation of the culture industry. A particular effort of the *cultural studies* is to point out constantly that popular texts especially may not be conceptualized hermetically closed to an extent that would make the implied dominant discourses and hegemonic forces inevitable and without any alternative.◂21 Particularly the above-mentioned discourse-theoretical reading of a text that aims at criticizing gouvernemental structures runs the risk of suggesting a certain inescapability from the proclaimed hegemonic formations of governance. Such an interpretation tends to produce expectable results like a well-lubricated theory-machine: decentralized and naturalized discourses form self-governing subjects that perfectly match the forms of power and governance. Having said this, reading a text like Portal according to methods of the critique of ideology, of critical theory or discourse theory would have to acknowledge the ambivalences and openness of production and reception to a greater extent.

Deleuze (1992, 159), too, states that there are »lines of ›breakage‹ and of ›fracture‹« within the power structures of control. Power, discourses or dispositifs cannot be conceptualized as total and absolute – particularly not within social practice (cf. Bührmann/Schneider 2008, 53). Hence, it seems productive to conceptualize Portal as a specific articulation of media culture and media practice that is a significant part of a constellation that makes the subjects that act on the basis of this articulation ›tune in‹ according to specific forms of discursively and ideologically pervaded, »strategic« subject-practices. At the same time, though, the open, undetermined and partially transparent ideological contours that are effective within and through such a text also allow for the articulation of other (»tactical«) readings. The elaboration on these ambivalences on the basis of the binary differentiation between strategic and tactical practice is a particular effort of Michel DeCerteau (1984):

> »I call a ›tactic‹ a calculus which cannot count on a ›proper‹ (a spatial or institutional localization), nor thus on a border-line distinguishing the other as a visible totality. The place of a tactic belongs to the other. A tactic insinuates itself into the other´s place, fragmentarily, without taking it over in its entirety, without being able to keep it at a distance. It has at its disposal no base where it can capitalize on its advantages, prepare its expansions, and secure independence

with respect to circumstances. The ›proper‹ is a victory of space over time. On the contrary, because it does not have a place, a tactic depends on time.« (ibid., xix)

The immanent logic of the society of control and its decentralized and meandering formations allow for realizing a potential to overcome dominant forms of power: the test chamber as an ›inclosing milieu‹ is in a crisis, and after centuries of training by discipline, the cake appears to be attainable. The game resp. the ludic occupies the war machines. The (Deleuzian) ›jamming‹ is no longer just a passive danger of the information machines, but an active option (for action) in order to make the media visible. A representation of this constellation can be found in Portal 2 within the level *Turret Control Center* (chapter 5). In this level, the player has to sabotage the deadly turrets being produced in an assembly line that keeps on reproducing a certain prototype. The player's task is to disrupt the entire production line by replacing the original construction plan with one for an inferior and rejected turret-model – a classical momentum of (early industrial) sabotage.◂**22** Another way for dissidence is the appropriation of the means of production:

»Take, for example, what in France is called la perruque, ›the wig‹. La perruque is the worker's own work disguised as work for his employer. It differs from pilfering in that nothing of material value is stolen. It differs from absenteeism in that the worker is officially on the job. La perruque may be as simple a matter as a secretary's writing a love letter on ›company time‹ or as complex as a cabinetmaker's ›borrowing‹ a lathe to make a piece of furniture for his living room. […] Accused of stealing or turning material to his own ends and using the machines for his own profit, the worker who indulges in la perruque actually diverts time (not goods, since he uses only scraps) from the factory for work that is free, creative, and precisely not directed toward profit. In the very place where the machine he must serve reigns supreme, he cunningly takes pleasure in finding a way to create gratuitous products whose sole purpose is to signify his own capabilities through his work and to confirm his solidarity with other workers or his family through spending his time in this way. […] Far from being a regression toward a mode of production organized around artisans or individuals, la perruque reintroduces ›popular‹ techniques of other times and other places into the industrial space (that is, into the present order).« (De Certeau 1984, 25)

Of course, it suggests itself to conceptualize practices of *modding*, *trick-jumping*, *speedruns* or *camping* as that type of tactical actions. But that would not do justice to the punctuality of tactics according to De Certeau – those ostensibly emancipatory practices are too much of an integral component of the economic process of the *gaming industry*.◂**23** It rather seems to be the momentum of individual action within the game, in which the player tries to act against the al-

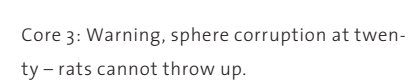
Fig. 5: »Portal 2 Keep Calm And Continue Testing T-Shirt – Officially Licenced Product«

gorithm, against the winning condition, against the urge to act that might count as *la perruque*. But that very momentum can hardly be named and described as such an action can only be articulated by particular individual practice within the governed arrangement of the game.

The breaches within the society of control emerge where governance functions as a particularly intersubjective procedure of massive subjectification. Although subjective agency becomes marginalized within an intersubjective procedure, it does not disappear entirely. Governance within the society of control interpellates the crowd; dissidence is the (and probably the last remaining) agency of the individual subject. In line with De Certeau's concept of tactics, the tested subject infiltrates the place of strategy – and replaces the original with the corruption of the system (the virus) for a short moment (without being able to appropriate the place of ›the other‹ permanently). Chell's struggle against GLaDOS is a struggle against the algorithm (of the game and of the society of control). Winning is impossible (the cake is always a lie). However, there is an option for tactical action. Tactic is not a type of dissidence: processing the test means subordinating to control and gamification. The tactic is in jamming. Jamming makes media become visible, jamming invades the place of the other, jamming interrupts protocols.

But jamming is not able to fix the text (and the test) – the subject remains within the test-text (see fig. 5). However, the test-subject begins to act and might transform itself from the test-object to the subject of testing. The reward (a field of grain behind an opening door, robots singing the credits song, a new high score or extra achievements, the satisfying feeling of having ›completed‹ a game) probably naturalizes and veils a great deal of the work that the player had to do as well as the fact that completing a game only means being able to start a new one. At the same time, this work (this action) is the tactical way into a semi-autonomy in relation to a ›gouvernemental‹ strategic text: the player in Portal tries to make the logic behind the riddles and the *if-then*-pattern of the program (that is: the algorithmic) transparent and controllable.

Towards an action theory of computer games



Core 3: Warning, sphere corruption at twenty – rats cannot throw up.

The central aspect for an understanding of computer games is the (intersubjective) momentum of the ›urge for action‹. It is constitutive for any functional computer game. Particularly the momentum of action makes power fragile in terms of a political and ideologically critical conceptualization of computer games. The test-subject in the Portal series (no matter whether this description refers to Chell or to the player) has to act in order to be governed. The effectiveness of adaptions and interpellations is constituted by the momentum of (permanent) action and the demand for action – and this is also and particularly the central momentum of *gamification*-applications. But no governance is all-embracing, no society of control without breaches. Adaption concepts operate on an intersubjective level and not as individual interpellations. Individual dissidence is always possible. Portal celebrates the tactical escape from the test, The Stanley Parable is a similar narration about the ambivalence of ›tuning in‹ to adaption concepts. Hence, action (by the avatar or the player) is the momentum that can make the society of control lose control over the subjects. Action reconciles with the discourse inasmuch as agency (like self-efficacy) holds good for the crucial momentum for constituting a notion of autonomous subjectivity. However, action also separates from the discourse as individual action can never be in permanent accordance with the discourse.

Hence, it seems necessary (not only due to the previous reasoning) to turn towards an action theory of the computer game.◂24 In my opinion, a fundamental and sound concept of action resp. of an action theory would not only help work on questions about the discursive relation between the subject and the game.◂25 It would also be a basis for reasoning similar questions: can games and work be reasonably distinguished from one another by referring to the concept of action? Does such a concept of action need further differentiation (e.g. action of control vs. cultural action, affective action etc.)? Can one and the same concept of action be applied to different kinds of games like shooters or business simulations or does it need to be differentiated? What is the exact role of media itself (the technology, the media society, the media economy etc.) within such a concept of action?

If we return to the rat-metaphor introduced at the beginning, it is fitting to see Shannon's *Theseus*-mouse as the most adequate representation of the test scenario in Portal. The test object navigates through the test chambers based on the (morphic-discursively) implemented algorithm of the game in terms of a

controlling power structure. It can only tactically oppose the strategic urge for action within the test scenario by acting individually (without hope of a McDougallian leap of understanding). This is the only way for the test object to emancipate itself: by transforming into a test subject – without escaping the test (and the control) in a substantial way, though.

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Translated by Andreas Weich

Endnotes

01► All quotes from the game Portal 2 within this text are taken from a fan-transcription: [http://www.gamefaqs.com/pc/991073-portal-2/faqs/62236]; accessed 10 November 2014.

02► Paraphrasing Heidegger in the prelude of a text on testing can therefore be seen as a test in itself in terms of testing the conventions of reputation management within media studies: »Congratulations, you managed to complete this absolutely meaningless test« (GLaDOS).

03► Many of the following arguments refer to the single player gameplay. The elaborated multiplayer mode that Portal provides as well will be left out as one of the main arguments focuses on the technology or the algorithmic as a ›counterpart‹; a constellation that primarily appears within single player mode.

04► It is necessary to mention that these findings could scarcely be confirmed in other experiments up till now (Agar et al. 1954).

05► Although this analogy of the morphic and the discursive is rather meant to be anecdotic, one could productively discuss how the esoteric momentum of the morphic field can be transformed into a constellation of indirectly coordinated processes of control, regulation, and communication by means of concepts of stigmergic systems. Discourse theory and analysis (just like the works of Sheldrake) are interested in the ›systemic‹ extent that transforms disorder into order without a direct organizing interaction or communication. However, these forms of contingent self-organization that form our society (›the market‹, ›the invisible hand‹ etc.) should not be seen as esoterically but politically formed processes.

06► However, one essential gist of all famous test and experiments in social psychology (like the Milgram experiment, the Stanford prison experiment etc.) is the fact that the test object only rarely empowers itself in terms of a test subject.

07► See also the article by Sandkühler for this subject.

08► It is important to see that the society of control does not chronologically succeed the disciplinary society in a historic perspective but that both forms of power and governance can be assumed to be coexistent.

9► Deterding et al. (2011): gamification is »the use of game design elements in non-game contexts« (ibid.,1).

10► See also the considerations of Schrape (2014) who conceptualizes gamification as a paradigmatic mode of gouvernmentality.

11► »This rhetorical power derives from the ›-ification‹ rather than from the ›game‹. -ification involves simple, repeatable, proven techniques or devices: you can purify, beautify, falsify, terrify, and so forth. -ification is always easy and repeatable, and it's usually bullshit. Just add points. […] I've suggested the term ›exploitationware‹ as a more accurate name for gamification's true purpose, for those of us still interested in truth. Exploitationware captures gamifiers' real intentions: a grifter's game, pursued to capitalize on a cultural moment, through services about which they have questionable expertise, to bring about results meant to last only long enough to pad their bank accounts before the next bullshit trend comes along.« (Bogost 2011)

12► Although the entry on ›serious games‹ in the Encyclopedia of video games (Ferdig 2012) claims that there is no comprehensive definition of the term, the topic sentence can be understood as a (negative) definition: »A serious game is a game that has been designed for a reason other than just to entertain« (ebd., 564). The term was originally established within a book by Clark Abt (*Serious Games*, 1970) and gained relevance within the current discourse thanks to the foundation of the *Serious Games Initiative* in 2002. One can read on the website: »The Serious Games Initiative is focused on uses for games in exploring management and leadership challenges facing the public sector« [www.seriousgames.org]; accessed 10 November 2014.

13► In this context Huhtamo (2005) provides a concise argumentation. He understands such an approach as the effort to write the history of the game as a history of automatization and the interconnection of man and machine: »The notion of a close, near-symbolic relationship between the human and machine is often thought to be the product of contemporary culture, saturated by all kinds of devices, both stationary and mobile. As arguably the most widespread application of interactive media, electronic games may seem the ultimate fulfillment of this idea, both in good and in bad. Yet the discourse on linking humans with machines goes further back in time« (ibid., 5).

14► For a more detailed argumentation concerning this aspect see Nohr 2013.

15► On an anecdotic level this *reentry* can be illustrated by referring to fan-videos on YouTube that are designed as tutorials and walkthroughs for the co-op-mode in Portal 2 and are significantly titled »Lets try this again«.[http://www.youtube.com/playlist?list=PLGC6Ybfsjk7bBcLWnU-kUVfyWN9zV17LB]; accessed 10 November 2014.

16► Such breaches also allow ›radical‹ forms of self-empowerment in order to escape from the

›interpellative urge‹ – e.g. by acting *not at all* or by *not* playing.

17► Just like in the final screen in PORTAL the player enters a *locus amoenus* but loses control in this very moment. This means that the computer takes control for the final sequence. The final *cut scene* thwarts the salvation by denying agency.

18► For an argumentation that conceptualizes hegemony as an agency-limiting, ›object-constitutive‹ political assertion in terms of game, game definitions, and game as a dispositif, see also Fron et al. 2007.

19► Towards the transformation of labor at the end of the 18th century in respect to a rising (ludic) culture of automatons and automatization cf. Huhtamo (2005); for a discussion of the relation between subjectification in scientific management and the emergence of the computer game, see Pias /2007).

20► In order to make the avatar Chell visible for the player, a complex arrangement of portals is necessary. When you look down in THE STANLEY PARABLE in the ego perspective, no legs can be seen – a deficit that the *voice-over* addresses repeatedly.

21► However, referring to cultural studies, evoke another ›one-dimensional‹ alternative: based on the ›verdict of activity‹ within the underlying theory of reception, any text within popular culture tends to be conceptualized as ›negotiated‹, ›open‹, and ›dissident‹ due to the fact that meaning is only produced during reception. In contrast to such a perspective, it seems much more productive to analyze the ›text and product PORTAL‹ as part of a dialectic interplay similar, for example, to the approach in the early paradigmatic texts of Stuart Hall (e.g. Hall 1989). These approaches constitute their epistemic value based on the fact that they conceptualize an ambivalence between interpellation and hegemony on the one hand and appropriation and interpretability of popular texts on the other– and, at the same time, generally acknowledge that particularly the popular text is definitely formed by a production context that is closely linked to hegemonic discourses and also capable of influencing the reading practices significantly.

22► From a Deleuzian perspective, this would rather be a representation of the energetic machines of the disciplinary that are always in danger of sabotage, of course – though, at the same time, this constellation represents the concept of a self-reproducing corrupt code that might be a more appropriate representation of the information-machines of the society of control.

23► See for a more detailed argumentation on this matter Nohr 2008, 183ff.; a similar description of the relation between participation and culture industry can also be found in Schäfer 2006.

24► See for a more detailed discussion of this issue: Neitzel/Nohr 2010.

25► Adelmann/Winkler (2014) did a pointed step towards such an action theory by referring to Norbert Elias' concept of culture and describing action in computer games as a type of compensation of a ›deferral of an action's outcome‹ that comes with modernization. The »long chains« of the society of control (»...one is never finished with anything...« Deleuze

1992, 5) are – according to Elias resp. Adelmann/Winkler – diametrically opposed to the short and effective chains of action in games (»cause => effect; snap => and done«, ebd. 79; transl. by AW).

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Games

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