"Consciousness is a very recent acquisition of nature, and it is still in an "experimental" state." (Jung 1964, p.6)

"Computer: Wake up, Neo. – The Matrix has you ... – Follow the white rabbit. [...]

Neo: Have you ever had that feeling, where you're not sure if you're awake or still dreaming?

Troy: You need to unplug!" (Matrix 1999)

**1 [Premonition]**

The monomyth seemed such a common and popular idea (in our ordinary world), surely everyone must have known the concept of this basic pattern for narratives by heart. That is why it did not feel right, when I was working for the first time on a lecture of the hero’s journey for game design students. I felt uneasy. This work may have been done many times before, since it was common knowledge to most recipients of movies and games. Today, years later, I am still amazed that this topic seems to engage most listeners. I am aware that (especially in the world of game design) there were not as many lectures on the subject that I feared there were. And I am aware that my unease was part of a bigger picture of recognizing that there is a collective unconscious that my mind is sharing and it stores some of the elements I was trying to make transparent to my students. We may have a vague notion, we may unconsciously recognize the narrative pattern of the hero’s journey, but usually we do not take our time and analyze this familiar but vague pattern any further.

The Collective Unconscious is a find of Carl Gustav Jung. In his essays on “The archetypes and the collective unconscious,” Jung recalls fairy tales, myths and mandalas and uses case examples from his practice as a therapist in Zurich. As a result, his theses take shape: The collective unconscious with its archetypal ideas is strongly related to images. In 1913 after a split with Sigmund Freud, Jung put his academic career on hold and devoted himself to the mythological exploration of his inner world of images. He said later that the next four years were the most important time of his life.

“[...] führt [...] nämlich zur Erkenntnis einer Unterscheidung im Unbewussten. Wir haben nämlich ein persönliches Unbewusstes und ein un- oder überpersönliches Unbewusstes zu unterscheiden. Wir bezeichnen Letzteres auch als das absolute oder kollektive Unbewusste, eben weil es vom Persönlichen losgelöst und ganz allgemein ist, weil seine Inhalte in allen Köpfen gefunden werden können, was bei den persönlichen Inhalten natürlich nicht der Fall ist.” (Jung, 1917, p. 86)

Jung states that the unconscious mind is divided into a personal Unconscious and an impersonal or transpersonal Unconscious (literal translation). This is also known as absolute or collective Unconscious. Its contents can be found in all minds (heads), which of course is not the case with personal contents. Jung is convinced that all humans share the content of this impersonal Unconscious.

“Die urtümlichen Bilder sind die āltesten und allgemeinsten und tiefsten Gedanken der Menschheit überhaupt. Sie sind eben sowohl Gefühl als Gedanke, man könnte sie darum auch ursprüngliches Fühldenken nennen.” (Jung, 1917, p. 86)

The next paragraph focuses on his visual approach. He points out that primeval images are the most common and deepest thoughts of human beings. He interprets these images as a hybrid of feelings and thoughts and comes up with the interesting compound word “Feelthinking”. This may be interpreted as emotional thinking that comes in the shape of visuals. A process of thinking evokes an emotional reaction and vice versa.

“Damit haben wir nun auch das Objekt gefunden, das die Libido wählte, nachdem sie aus der persönlich infantilen Übertragungsform befreit war. Sie sinkt nämlich hinunter in das Tiefste des Unbewussten und belebt dort, was seit Uralters schlummerte. Sie hat den vergrabenen Schatz entdeckt, aus dem die Menschheit je und je schöpfte, aus dem sie ihre Götter und Dāmonen emporhob und alle jene stärksten und gewaltigsten Gedanken, ohne welche der Mensch aufhört, Mensch zu sein.” (Jung, 1917, p. 86)

This visual “Feelthinking” finds an engine in the Libido after she was freed from the personal realms of the mind. The Libido has travelled to the deep realms of the absolute Unconscious, and there she reignites the hidden treasures of human kind. This treasure seems to be a trove of our narrative mythological material. Jung says that it consists of gods and demons and the strongest and vast ideas without them human kind couldn’t be human kind (literal translation).

Hence Jung searched for common myths and developed his theory and typology of archetypes. Archetypes are part of the collective Unconscious while the personal Unconscious features complexes in their place. These archetypes are the material of our dreams and myths. Writers and scholars took this idea on board. One of them, J.R.R. Tolkien, developed own mythological languages and worlds that were heavily building on ancient myths like *Beowulf* (8th century), the *Kalevala* (1849), the national saga of Finland, and *Le Morte d’Arthur* (1485). These are primary epic that “tie together all the oral myths and legends of a culture into a single heroic story.” (Tolkien, 1931) As an obsessed philologist Tolkien developed language first. He was convinced that language and mythology are related functions. Which meant for him that language construction was the base for breeding a mythology. Tolkien skillfully worked with character archetypes in all of his novels from the 1930s into the 1960s, probably most well known is *The Lord of the Rings (*Tolkien*, 1954/55*).

Not a philologist but a mythologist, in his works,Joseph Campbell compared myths from different cultures around the world. He built on the work of German anthropologist Adolph Bastian (1826-1905). This well travelled scholar first proposed the idea that myths from all over the world seem to be built from the same "elementary ideas" (Elementargedanken) (Campbell, 1949, p. 17) (Bastian, 1895, vol.1, p. ix). C.G. Jung later assimilated this theory and named these elementary ideas "archetypes". For him they are no less than the building blocks of the collective unconscious mind. And this assimilated concept reflected very much in Campbell’s comparative mythology. Unlike Tolkien, Jung didn't think language was intrinsically interwoven with story creation and story perception. People who didn't speak the same language were perfectly able to enjoy the same stories. From his observations, Jung was convinced that everyone in the world was born with the same basic unconscious model of what a "hero" is, what a "mentor" is, or what in fact a "quest" is.

"Jung developed his idea of archetypes mostly as a way of finding meaning within the dreams and visions of the mentally ill: if a person believes they are being followed by a giant apple pie, it's difficult to make sense of how to help them. But if the giant apple pie can be understood to represent that person's shadow, the embodiment of all their fears, then the psychotherapist can help guide them through that fear, just as Yoda guided Luke on Dagoba. If you think of a person as a computer and our bodies as "hardware," language and culture seem to be the "software." Deeper still, and apparently common to all homo sapiens, is a sort of built-in "operating system" which interprets the world by sorting people, places, things and experiences into archetypes."

(Brennan, Kirsten, 2006, .../myth.html)

Campbell carefully thought and worked through Bastian’s and Jung’s theories and finally broke down Jung’s archetypes to an overseeable number and mapped out an underlying structure for all mythological stories. In doing so, he developed the theory of the one and only story that has always been told by human kind over thousands of years – known today as the monomyth. The book was titled *The Hero with a Thousand Faces* *(1949).* In it, Campbell provided examples of stories from different cultures around the world and showed how they were using similar structures and archetypes. After a slow start like Tolkien’s books, over five decades of the 20th century, Campbell’s remarkable book on the hero’s journey was quite successful in seeping into the minds of people all around the world creating and perceiving entertaining stories via textual, visual, audiovisual and animated fictions and for the latest two decades also via interactive fictions of games.

**2 [Call to Adventure]**

Movies and games along with other emerging media in the 20th century have taken up these ideas and adapted them to their own needs and limitations. A very obvious example is the superhero phenomenon of the 20th century. Comic books introduced the superheroes like Superman, Spider-Man, and Batman to growing fan communities and the movie industry gladly helped spreading these modern day heroes across cultures. These superheroes come across as popular culture mythical gods and champions. In a way, they are replacing Greek Mythology, Nordic mythology and other culture’s mythologies. We celebrate or even worship them not from a religious perspective as the Greeks or other cultures did, but from a visual and metaphorical standpoint. We collect comic books and visual novels, we are eager to watch superhero movies and play the games and their sequels and even their sequel’s sequels. We happily use those archetypal superheroes as simple metaphors to our own struggles and journeys. Wishful thinking makes the superheroes become our alter egos, let’s us escape our daily life for a while and dream of a different identity beyond the limits of normality. The characters and plots of many of those superhero fictions oddly resemble each other. They show strong signs of simplification of behavior and reduction of social actions and cultural pattern.

Today, the film and game communities are well aware of the afore represented influential narrative line from C.G. Jung(1919) to Joseph Campbell (1949) to Christoph Vogler (1992).

For practical purposes they were searching for standards. Jung’s archetypes and Campbell’s monomythical plot turned out to be ideal for this purpose. In order to make these theories usable for movie screenwriting, there was nothing more to do but focus on character building and implementation of structures, reducing the number of archetypes and melting the plots down to simplified standards. And that is what was done.

The notion of Campbell’s work *The Hero with a Thousand Faces* *(1949)* may be seen best in *J.R.R. Tolkien*’s novel *The Lord of the Rings (1954/55)*. Tolkien and Campbell simultaneously worked on similar ideas. Later on *George Lucas* brought it all together in his original *Star Wars* (Kurtz & Lucas, 1977) movie and its sequels. Lucas borrowed from Tolkien and some other popular sources like Flash Gordon (Comic and Film serial) and used the plot structure laid out by Campbell as a blueprint for his movie. Today, Lucas’ original Star Wars trilogy serves as the most perfect example of a plot pattern of the hero’s journey.

**3 [Refusal]**

In the beginning, I mentioned my uneasiness for giving a lecture that somehow everyone already knows. In 2005, the Internet did not show too many accurate results on the hero's journey. In the ten years since I first put together a lecture on the monomyth, material and examples on Campbell’s narrative theory have literally exploded. A search today retrieves hundreds of slides and diagrams and synopses and videos on the topic, some very instructive with appropriate examples mostly from film. Very few are critical, and most rely on analyzing the 20th century epics of *Star Wars*, *Lord of the Rings* and *The Hobbit*.

The lecture I put together went further. Literary criticism knows many more variations on plot theory. Over the decades scholars came up with different plot theories and different conclusions. The momomyth may be the most popular of those theories but by no means the only theory of plots. And this may only be a hasty footnote. There are many different narrative theories that do not agree with a monomyth theory. Quite a few of them still rely on archetypes as in Jung’s work. The numbers of plots keep changing. Christopher Booker researched the matter for 34 years before publishing his work on the theory of *The Seven Basic Plots* (2004). According to his Jungian-influenced analysis, there is a meta-plot that divides any story in five stages and basically comes as a stripped down version of the hero's journey. With this analysis, he is not far away from Campbell. The Basic Plots however are imperatives like "Overcoming the Monster", "Rags to Riches", "The Quest", etc. that may be well illustrated with examples of world literature and film (like Beowulf, Cinderella, The Wonderful Wizard of Os). Much earlier in 1895, the French writer Georges Polti came up with a list of 36 plausible plots from supplication, pursuit, disaster and revolt all the way to remorse, recovery of a lost one and loss of loved ones. In his introduction, Polti (1895) refers to the detailed list of 36 plots that have been around since Goethe, Schiller and Gozzi. The stages of a night journey or a hero's journey on the other hand may remind us a lot of the 31 functions in Vladimir Propp's theory on the *Morphology of the Folk Tale* (1958). As a structuralist, Propp broke up Russian fairy tales into sections and came up with individual functions that occur again and again in fairy tales from absentation, interdiction and trickery, mediation and pursuit and rescue all the way to punishment and wedding. These functions offer a great starting point for analyzing narrative videogames that seem to use some of the fairy tale functions revealed by Propp as simple but effective narrative instructions for the player (villainy, pursuit, rescue the princess!) and therefore for the game mechanic of a game.

But returning to the topic of the monomyth. Oddly, the *Star Wars* movie had an almost forgotten precursor in the strange movie *Forbidden Planet* from 1956, in which the Unconscious stars as culprit and becomes the main protagonist and progressive factor of the story. The movie is loosely based on William Shakespeare’s The Tempest. The screenwriters were very imaginative and came up with an exciting science fiction setting. Spaceship Commander Adams and his crew are sent to faraway planet Altair-4 to find out what happened to a colony of settlers. They find two survivors, Dr. Edward Morbius and his daughter Altaira/Alta living in a kind of paradise that was created by Morbius. The scientist was able to use secrets from the Krell, a long-lost civilization that once inhabited the planet. They are not welcome and soon after their arrival, the crew faces an invisible force that puts them all in danger. Morbius calls this force: the Id.

“Captain Adams: What is the Id?

Morbius: It is an obsolete term. I am afraid once used to describe the elementary base of the subconscious mind.

Captain Adams: Monsters from the Id? – Monsters from the subconscious. Of course, that’s what Doc meant. – Morbius! A big machine, 8000 cubic miles of Kleister relais, enough power for a whole population of creative geniuses, operated by remote control! Morbius! Operated by the electromagnetic impulses of individual Krell brains.

Morbius: To what purpose?

Captain Adams: In return that ultimate machine would instantaneously point silent matter to any planet of the universe. In any shape or color they might imagine. For any purpose! Morbius! Creation by mere thought.

Morbius: Why haven’t I seen this all along?

Captain Adams: But like you the Krell forgot one deadly danger: Their own subconscious hate and lust for destruction.

Morbius: The Beast. The mindless primitive. Even the Krell must have evolved from that beginning.

Captain Adams: And so those mindless beasts of the subconscious had access to a machine that could never be shut down. The secret devil of every soul of the planet all set free at once to loot and maim - and take revenge, Morbius, and kill!” (*Forbidden Planet*, Nayfack & Wilcox, 1956, transcribed key scene)

The Invisible Id-Monster indeed is a great and unexpected culprit in this movie. Its invisible presence and imminent danger is skillfully orchestrated. And its appearance in the crossfire of lasers is masterfully managed. The monster is never fully shown, the spectators have to imagine how it appears. Sounds and music are very much responsible for creating a creepy feeling. Bebe Barron, the sound designer was told many times that her music for the Id sounds just like dreams people have had. “We were expressing our subconscious”, she said in an interview. The Id in this case is modeled after Siegmund Freud’s Id (Es). The Id in Freud’s theory is part of the unconscious. This unconscious is divided into the Superego and the Id. While as the Superego represents conscience, the Id represents instincts. The Id-monster therefore may represent the basic instincts of the creators of the sophisticated machine. If we apply this to Morbius who used the machine for creating a sort of paradise for him and his daughter, the Id may show his personal unconscious, which is worrying about his daughter, trying to protect her from the all-male crew and save his created paradise. But there is a more interesting layer of unconscious because the original creators of the thought machine were the Krell, a technologically advanced alien species. The machine represents all that’s left from the Krell. It seems that while the Krell were using the machine to create by mere thought, they were overcome by their collective unconscious that was inadvertently also feed into the machine. According to Jung, the collective unconscious is the deepest level of the psyche. It contains all inherited psychic structures and archetypal experiences. The collective unconscious contains material of an entire species rather than of an individual. The unconscious, so Captain Adams suggests, must have destroyed the Krell and their culture. Thoughts became real, thoughts were instantly realized – and they destroyed their creators, a whole species. The unconscious was the culprit.

This somewhat forgotten movie seems not only significant for using a well known hero’s plot from the foundations of our storytelling culture and enriching it with archetypes like the innocent, anima, shadow, over-protective father, alter ego and creature (tiger) tamed by the virgin (as in medieval myth a unicorn only can be tamed by a virgin). It also seems exemplary, in literally using the unconscious as an invisible monster or force or adversary that turns out to be the evil side of the guardian Morbius but also in many aspects it is a model or paragon for science fiction movies to come like Stanley Kubrick’s *2001: A Space Odyssey* (Kubrick, 1968), *Star Wars* (Kurtz & Lucas, 1977) and the TV series *Star Trek: the Original Series* (Roddenberry, 1966), and many sequels and other movies of this genre thereafter.

**4 [Mentor]**

While as *C.G. Jung* set the psychological foundations and *Joseph Campbell* laid out the story pattern of the Hero’s Journey, *Christoph Vogler* adapted this journey, reduced it, and standardized it for screenwriting. First, Vogler used Campbell's work to create the now-legendary 7-page company memo for Hollywood screenwriters, *A Practical Guide to The Hero with a Thousand Faces (1985)*. This memo impressed Disney Studios so much, as we will see in the next paragraph. Later on, Vogler expanded his summary of Campbell’s theory in the book *The Writer’s Journey (1992)*. This text gave Hollywood a blueprint, which it keeps using and reusing in most of its productions.

In his memo from 1985, Vogler introduces Campbell as a Jungian scholar of utmost importance:

“Mythographer Joseph Campbell wrote what many consider to be the most influential book of the 20th century, *The Hero With a Thousand Faces*. [...] the ideas in his book are often described as Jungian. The book is based on Jung’s idea of the “archetypes,” constantly repeating characters that occur in the dreams of all people and the myths of all cultures. [...]

Jung believes that these archetypes are reflections of the human mind – that our minds divide themselves into these characters to play out the drama of our lives. The repeating characters of the hero myth, such as the young hero, the wise old man, the shape-shifting woman, and the shadowy nemesis, are identical with the archetypes of the human mind, as shown in dreams. That’s why myths, and stories constructed on the mythological model, are always psychologically true. Such stories are true models of the workings of the human mind, true maps of the psyche. They are psychologically valid and realistic even when they portray fantastic, impossible, unreal events.” (Vogler, 1985)

Amazingly, the practical examples of story stages, Vogler uses in his famous memo, are almost all taken from the Star Wars movie made by Georg Lucas in 1977. There are two references to the movie *E.T. the Extra-Terrestrial* (Spielberg, 1982), one reference each to *The Wonderful Wizard of Os* (Le Roy & Fleming, 1939), *Casablanca* (Wallis & Curtiz, 1942) and *Witness for the Prosecution* (1957). All other examples were added later on in extended versions or book versions.

Vogler goes on to describe the 12 Hero Stages. First the story has to introduce the ordinary world (1) where the hero lives. He uses Dorothy’s Kansas in the Wonderful Wizard of Os and Planet Tattoine of Star Wars as examples. Then it is the call for adventure (2) in which the main character is presented with a problem, a challenge. That is the tornado in the Wizard of Os and R2D2’s cryptic message in Star Wars. Best represented maybe by the arrival of Gandalf in The Hobbit. Next is the refusal of the quest (3). The hero is reluctant and balks at the threshold of adventure. In Star Wars, Luke Skywalker doesn’t want to take on the quest until he realizes that his aunt and uncle were killed by the emperor’s troops. This is followed by Meeting the Mentor (4). The hero is encouraged by a wise figure. It is Gandalf in The Hobbit and Obi Wan Kenobi in Star Wars. That is the end of the first act.

In his next stage, crossing the threshold (5), the hero enters the special world of his story – and the adventure takes off from here. In the Wonderful Wizard of Os, Dorothy set off on the yellow brick road. Then it is Test, Allies and Enemies (6), which means the hero is forced to find allies and make enemies and pass challenges. In Star Wars, Luke Skywalker finds an ally in Han Solo and lots of enemies. In the Wonderful Wizard of Os Dorothy is tested by the Tin, Woodman, Scarecrow and the lion, before they become allies. Then the hero reaches the Innermost Cave (the Approach) (7). He comes to a most dangerous place, often deep underground, where a Holy Grail or a fight with a dragon awaits. In Star Wars, Luke and his allies get sucked into the Death Star where they have to rescue Princess Leia. The Supreme Ordeal (8) is the place where the hero touches rock bottom. He faces death in a mostly hopeless situation and has to overcome it. This is likely the most important stage of the journey for bonding the viewers or readers with the hero. The hero may be literally brought back from death, which lets the public emotionally identify with him. In The Wonderful Wizard of Os it is the death of the wicked witch. In Star Wars it is the scene when the Death Star gets blown up. Vogler calls the next stage The Hero seizes the Sword (9). The hero has survived, slain the dragon or monster. He now takes possession of the treasure. The sword may also be a metaphor for gaining knowledge or experience or rescue of a loved woman or man. This brings the main part of the story or second act to an end – conclusion.

The next stage leads into the last and short third act. The Road Back (10) may not be the quiet walk back home wished for. Often the hero is still pursued by the forces he has taken the treasure or elixir from. In Star Wars, Luke and his allies escape with Princess Leia from the exploding Death Star, but they are still being chased. The Resurrection (11) means that the hero finally escapes from the special world of his adventure. Often there is a replay of some of the Supreme Ordeal. The hero is transformed into a new being. And finally, there is the last stage, Return with the Elixir (12) that closes the circle of the story. The hero returns to his ordinary world. However, he needs to bring back something, the elixir or a treasure, just to make the whole adventure meaningful. Sometimes it is knowledge or experience or a loved one. If the hero didn’t achieve the goal of the adventure, he would be doomed to repeat the whole ordeal.

Campbell summarizes the hero’s journey in a diagram and a short text on page 227 of his book (1949). In comparison to Vogler, even in his summary, Campbell takes up a lot more of the Jungian dream symbolism:

“The mythological hero, setting forth from his common-day hut or castle, is lured, carried away, or else voluntarily proceeds, to the threshold of adventure. There he encounters a shadow presence that guards the passage. The hero may defeat or conciliate this power and go alive into the kingdom of the dark (brother-battle, dragon-battle; offering, charm), or be slain by the opponent and descend in death (dismemberment, crucifixion). Beyond the threshold, then, the hero journeys through a world of unfamiliar yet strangely intimate forces, some of which severely threaten him (tests), some of which give magical aid (helpers). When he arrives at the nadir of the mythological round, he undergoes a supreme ordeal and gains his reward. The triumph may be represented as the hero's sexual union with the goddess-mother of the world (sacred marriage), his recognition by the father-creator (father atonement), his own divinization (apotheosis), or again —if the powers have remained unfriendly to him—his theft of the boon he came to gain (bride-theft, fire-theft); intrinsically it is an expansion of consciousness and therewith of being (illumination, transfiguration, freedom). The final work is that of the return. If the powers have blessed the hero, he now sets forth under their protection (emissary); if not, he flees and is pursued (transformation flight, obstacle flight). At the return threshold the transcendental powers must remain behind; the hero re-emerges from the kingdom of dread (return, resurrection). The boon that he brings restores the world (elixir).” (Campbell 1949, p. 227 – 228)

Campbell comes up with 17 hero stages. His journey is structured as an Aristotelian play of three acts. The first act is called The Departure. It features five stages – right away The Call for Adventure (I), The Refusal of the Call (II), Supernatural Aid (III), Crossing of the first Threshold (IV) and the Belly of the Whale (V). The start in the Ordinary World falls together with the Call for Adventure. The stage Meeting with the Mentor had a more magical touch as Supernatural Aid. And after crossing the Threshold, Campbell had an additional stage called Belly of the Whale in his journey that shows up in Vogler’s variation as the Innermost Cave much later in the main part.

The second act named Initiation consists of The Road of Trials (VI), The Meeting with the Goddess (VII), Woman as the Temptress (VIII), Atonement with the Father (IX), Apotheosis (X) and The Ultimate Boon (XI).

The third act titled as Return owns considerably more stages. The Refusal of the Return (XII), The Magic Flight (XIII), Rescue from Without (XIV), The Crossing of the Return Threshold (XV), Master of the Two Worlds (XVI) and Freedom to live (XVII).

Generally, Campbell operates on a complete picture of the night journey and is well aware that not every myth uses all of those 17 stages. Especially in act two and three; he offers a choice of narrative psychological patterns right out of myths and dreams. Vogler tuned this down and reduced the imagery of the journey for a tightened and entertaining procedure. Most important for him, it seems, is the emphasis on the dramatic climaxes and the full circle of the story. Fully aware of a dramatic arc, he introduces with the ordinary world, a calm and easing first stage and finally closes the circle with the (rather triumphant) Return of the Elixir. Campbell’s journey relies much more on his character's psychology, it is not concerned with the dramatic and entertaining evolvement of the story but may feature several climaxes and many more difficulties on the way home than Vogler’s, as well as a longer or prolonged ending.

**5 [Crossing the first Threshold]**

“There are so many movies nowadays that can fall under this category of mirroring the Hero's Journey that's prevalent in pretty much every culture.  Hollywood is obsessed with heroes.  They like to hear audiences cheer and root for the good guy.”

(Ken Miyamoto, former Screenwriter of Sony Pictures, http://www.quora.com/Which-movies-are-the-best-examples-of-the-Heros-Journey)

Walt Disney Studios, as a bridge between films, animations and games was particularly impressed by Vogler’s standardization. Vogler’s seven-page memo on the hero’s journey was copied, faxed and distributed within the studios. In 1988, the head of Disney asked Vogler to do research and development work for the animation movie, The Lion King. He subsequently spent some years working with Disney’s Feature Animation division on *The Lion King* (Hahn & Allers, 1994) and many other projects. The Lion King is a very good example for meticulously emulating the structure of the 12 hero stages, and it was one of the most successful movies produced by the Disney animation division.

Hollywood’s relentless adoption of the hero’s journey of course flowed right into narrative games, above all into RPGs (Role Playing Games) like the *Final Fantasy* series and Action and Shooter Games. Campbell, Tolkien, the Star Wars movie and Vogler played an important role as catalysts for narrative videogames.

However, Game Experts that have made the link between Jung’s archetypes, Campbell’s journey of a hero and narrative video games, have been scarce. Authors, Andrew Rollings and Ernest Adams (2003) and Lee Sheldon (2004) point out this link in only a few paragraphs in their articles. Sheldon is the only author that introduces Jung and Campbell together as background for storytelling in games and talks of symbolism as being used to invoke emotions and reactions in players. In contrast, Bob Bates merely makes the analogy that game developers have to take their journey together (Bates 2004, p.267f). It seems that the tradition of the hero of a journey did not receive that much conscious attention from the game design community. There are some exceptions, which will be looked at later.

Unfortunately, there does not seem to be a great deal of analytical thinking about archetypes and plot in video game development. But the journey of a hero is presented as a convenient manual for storytelling in games. Adams however does a great job in describing Campbell’s model and leading us in one chapter through all of the segments in a hero’s story (Rollings and Adams, 2003). However, Adams does not use Campbell’s writing other than in one introductory quote, he uses Christoph Vogler’s reduced version that is meant as an adapted version for screenwriting of movies. Rather, Adams says, Campbell’s book is heavy going and may be an overkill but for the most story-intensive games.

Adams quotes Campbell once:

“Whether we listen with aloof amusement to [a] ... witch doctor of the Congo, or read with cultivated rapture thin translations from the sonnets of the mystic Lao tse; now and again crack the hard nutshell of an argument of Aquinas, or catch suddenly the shining meaning of [an] ... Eskimo fairytale: it will always be the one, shape shifting yet marvelously constant story that we find, together with a challengingly persistent suggestion of more remaining to be experienced than will even be known or told.” (Campbell, 1949)

And then he starts leading us step by step through Vogler’s journey of a hero. As examples Adams mostly uses the game Half-Life (1998) and enhances it with many other game examples of different genres. Very important for games seems to be the exposé of the ordinary world as seen in the non interactive opening scene of Half-Life where Gordon Freeman rides the monorail to work. For the player this exposé is very evident since in most cases he cannot interact with the character(s) yet but gets some important facts of the world and his character told. A similar well-narrated opening scene is featured by the game *Red Dead Redemption* (Rockstar 2011) where the main character John Marston is transferred to the Wild West desert town Armadillo via public steam train and listens in on conversations of fellow travellers. Adams suggests that games often work in their ordinary world segment with a glimpse into the special world that foreshadows some of the future events.

“The various Star Wars games [...] that feature the Death Star often use this technique. The Death Star appears as part of the background graphics a couple of levels before the player is called upon to destroy it. As soon as it appears, ominously hanging in the distance like a small moon, the player knows that sooner or later he will be there.” (Rollings and Adams, 2003, p. 97)

The Call to Adventure is often a fairly simple task in games. The Super Mario games use the trope of rescuing the princess as call to adventure. The princess gets kidnapped in broad daylight (villainy or lack as function in Propp, 1958), the hero Mario takes up pursuit and starts the adventure (pursuit) that he intends to end successfully (rescue). Or it can be a complex matter where the hero has to leave his real world and literally enter another world like Britannica in *Ultima VII* (Origin Systems, 1992) via an object like the Obelisk (departure).

Furthermore Adams describes the circular journey story model as a story vehicle and then he debates the divide between gameplay and narrative. He states that all the scenes that are non-interactive are narrative while as all the interactive scenes are non-narrative. This division cannot be held up anymore today. With improved technology, there are many mixed forms now where interaction goes on while story information gets delivered to the player at the same time. And the world itself, in which the player’s avatar resides, is constructed as a narrative environment that reveals important information to the player. But Adams rightly points out:

“The raison d'être of all computer gaming is interactivity: giving the player something to do that he cannot do in the real world. The trick, then, is to provide enough narrative to create the game world and motivate the player, but not so much as to inhibit his freedom to meet the game's challenges in his own way.” (Rollings and Adams, 2003, p. 115)

In later books on fundamentals of game design, Adams and Rollings concentrate much more on the mechanics of games and omit discussions of plot structures of narration in games. This has a lot to do with the disappearance of classical adventure games. There are only a couple paragraphs or a few lines left with one reference to Campbell in Adams and Rollings (2007, p. 207) and (2010, p. 181). The reference suggests that many adventure games use the journey and make it a linear story. If then the player takes her avatar back through the already played game world, she doesn’t encounter any more dramatic events she already experienced. Therefore "many adventure games periodically require the player to pass through one-way doors – travel mechanisms that cannot be reversed." (Adams and Rollings, 2007, p. 207)

In pointing out that Interactivity and good story can be bound together, Adams and Rollings (2003, p. 119) refer to Star Trek's idea of a Holodeck as a latent implementation of reenactments of our desires and dreams. It seems that this idea of transforming a fictional biography into a realistic virtual experience can be incorporated into our subconscious, so that we strive for fulfillment of this ideal. Here psychology and fiction influence reality by attempting, by means of evolving technology to meet this fictitious ideal or at least get one step closer to the seem less virtual reality as a Holodeck with every innovation. More of this topic follows later.

**6 [Test, Allies, Enemies]**

There is an abundance of nightmarish monsters in videogames. They come as simple enemies, they come in hordes, they lurk, they are sneaky, and they sometimes surprise and scare the player. Quite often they are oversized and come as characters for a boss fight. In videogames, a boss is a significant enemy that is controlled by the computer. Boss battles are the climax of a particular section of a game or the endgame. The bosses are mostly monsters that endure a lot more damage than any other character in a game. They may come in a horrible physical form or grow into or assume such a form to be intimidating and well equipped for the dramatic event of the boss fight. Often there is some sort of dissociation there, and a regular size character grows into an oversized monster. This may be a subconscious analogy to the splitting in a psyche as Jung (1964) claims, although it doesn't always fit the splitting of the psyche, but a mad and enraged overload of a game character. As an interesting example for dissociation of consciousness, Jung himself suggests the fictional example of Dr. Jekyll and Mr. Hide from the 1931 movie (Jung 1964, p.7). The physical transformation of such a character is in reality a change of the inner psychic state. According to Jung, anthropologists refer to "the loss of a soul" as the most common mental derangement of so-called primitive cultures. This physical change of a split character is what movies and games often rely on. Visually, it is much easier to convey this by a drastic visual change of a character and by characters with extremely different shapes and physical attributes. There is the genre of god games that work with simple ethic decisions and let the player develop the main character into a good or a bad role. Game designer Peter Molyneaux is well known for his game Black and White (2001), in which the main character has slow physical changes that morph him eventually from a regular animal form of monkey, cow, lion and polar bear into a good creature or an oversized bad monster.

“Consciousness is a very recent acquisition of nature, and it is still in an "experimental" state.” (Jung 1964, p.6)

The game developer community is very diverse, with many skilled and well-educated game developers and many specialized artists. Among them are many graphic game artists who may not be aware of archetypes and their psychological foundation. Often they do not have that much insight into narrative story patterns. Besides their obsession for games, they developed a love for drawing and try to make a living with creating characters for fantasy stories. Mainly they are modeling fantasy figures according to their gut feelings.

The result is a glut of stereotypical characters, elves, trolls, orks, monsters and horror characters with similar or the same attributes such as oversized horns and antlers or paws and claws or spikes and fur that could be the substance of nightmares. This is not necessarily evidence of a great deal of ingenuity. On the other hand, these Z-Brush Monsters seem to point to a direct emanation from nightmares and mythologies, respectively the unconscious of these artists and by their similarity of imagination to the collective unconscious.

This may be illustrated best with examples of *Z Brush* Monsters. *Z Brush* is a very popular software for creating 3d models of digital characters and objects for games and animation film. Artists love to put their creations on the Internet, particularly as speed paintings and speed sculpting movies, visible for anyone via Youtube. There are many *ZBrush* tutorials out there where game aficionados can learn how to sculpt and texture a detailed monster. It always seems that the aim of those visual arts tutorials is to create a monster. One of these online courses (by Fabrizio Bortolussi) states that throughout a series of lessons the new artist will learn to “cover all aspects of designing a scary creature within ZBrush using alternative techniques.” Further the tutor announces that the students “will see some examples of scary imagery as well as a sneak peek of an upcoming short film which is all covered up with the word "fear".” At which point he provides some technical details and ends with the prospect of texturing the monster “using just simple brushes and alphas and adding some quick fur” (Bortolussi, 2012).

Another classic 3d modeling task for a tutorial is the female antagonist in form of a centaur. The tutorial by Peter Minister shows this very nicely in creating the standard shape of a centaur and enhancing the female human part of the figure with a second bottom, attractive breasts, tattoos, jewelry and ornaments and a huge gold fight axe with a ruby in one hand. The stereotypical Bikini-armor is there too. Consequently, she holds the cutoff head of an ugly troll in her other hand presumably alluding to the mythical Judith. (Minister, 2014).

The Australian resource site BadKing specializes in free ZBrush tutorials, 3D modeling, insert multi mesh brushes, alpha maps, concept art and more. Again this is a group of professional artists that work in the videogame, feature film, advertising and publishing industries. Over a few years, BadKing managed to create a fair-size community of artists and novices. Upon request of the community, in 2014, BadKing created a Monster Parts Brush Set for the ZBrush software and announced it as “the ultimate organic brush pack complete with dozens of monster parts.” The twist was that the community was asked to chip in and submit suggestions for “the BIGGEST and BADDEST FREE Monster Brush Set EVER!!!” The response by the community was great. There were plenty of submissions. Today, the Monster pack is available for download. The editors of BadKing had to divide the pack into downloads for arms, legs, ears, torsos, heads, wings, teeth and horns. A sample showcase can be seen on the website. It features monster body parts designed by individual artists.

It seems the unconscious becomes the culprit here too – this time for generating stereotypical images, respectively 3D-monster-parts. The community made package is teeming with horns, all looking rather similar, even if they differ in size and thickness. There is also an abundance of chicken or turkey legs, often with oversized thighs. Pig legs with pig trotters or devil's feet with two toes are very popular, and so are cow legs. The package features some short and spiky tails on human-like backbones and feet and hands with only three digits each. Claws of crabs or lobsters are quite popular; they come oversized and look rather dangerous. Most of the monster heads resemble animals, be it a bull turning into a minotaur, be it a ram or a capricorn, be it a prehistoric tiger with saber teeth or a giant terrifying bear. Skeletal bones often are very prominent or the monster comes with a practically bare skull. Some of the creature parts seem to be almost bare skeletons from spiny creatures, thin bony arms or legs. The teeth mostly refer to animals, to tigers, bears, snakes, piranhas and sharks. Or they refer to the imagery of bats and vampires and have spiky naily teeth. Ears seem to leave more options open, they can be just a little deformed like peaky elves ears or they can take on completely different shapes not exactly recognizable as ears anymore. Female torsos seem to be preferred for extensions like wings and tails. Furthermore the packages contain sets of antlers, devil heads with goat horns, scary alien monster heads with no eyes, only a big mouth with scary spiky teeth (maybe referring to H.R. Giger's creatures), and several sets with crustacean limbs and oversized insect-like limbs and parts. (BadKing, 2013/14) It is all there, right out of nightmares, a mental imprint of archaic images with different sets that are made by different community artists and look very much alike. There is not a big variation in the depiction of a monster. The imagination encompasses a vague somewhat enhanced reflection of mythical monsters like minotaur, centaur, giant snake and squid and flying fire-dragon and so forth as they already were depicted in book illustrations, drawings and paintings over the centuries and comics and movies and animations in the 20th century.

**7 [Progress to the deepest Cave]**

But there are and have been developers that are well aware of the psychology of archetypes. One of the most brilliant examples is game designer *Tim Schafer* who was inspired by a university course on *C.G. Jung* and says that he formed his game *Psychonauts* (Double Fine Productions, 2005) after his dreams. It features the Unconscious as game hub for his main character Raz, a Psychonaut-in-training, who can enter minds of several people with their own secret memories, nightmares and demons and find out about their specific mental problem. A psychonaut by definition is a person who explores activities by which altered states of consciousness are induced and utilized for spiritual purposes or exploration of human condition in order to gain deeper insights into the mind. Ernst Jünger coined the term in the 1970s. Raz, short for Razputin, enters the collective unconscious via machines: a brain tumbler or a PSI Popper Generator. The first time Razputin enters the collective unconscious hub, he can only enter his own mind from there. All other doors are locked. But as the game progresses, one by one, other doors open up, leading to more worlds. Upon entering the door to his mind, Raz finds himself in a dreamlike world, a dark clearing covered in thick fog. There is a caravan where it turns out Raz was once born. When he enters the caravan he gets stuck in an egg-like glitch (disturbance). It seems the caravan represents the womb. He manages to punch his way out of there. Outside he spots a bunny-like creature that emits hearts. He eventually follows the cute thing and comes to a different clearing where a monster with glowing eyes awaits him. Fortunately he gets pulled back to the real world at that point. This may be as analogy to waking up suddenly from a dream.

In an interview, Schafer refers to the psychology class on Jung as motivation for his character walking around in other characters minds. He also explains that he used the premise as a fun way of making a sandbox to develop a game in:

“And in the dreams class, there were so many examples of people having problems in their lives, and expressing them in their dreams in a disguised way. It's like they want to think about it, but they can't. And you can use so much of that ... going into a dream, you can have these crazy monsters and stuff, but knowing that they represent the fears of these characters, because you're inside their head. I thought that had so much possibility.” (Pearce, 2003)

“Taking this example of *Psychonauts*, where you're a young psychic kid, and you're going into people's heads, it's that whole idea of making a fun sandbox to work in. Because you can go into anyone's head, so each level of the game can be as different as the characters in the world. We have a character who's obsessed with black velvet art, and you go into his world, and his entire world is made of black velvet. It's a radically different style than the conspiracy theory nut, whose whole mind is literally a web of streets, spreading out from his house in the center, like concentric circles of conspiracy all around him. His mental state is represented by the level design, so that the actual world that he's in expresses his personality…”(Pearce, 2003)

Later on in the game Raz comes back to face his monster, now equipped and better prepared. But after firing the first shot from his PSI blaster, the monster disappears. Instead he finds a new clearing (memory to face) with a huge tower of thorns rising from the fog. On top of the tower there seems to be his friend strapped to a chair and threatened by a dentist who wants to remove his brain. Raz tries to climb the tower but cannot get to the very top. Instead he has to leave for the real world again for some levitation training that might enable him to get to the top. The game continues this way as if Raz has to wake up from his dreams (or memories) in crucial moments and face some more braining (training) in the real world to ready him for the challenge. It seems as if he has to complete some dream work that enables him to progress through the game. Raz also has to face some more of his fears. For instance he is afraid of large bodies of water due to a curse on his family. Again, a bathtub in an earlier level symbolizes this. The strongest metaphor is the debraining of the bodies by coach Oleander who uses the brains of his students for experiments and naturally wants to take over the world (which is intended to be as much a pun on games as a plot). Raz is in constant fear of loosing his abilities (brain) and needs to save his friends, some having already lost their brains. These brains reappear in brain tank machines and engage Raz in fights. Another interesting topic shows up after Raz defeats the brain tank with coach Oleander’s brain. The victory comes at the loss of his brain, so Raz puts his own brain and Oleander’s brain in a tank and mixes the psyches. Thus Raz’s childhood memories get mixed together with Oleander’s childhood memories of his cruel father’s butcher shop. Raz has to face these memories in personification of the two psychopathic fathers. After they are defeated and thrown into the meat-grinder, they emerge as a grotesque two-headed monster. At that point Raz’s real father shows up and gives him special powers that enable him to defeat that monster. There is a good ending with everyone in the camp being recranialized, although the message of the kidnapping of Raz’ friend Lili’s father that sets the premise for more adventure in a sequel, was never done.

Another striking example is Schafer's game, *Grim Fandango* (LucasArts, 1998) that was remastered for publication on PS4 and PC (Double Fine Productions, 2015). Schafer creates the Land of the Dead populated with skeletal characters (calacas); through which recently departed souls must travel before they reach their final destination, the Ninth Underworld. Characters and setting are inspired by Aztec and Mexican folklore as well as by themes of film noir and Greek mythology. The dark comedy’s irony is always around the corner. The story follows travel agent "Manny" [Calavera](http://en.wikipedia.org/wiki/Calavera) as he attempts to save “Meche” Colomar, a newly arrived but virtuous female soul, during her long journey. Here we literally have Jung's night journey that takes place in an in-between-world of reality and afterlife. Manny is the ferryman that takes the death in analogy, to ferryman Charon in Greek mythology across the river Styx that is the boundary between earth and underworld (Hades). Styx circumflows Hades nine times. Manny is a travel agent that sends the souls across the land of the dead. Good deeds in life are rewarded by access to better travel packages. The best ticket gets you on the Number Nine, a train that takes four minutes to reach the gate to the Ninth Underworld. But there are those that have to go by foot. It takes them a four-year journey through the underworld to reach The Land of Eternal Rest that is to be found in the Ninth Underworld.

Schafer's adventure game curiously combines Aztec beliefs of the afterlife and the underworld Mictlan as culture background with a visual arts design style that uses Art Deco design motifs from the 1930s and a dark plot with elements of corruption and deceit that is reminiscent of the film noir genre of the 1950s. The Aztec underworld Mictlan apparently consisted of nine distinct levels. And the journey from the first level to the ninth took four years. Aztec mythology even knew a psychopomp in the form of fire god Xolotl that escorts the newly deceased souls from real life to afterlife. Psychopomps exist in other culture’s myths. Examples are Charon in Greek and Anubis in Egyptian mythology. Manny Calavera is a rather literal interpretation of Xolotl who simply provides safe passage for the deceased and does not have the task to judge them. Jungian psychology sees a psychopomp as a mediator between the unconscious and conscious realms. In dreams he is personified as a wise man or woman, or he can be a helpful animal, even a shaman. Main character Manny Calavera plays exactly the role of such a mediator. Schafer states in an interview with Celia Pearce that he was very influenced by his fascination with folklore that stemmed from an anthropology class he took at the University of California Berkeley and further talks with folklorist Alan Dundes, whose work was central to establishing the study of folklore as an academic discipline.

“Folklore is such a great place to mine for ideas and stories. There's such a rich body of work that people have, for no commercial reason, dragged from generation to generation, so it obviously resonates with people.” (Pearce 2003)

While sitting in a psychology class, Schafer was intrigued with the mythical four-year journey of the soul. Later on when he was developing the idea for Grim Fandango, Schafer recognized that this four-year journey in the Mictlan afterlife could indeed set a fitting premise or stage for his adventure game.

“Then I thought, what role would a person want to play in a Day of the Dead scenario? You'd want to be the grim reaper himself. That's how Manny got his job. Then I imagined him picking up people in the land of the living and bringing them to the land of the dead, like he's really just a glorified limo or taxi driver. So the idea came of Manny having this really mundane job that looks glamorous because he has the robe and the scythe, but really, he's just punching the clock.” (Evenson, 1998)

This is where Schafer breaks an already interesting and not so normal archetype: Campbell’s mentor respectively Jung’s wise man. The first twist is that escort, mentor and wise man come in shape of a mythical character from the shadow side of the real world that we all fear: death, the grim reaper, a cloaked figure that usually just brings death to living beings and is not suited too well for identification. However Manny seems to be rather likable and the player starts identifying with him. But as soon as we are ready to accept the character, it turns out that the grim reaper is nothing more than a cab driver that is imprisoned in his role and can’t escape his casual job. This is the opposite of what is usually expected of the hero of a hero’s journey. In this respect the story stays closer to Jung’s concept of the night journey where we navigate through unknown territory of the dark side of life. This is emphasized by the fact that Schafer was also inspired by film noir. He recounts the initial connection of the two themes found in Mexican folklore where the dead were buried with two bags of gold to be used in the afterlife. One bag was put on their chest, the other one was hidden somewhere in the coffin. If the first bag gets stolen the dead could still buy his way through afterlife with the second hidden bag. This idea of a criminal element led to the idea of using a detective story atmosphere of a film noir setting as a style for the game world. Inspiration was drawn from films like *Double Indemnity* (DeSilva & Sistrom, 1944), in which a weak insurance salesman finds himself entangled in a murder plot.

“Right when we were starting Grim there was a huge film noir festival in town. It was a strange coincidence, and I saw every single film showing there. I think I used something from every single movie. Like in Gilda, there's this character who always bets on the number two and wins, and that's how he gets his payoff in the Casino, and that's in the game. I just looted those games. Casablanca was the biggest influence on Grim, and The Big Sleep, and Double Indemnity.” (Evenson, 1998)

**8 [Reward]**

A recent example comes from a group of (my former) students that studied and embedded the archetypes of Jung, Campbell and Vogler step by step into their game story. For *Journey of a Roach* they literally used the structure of the hero’s journey for their dramatic structure of an adventure game but broke it with different characters and some un-heroic rather comedian behavior: a cockroach as an antihero with a clumsy sidekick, a spider not as a life threatening monster (as suggested in the first picture that only shows a shadow) but as caring mother of fly babies and ant soldiers (as enemies) that get converted from militaristic guards to peaceful creatures (Koboldgames, 2013).

The designers were aware of the pattern of the hero’s story (from class) and wanted to see how easy or difficult it is to follow this pattern and implement a hero’s story with all necessary classical story steps. The intention was only to have a good structure for the game, with a set frame and a good suspense. The designers assumed that the structure of the hero's story could be used for a game, and indeed, it turned out to be very helpful for development. For further strengthening of the story pattern, the designers decided to use characters that usually are not used in the line up of dramatic archetypal roles. Assigning the main role to a cockroach is a statement of subversion and irony in itself.

The cockroach is not a monster but becomes the unlikely hero of the story. Basically, he is the guy next door that becomes thrown into an adventure. He has a sidekick that is a clumsy fellow. And many of the other characters are not what they should be. Even the enemy soldier ants (with their armbands referring to Nazis) turn into happy friendly guys at the end when life changes back from hero mode to daily reality mode. The spider is not a monster but a caring and protective mother for the fly babies. It remains open though, if she breeds them for their benefit or as food source for herself. The firefly contrary to nature is not very active, sleeps in his hammock and smokes ganja all the time. As a hippy, he is in an unlikely communal living arrangement with a retired general. The general, a wasp, is not a strong figure but an old, frail and weak creature that needs all the help that he can get to survive. The designers of Koboldgames work with contrasts, – as they say – they try to break the expected to strengthen the real.

The *Journey of a Roach* game's theme seems to be: Accidents and misfortunes! The original concept of March 8, 2011 states Black Humor as the first goal for the game. Puzzles and mechanic should not be typical for the genre adventure game. The two main characters should be able to walk along walls and ceilings. The designers planned to integrate references to movies that work with the hero's journey pattern. There is a scene of *Mission Impossible* (Cruise & De Palma, 2000) integrated as persiflage. Further, in the concept, the designers planned that in the end the main characters ride a nuclear bomb (like Major Kong in the movie *Dr. Strangelove* (Kubrick, 1964)), which is wrongly perceived as a rocket that would take the two cockroaches, Jim and Bud to the moon. This ending has been changed and fits the return with the elixir better as when the bomb explodes, the two roaches survive (as only roaches might be able to) and find the first flower on the surface of the scorched earth. There are other references to movies and games: in one of the puzzles, you find a picture of the Three Headed Monkey from the adventure game *Monkey Island* (LucasArts, 1990). The prison break scene refers to the movie *The Rock* (Simpson, Bruckheimer & Bay, 1996) on Alcatraz, and there are important references to *Planet of the Apes* (Jacobs & Schaffner, 1968); the insects worship a nuclear bomb in their hideout and at the very end in the outro of the game you get a glimpse of the shattered statue of liberty.

The original concept of *Journey of a Roach* shows a drama structure that uses Vogler's segmentation of the hero's journey one to one with all 12 steps:

“1. Premonition

Intro with dream sequence as cut scene. Premonition of war, noise, destruction.

2. Call to Adventure

Bud pokes Jim and tells him about his discovery.

3. Refusal

Jim can hardly stand and is dazed. (Tutorial explaining control)

4. Mentor

Bud shows Jim the next room and wants to go further

5. Crossing the first threshold

Bud gets buried alive and Jim must get help. Jim is now on his own.

6. Test, allies, enemies

Several Puzzles, Jim learns of the humans’ journey to the moon.

7. Progress to the deepest cave

The bunker is unstable, the puzzles dangerous, Jim is getting more injured. He wants out of the department store.

8. Decisive Test

Jim finds the place where he left Bud behind. Bud is no longer there.

9. Reward, grabbing the sword

Jim pulls himself together with his last strength and finds Bud's map to the Great Room with the Miracle.

10. Way back

Jim follows the map

11. Showdown

Jim finds Bud and the nuclear rocket. Together, they shoot out of the bunker on top of the bomb.

12. Return with the Elixir

The two have not died in the explosion, but at last they reach the earth’s surface.”

(Geiser and Woll, 2011)

The designers have not altered the dramatic structure while developing the game. It worked as a narrative backbone and supported the one change of concept in not using text but icons as mediating language of the insects. Narrative backbone and distinct setting divided into segments respectively rooms (as standard in adventure games) interlocked very well. There are 13 rooms in all; the adventure leads from room to room from down underground to the Deepest Cave and up again room-by-room until the characters reach the top, the surface of the earth. The designers made a level-map where they indicate the narrative segments of the journey. The comedian behavior of the insect characters culminates in the ride on the nuclear bomb, their un/likely survival or reincarnation on the surface of the earth where they encounter the first glimpse of hope in a budding and blossoming flower. Jim had been looking for such a flower all along. This brings them and their enemies, one of the ant soldiers, to dance a jig and slowly disappear with the flower (the elixir) in hand in the distance, as many other adventure heroes have done before.

**9 [The Road back]**

Some of the more interesting Indie Games today concentrate on individual archetypes such as the Shadow, a selection of archetypes or variations differing from stereotypes in the game setup. Good examples are *Limbo* (Playdead, 2010), *Feist* (Team Feist, 2008/15) and *Dear Esther* (The Chinese Room, 2008/12) with reduced but very imaginative environments. *Dear Esther,* *Gone Home* (Fullbright Company, 2013) and *Kentucky Road Zero* (Cardboard Computer, 2013) belong to a new recently emerging genre among Indie Games. They are so-called Story Exploration Games that base their narratives on emotions, social and psychological backgrounds and relationship stories; often reduce interactivity and make careful use of selective archetypes and journey segments in their projects.

The game *Feist* (Team Feist, 2008/15) features a little fury ball as main character. The player quickly gets emotionally attached to it. A Jungian interpretation of the little furry ball as an archetype child (innocence) is indeed possible, yet at the same time the player experiences irony and distance. In Southern American English Feist is a term for a small mongrel dog. In this game, Feist is not a dog, but is it a mongrel of something familiar yet not nameable? The furry ball’s name is Feist, he has a weapon, is he a hero? A not nameable hero? But the weapon is a pinecone, and the hero’s assignment is broken again. The contradictions thus create a new (satirical) profile.

The structure of the “Black Forest” with several graphic layers seems particularly interesting. It might result directly from our dreams. And the animals or creatures are not recognizable as specific animals, but they are hybrids or mongrels or unidentifiable beings and created as such. The same with the plants, they are not identifiable as specific plants. Artist Florian Faller relates his creatures more to Freud’s idea of the uncanny. But a certain proximity to Jung’s collective unconscious may be easily seen in archetypes that quasi shine through the obscure, like the innocent and the monster. Often in dreams they remain vague and indefinable.

In many parts, Feist is a fighting game. The cute character has to avoid traps and gets a weapon. But the weapon has to be different than all the martial devices you can usually find in fighting games. Thus the main weapon in Feist is a pinecone. Another weapon is a twig. Faller says, that cones and twigs of course are a reference back to the things that we fought and played with as children, but maybe we were not that innocent then. The main character in Feist should be vulnerable, should arouse compassion and even pity. On the other hand the little creature feeds on tiny mosquitoes and therefore is a “predator”.

Feist deliberately operates with not exactly assignable figurative references. There are no beings, no plants, that exist in our world as such or which refer to a particular species. At the same time they should not be exotic, on the contrary, the plant and animal world is being strictly built from familiar characteristics. And the inhabitants of this world always have elements that are deliberately emphasizing the characteristics of familiar animal species. This may be fur, grunt, horns and tusks like distinguished domestic mammals of Western and Central Europe. The designers, Florian Faller and Adrian Stutz state that they didn’t try to create hybrid creatures because this would be too exotic for them. They fully intended to stay as much in the vague as possible. The same is not only true for animals but for plants and landscapes. There the designers refer to fir-like trees without being more precise. Which means, and the designers emphasize on this, they build a fairy tale world, but in principle without any form of exoticism, i.e. in actuality the designers and their creatures never leave the shadowy realms of the “Black Forest”.

With respect to the fictive world that is exclusively built up from the familiar and domestic, but always remains in the field of allusions and is never explicit about species, referring to Freud and the “Uncanny” may be as appropriate as referring to Jung. Faller reminds us that Freud’s uncanny develops from a double reversal of “Heimlich” (secretly) and “heimelig” (homey) and sets or creates a cognitive dissonance, being attracted and repulsed by an object at the same time.

The game *Limbo* (Playdead, 2011) refers to an imaginary place for lost, forgotten or unwanted children or people. The Catholic Church uses the term Limbo as an abode of unbaptized but innocent or righteous souls, mostly infants. They have to live at the edge of hell. The game comes only in black and white and with minimal ambient sounds and puts the player in the role of a young boy travelling through an eerie and treacherous world in an attempt to discover the fate of his sister. The young boy wakes up in a forest and starts to explore a bizarre and increasingly disturbing world. As you make your way through the forest, you come across obstacles that often kill you immediately in shockingly gruesome ways. The little boy gets decapitated by a bear trap, cut up, crushed, smashed or eaten by a crocodile. You die many cruel deaths. But after the death you restart right before the trap and get to figure out how to get around it.

Story and ending are open to much interpretation. The boy may look for his dead sister. At one point in the game, he sees a girl, but before he can get to her, she runs away and disappears. After completing the final puzzle, the boy is thrown through a pane of glass back into the forest. He walks a short distance until he encounters a girl, maybe his sister, or his alter ego. When he approaches the girl, she stands up, startled. And at this point, the game abruptly ends. Is the boy now reunited with his sister? Are they both dead and have to remain in Limbo? Can they progress to hell together? Is the girl just the alter ego of the boy and the boy as girl starts the whole gruesome adventure through the forest again? Are they both dead and have found their place of demise? Players have come up with different interpretations for the end, but the players have all been deeply emotionally involved by their experience of the game.

The Indie game *Dear Esther* (The Chinese Room, 2008/12) remains at least as mysterious with its setup on an unnamed island of the Hebrides and no visible characters. The player explores the shadowy island in a first person perspective and needs to pick up fragments of stories on his way. A male voice reads parts of letters to him. It is not clear whom that voice belongs too, but they are all addressing Esther who is dead. The player himself may be her husband searching for memories. There are other characters that are important to the story told via voiced-over letters, but they become blurred the longer the exploration goes on. At the end of the game, the player climbs a radio mast atop a peak and jumps off. He falls to the shore but the shadow we see becomes that of a bird and the player flies along the bay and sees an array of paper boats in the water. Those may be the letters he had written to Esther. This is definitely an unusual videogame since it plays with a person’s psyche and creates an inner world as an outer world, in this case a shadowy unpleasant island that does not offer anything but loneliness, isolation and self-deprecation. And this is what the player, as the main character of the story experiences throughout the game, always somewhat left in the mysterious and never quite sure what his estranged role really is up to the very end.

*Gone Home* (Fullbright Company, 2013) is another exceptional story exploration game that works with fragments of information that have to be discovered and read or listened to by the player. The player takes the role of 21-year-old Kaitlin who comes home from a long trip abroad to the family mansion in Portland and finds no one home. A note on the door from her sister tells her not to look for answers about where she has gone. The information hunt starts from there. Kaitlin finds more and more messages and notes from her sister and starts putting together the story. Some discoveries also lead to clues about the past and the whereabouts of her parents. Again, there is no other visible character in the game but we get to know a lot of intimate information about all of the family members. The main story is the one of sister, Samantha who has a relationship with another girl and after a few turns of the story, has run away with her girl-friend for good.

The mentioned Indie games show that successful narrative does not always need to involve a hero’s journey and a full array of archetypes. These games work with reduced imagery and explorative structures rather than complex narration. They focus on very few distinct archetypes and bring them to the spotlight. While *Feist* creates a shadowy but playful forest world in which an innocent creature fights nightmarish creatures right out of our dreams, with simple objects that children would use, *Limbo* creates a horrific boundary or afterlife world with gruesome mechanics that arrange thousands of deaths as if, it is an inner world of a person that has to come to terms with mourning for a loved one or has a premonition of his own demise. Limbo basically is a game about the sinister sides of life and trying to cope with death. Similarly, *Dear Esther* shows a more contemplative way of dealing with loneliness and isolation after the loss of a loved one. The outer world, in this case corresponds to the inner world of the main character. It is rather symbolic and as the player works through this in the first person perspective, he gets emotionally involved and may experience in some ways, what the main character went through in writing the letters to his dead wife. Finally *Gone Home* develops the story of characters that are not visible in the game. It is not about death but about relationships, desires, conformity and secrecy. The house in which we explore the story and find its fragments, functions as a shell world and the characters develop from conformity to nonconformity revealing all their secrets and offering new approaches after the cathartic revelations.

**10 [Return with the Elixir]**

Finally, there is *Birdly* (Team Max Rheiner, 2014*)*, an experimental hardware for the VR-console *Oculus Rift* that tries to get us closer to our Dream of Flying. Its goal for the user is to fly through the sky like a bird. At present, we experience a revival of Virtual Reality. With the rise of the Oculus Rift and the advent of more VR-consoles (from Google, Microsoft and independent developers), new opportunities reveal themselves for the game industries. These possibilities prepare the ground for new ways to engage in immersive virtual realities. Birdly is one of the most recent innovative experiments that enhances one of the virtual reality systems and does this successfully. Birdly is a full-body VR installation that explores the experience of a bird in flight. It tries to capture the mediated flying experience with several methods. Unlike a common flight simulator you do not control a machine – you embody a bird. The bird simulator was developed for a bird sanctuary that wanted to familiarize visitors with the life of birds by taking on their perspectives on the world. To evoke this embodiment, Birdly mainly relies on the sensory-motor coupling. The user or participant controls the simulator with her hands and arms and this directly correlates to the wings and the primary feathers of the bird. The inputs are reflected in the flight model of the bird and displayed physically by the simulator (a padded chair or frame that accommodates a player lying flat on her belly) through nick, roll and heave movements. This goes far beyond the classical approach of (immersive) gaming. There is also wind and scent (olfactory feedback) used in immersing the player or flying person with more senses. The closer she flies to the forest the stronger the scent of fir trees become. The headwind comes from a ventilator that sits directly in front of the player and simulates natural breezes. Wind and scent change according to scenery and location of the player. The wind adapts its strength according to the speed the player is flying at.

The physical computing lab and the gamelab of the *University of the Arts Zurich* are developing game and narrative approaches for the new simulator. Like several other Virtual Reality technologies that are presently in development for games, Birdly brings us one step closer to the Holodeck of living and experiencing dreams, narratives and gaming in Virtual Reality. The head of project, Max Rheiner, says: “We did not exactly know how a bird flies and what his perception is, so we were trying to emulate a human dream. As human beings, we are often dreaming of flying. And we realized the dream of flying as a physical experience.” (Max Rheiner in SRF Kulturplatz, 25.2.2015) This means that Birdly may be as much an embodiment of a bird flying through the sky, as it is an embodiment of man experiencing flying sensations in his dream - a sensation that may remain vague and be right out of the unconscious similar to the flight of Icarus. Like Icarus, the virtual reality contraption of Oculus Rift and Birdly manages to play out the dream of flying in a physical way or at least with some comparable physical activities and sensations that make the user believe that he or she really flies across San Francisco like a bird. In this respect, flying with Birdly is fulfillment of a dream. It causes anxiety, maybe even nausea when the user dives head down into town. And it causes amazement and sometimes, tremendous happiness (emotional involvement) in experiencing something you cannot experience in real life. There are many ways of applying Birdly. It may be used to overcome fears. It may be used for education. In history classes, students could be transferred into a specific historical time period. Or it could be used very subjectively, as for fiction: film and theater and any interactive formats including games.

There are many more research projects underway to bring us all into a real virtual reality or bring the virtuality in the shape of holograms right into our world. Some of them are low-funded projects like Birdly, others are big projects with huge financial contributions like Oculus Rift(https://www.oculus.com), essentially a VR-Headgear system that tries to establish a separated virtual world for the user in which he is set in and can interact as a separate avatar. And there are big projects like *Magic Leap* (www.magicleap.com) that work on merging virtual objects, scenes and worlds as holograms with the real world. Many of those projects eventually will not make it as, we have seen before with other innovative VR-projects in the 1990s and 2000s, but they are extending our horizon and will give us an idea of what will follow. The general notion is that we are progressing towards a full-body virtual world as seen in the concept of the Holodeck that has been around for thirty years now.

The concept of a Holodeck, where people can physically play out their dreams and desires in adapted fictional worlds, was conceived for *Star Trek: The Next Generation* (Roddenberry, 1987). However, the concept was developed in Gene Dogloffs Holography Lab in New York in the 1960s. Gene Roddenberry, writer for the Star Trek series took up the idea after meeting Dolgloff in 1973. He first tested it in 1974 in *Star Trek: the Animated Series* (Roddenberry, 1974). In both series a Holodeck is depicted as an enclosed room in which objects and people are simulated by a combination of transported matter, replicated matter, tractor beams, and shaped force fields. Holographic images are projected upon it. The user runs it in first person perspective. The holographic figures and the real humans cannot be distinguished from each other. However, the fictions (in the fiction) are not generated by the users themselves, they are written by Holonovelists and can only be adapted in a certain way by the users.

In 1997 Janet Murray published her book on the Holodeck as an intriguing and provocative model for future storytelling. The book describes the then current formats of digital storytelling and illustrates very well, that the whole community working with or on electronic literature, games and virtual reality had the hope of being able to develop and play holodeck-like games very soon. Procedural authorship was the keyword for the change that had taken place in digital storytelling and was supposed to set a new paradigm for the digital storytelling to come. Top of the line for dramatic cyber-storytelling then was according to Murray, a rather impressive narrative game by Jordan Mechner called *The Last Express* (Smoking Car Productions, 1997), an adventure crime game playing on the orient express train that is travelling in 1914 from Paris to Constantinople (Istanbul). A remastered version of the game was released for iPad in 2012. Over the years those hopes fizzled out, games progressed towards open worlds with many more possibilities of interactions and assembling narrative segments for the player, and MMORPGs and Open Sims (like SecondLife) offered new variants of identity and immersion for the player but the separation between game world and real world has only been perforated but not permeated. Therefore, we may need to ask the question, if the new and exciting developments in virtual reality gaming bring us any closer to the Holodeck or are they as deceiving as it was in 1997, and we are still far away from being able to be literally in a game, where we can play out our own fantasies and dreams as immediate fictitious realities?

For now, we may be better off going back to the ordinary world and not just expect the emergence of more immersive technology, more complex game structures and more realistic graphics. The Indie game examples show that dramatic games based on psychological intentions and motifs are now possible. We already have all the tools, we just need to recognize how to use them. Like in *Limbo* (Playdead, 2010), where a reduced 2D environment with silhouetted characters and no text (!) are enough to create a disturbing nightmarish game right out of the unconscious that may be cathartic for some people or bothersome for others. The same goes for games like *Feist* (Team Feist, 2008/15), *Dear Esther* (The Chinese Room, 2008/12) and *Gone Away* (Fullbright Company, 2013) and others that successfully manage to lure the player into explorative inner worlds that set the unconscious, and some of its archetypes and dream entanglements free for the user to acquire by exploration, participation and play.

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