

A Tutorial in Play

GAINING AN UNDERSTANDING OF TUTORIAL DESIGN IN ACTION-ADVENTURE AND ACTION-RPG GAMES

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Area of Interest

The area of interest is how game mechanic tutorials are used to create an in-game experience for a player and how they affect the gameplay. Game mechanic tutorials are usually placed in the beginning of a game and/or spread out throughout the game as the gameplay becomes more complex. The effectivity of this can affect the gameplay in different ways which is unique for certain genres. This report has a special emphasis is on tutorials of game mechanics in action-adventure games and action-RPGs, and how these can both upset and strengthen the games gameplay. What is it in these tutorials that are important for the experience, how is it achieved to keep the player engrossed in the gameplay and what happens when the experience is broken? Digital games have been part of my life for as long as I can remember, having had a fondness for the original PlayStation. I liked the Playstation because I could find bugs and glitches in games that I loved. This helped me understand how game worked as a system and how I could create my own ways of playing the game that was not intended.

I was 15 when I decided I wanted to make games for a living, which later lead into a Bachelor's degree in Medialogy at Aalborg University. Here I learned the technical aspects that go into making a game such as programming, 3D modelling, animation, designing systems, and user experience. My background in scientific studies has meant that I aim to find answers and explanations rather than only gaining an understanding like in my later humanitarian studies.

After my Bachelor's I decided to pursue a Master's in interactive digital media, in which I completed projects regarding user experience and game design. It is also here that I, during my 9th semester, was chosen for the prestigious role of game designer at DADIU.

My interest is based upon personal experiences from a previous game production completed during the 9th semester of Interactive Digital Media at DADIU (Danish Academy of Digital Interactive Entertainment) and includes existing exemplar games.

DADIU is a national program where students from different institutions are put into teams to develop games during an autumn semester. The teams reflect a professional production with each student having specific roles and areas of expertise such as, game director, game designer, sound designer, art director, artist, level designer, production manager and programmers.

At DADIU I learned what matters when working on a project with many kinds of professionals and how to be flexible regarding expectations relating to the different professions. I also took some of my most important steps in becoming a game designer and learning what the work entails.

It was also here that I got a real sense of how to communicate the designs to players of our game, as well as what goes into designing immersive gameplay. We struggled, however, with our tutorial and how we were supposed to tell the player effectively and clearly how to play and control the game. It was then I realised that teaching a player how to play a game might seem easy at first but can be a challenging and difficult thing to do in practice. Lengthy tutorials can be off-putting and negatively affect the player experience. I read books and watched video lectures on game design, but it was unclear how I was exactly supposed to solve this problem. It turned out to be more a question of trial and error to find an optimal solution. I wondered if it is possible to create an enjoyable tutorial, in which the player's experience is not broken, and the game's mechanics help to support the game's narrative. I studied the games I have played over time and thought - many games take vastly different approaches to tutorials. But what is it about these tutorials that work towards the player's immersion, and what is it that breaks the in-game experience during such tutorials? I also thought about different design traditions used by different developers, mainly the divide and differences Western and Eastern. At first glance it seems significant that both groups have their own distinctive design identity that have both strengths and weaknesses, as well as an effect on the gameplay. Eastern games tend to be text heavy and contain complex mechanics, whereas Western games tend to be more simple and direct. Both cultures have positive and negative aspects which I will explore more deeply in this report. All in all it made me wonder; what is it, exactly, that makes western and eastern action adventure and action-RPG games different?

Research Question

How satisfying is the in-game experience of an exemplar game mechanic tutorial, in an Eastern and Western single-player Action-Adventure and Action-RPG game, with consideration to gameplay? The assumption is that an investigation of this research question can contribute to my plans to work as a professional game designer.

Research Design

To explore this research question, several work questions have been designed through an iterative process and problem-based learning. They are listed below and are limited to the single player perspective mentioned in the research question. I will also use examples from other games not included in the exemplar games list, to showcase unique game-mechanic cases that contribute to my understanding of game-design and tutorials.

Work Question 1: What are exemplar game mechanic tutorial cases?

Several games are used to explore this question and is chosen based on an analytical framework of a few selection criteria. I want to compare tutorial traditions from western and eastern developed games to find differences and strengths in both. I have therefore chosen one game from each genre and each region. Each game has been played and completed in its entirety by myself and I am using

my own experience and understanding of the chosen games to describe them based on my analytical framework.

I want to focus on the single-player experience in each game - therefore I have chosen games that can be completed without an internet connection to avoid multiplayer aspects. The gameplay in multiplayer modes often varies significantly from gameplay found in single-player modes and depends on the player having a well-established understanding of the game mechanics and controls. It also helps me to focus on core gameplay.

Each game should be recognised as a good game in their respective genre, so they are a good representation of their genre. The game should follow the criteria listed below.

- a) The game must contain game mechanic tutorials.
- b) The game must have been played and completed by me.
- c) It must be possible to play the game from start to finish without an internet connection.
- d) Each game must be critically acclaimed in its' genre.

Work Question 2: What is an in-game Tutorial?

What does a tutorial do to teach the player how to play? What must a tutorial achieve and how is it achieved? What steps must a tutorial go through and how are they executed and experienced?

The exemplar games identified in Work Question 1 are used to help describe and answer these questions alongside literature and knowledge gathered through experience and research.

Work Question 3: How do Game Mechanics and gameplay relate in a tutorial?

What is gameplay, what are game mechanics and how are they used? Are all game mechanics equally important for a game? If so, how are they separated?

The exemplar games identified in Work Question 1 are used to help describe and answer these questions alongside literature and knowledge gathered through experience and research.

Work Question 4: What are the characteristics of Action-Adventure game and Action-RPG tutorials?

How are tutorials used in Action-Adventure games and how are they used in Action-RPGs? What makes these two genres similar and how do they differ when they teach game mechanics? Could elements from one genre be used in the other; how would this change the result? Do both genres have elements that are unique?

The exemplar games identified in Work Question 1 are used to help describe and answer these questions alongside literature and knowledge gathered through experience and research.

Contribution

Based on the above, I will finally conclude how game mechanic tutorial elements specific to these games enrich each other to enhance the experience. This will reflect upon my ambition to pursue a professional career, in which I work with game design.

Chapter number	Work Question/Theme	Headline
1	Research Question/Theme	Area of Interest
2	Work Question 1: What are exemplar	Game Mechanic tutorial cases
	game mechanic tutorial cases?	
3	Work Question 2: What is an in-game	On in-game Tutorials
	Tutorial?	
4	Work Question 3: How do Game	On Gameplay and Game
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	tutorial?	
5	Work Question 4: What are the	Action-Adventure and Action-
	characteristics of Action-Adventure game	RPG characteristics in tutorials
	and Action-RPG tutorials?	
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Game Mechanic tutorial cases

In this section I will explore the exemplar games chosen. I will look at what is most noticeable in each game's tutorials and how it works and where it falls short at teaching the game mechanics to the player. I am using my own experience from playing the games and will draw from theories in game design.

As stated previously, each game must follow a few criteria:

- a) The game must contain game mechanic tutorials.
- b) The game must have been played and completed by me.
- c) It must be possible to play the game from start to finish without an internet connection.
- d) Each game must be critically acclaimed in its' genre.

Based on these criteria I chose a short list of potential games to study.

	Western	Eastern
Action-Adventure	Uncharted 2: Among Thieves	Shadow of the Colossus
	The Last of Us	Okami
Action-RPG	The Elder Scrolls: Skyrim	Kingdom Hearts 2 Final Mix
	The Witcher	Bloodborne

This list was then shortened to four games that represent each of their respective genres and these are the games chosen:

	Western	Eastern
Action-Adventure	Uncharted 2: Among Thieves	Shadow of the Colossus (link2)
	(link1)	
Action-RPG	The Elder Scrolls: Skyrim (link3)	Kingdom Hearts 2 Final Mix
		(link4)

Aside from the above criteria, each game was chosen because they have had an impact on me and how I perceive and play games. They have helped me reflect on what it is exactly that makes a good game and shown me how this can affect the games industry.

However, to play a game you must first be taught how to play that game, so let me start by examining the tutorials of the exemplar pieces. Most games follow the same general conventions when it comes to control and button layout.

I will start by investigating the Action-Adventure games with Uncharted 2 and then Shadow of the Colossus, followed by the Action-RPG games; first Skyrim then Kingdom Hearts 2 Final Mix. The sections for the Action-RPGs will be longer than the Action-Adventure games because they contain more mechanics.

After all the games have been analysed I will compare them, first by genre and then overall.

This the order in which each game and comparison will appear.

- Uncharted 2
- Shadow of the Colossus
- Skyrim

- Kingdom Hearts 2 Final Mix
- Comparison of Uncharted 2 and Shadow of the Colossus
- Comparison of Skyrim and Kingdom Hearts 2 Final Mix
- Comparison of Action-Adventure and Action-RPG based on earlier comparisons.

The focus will be on the gameplay - the story of each game will be largely ignored unless it is important. I have however, made a short summary of each game and their central story in the beginning of each section.

Uncharted 2: Among thieves (Western action-adventure).

Uncharted 2 (Uncharted 2: Among Thieves, 2009) is an Action-Adventure game made by Naughty Dog in 2009 for the PS3 and later remastered for the PS4. The version I use here is the PS4 version since the only difference is a graphical update.

Uncharted 2 is the second game in a series following the adventures of Nathan Drake, who travels the world in search of the world's secrets. In this game, Nathan follows the journey of Marco Polo in the search for Shangri-La, a civilization lost in myth.

Uncharted 2 opens with a scene where the games protagonist Nathan Drake wakes up inside a train dangling from a cliff. The focus of the camera is on Nathan's reactions (Figure 1) and his descent through the train. This is called a cutscene and these are used to tell the story between segments of gameplay.



Figure 1: Cutscene in the beginning of Uncharted 2

The scene is intense and puts the player on edge.

After the scene, the following screen is presented to the player (Figure 2):



Figure 2: The player gains control

The player is now able to move Nathan and must climb up the hanging train whilst it slowly breaks apart. The player is not given any prompts or told that they are able to move, it is conveyed through the change of perspective since the camera is now placed much farther away and to the rear of Nathan.

The yellow railing then directs the player's eye and indicates to them visually that they can move along this railing. This is a technic used throughout the whole ascent of the train. Yellow shows the player where they can climb and where they should go (Figure 3). The player learns this very quickly as they proceed.

Because of the tense mood the player naturally wants to proceed as fast as possible – due to because of the fear of falling. Pieces of the train repeatedly fall off and this creates a sense of urgency. This means the player will follow their instinct to survive, encouraging them to rapidly climb the train. Yellow therefore also becomes linked to the survival of the player.



Figure 3: Yellow lines shows the path

The player is also able to jump in different directions while climbing and swinging from poles. This is told to the player through onscreen text (Figure 4).



Figure 4: Telling the player how to swing and jump

At this point the player has already learned the buttons and actions they can use to climb around. Now they must perfect their skills by using everything they have learned to reach safety. This is a very typical way of teaching game mechanics in Adventure games. This also indicates to the player that climbing is a central mechanic in the game.



Figure 5: Using the same controls in different context

When the player ascents to the top, the rest of the train will start to fall. The player then instinctively uses the same movements they learned whilst climbing to move Nathan through the descanting cabin (Figure 5) and at last jump to safety. The player is here taught very quickly and effectively that the same movement rules apply when Nathan is upright. Also notice the yellow panels on the floor in Figure 5.

The game also uses light accents to outline the path the player should take. It also creates light details around certain items to draw the player's eye.

In Figure 6 the gun is placed in a firelit area and given a light effect that makes it stand out. This teaches the player how items appear when they can be interacted with.

This light effect is also very similar to the effect used for hidden items in the environment - such as treasures or other interactive objects.

The eye is then immediately drawn to the beam of light and the open door with a gentle glow



Figure 6: The gun is lit and the beam of light draws the eye

inside. The player now knows where they need to go (Figure 6).



Figure 7: Picking up a gun

When the player moves close to the first item a button prompt shows the player how to pick up the gun (Figure 7). Moments later they use the same button to open the door. This teaches the player that they only need one button to interact with the environment. The button prompt shows up every time the player is near something they can interact with.



Figure 8: Learning how to shoot

Next the player learns how to shoot their gun (Figure 8). This is also done with on-screen text that shows what buttons to press. All buttons related to shooting are located on the back of the controller, meaning that this part of the controller now has a very specific action associated with it.

The environment is very safe when the player shoots for the first time. They can therefore take their time and get used to controlling the aim. Shortly after, the player must shoot their first enemy (Figure 9). Shooting at him results in the container behind the enemy exploding and thus ending the fight and removing the danger.



Figure 9: The first enemy

These two examples from Figure 8 and 9 show the player that shooting can be used to proceed through the environment. This illustrates that shooting is a central mechanic in the game, and that shooting at certain environmental objects will have a result on gameplay.



Figure 10: The take cover mechanic

It is now a bit later in the game and the player must learn how to hide from enemies. This is once again shown with on-screen text and button prompts (Figure 10). The game also freezes until the correct button is pressed. This is because a new button is being introduced and thus is giving the player time to recognise and associate a new action with the button. This cover mechanic is also expanded upon much like the climbing mechanic by combining movement and stealth in different directions to allow the player to move from cover to cover. This button is expanded further as a stealth mechanic, when it turns into a combat roll, when used without cover.

This section of the game teaches the player how to use stealth to move around and avoid or incapacitate enemies.



Figure 11: Using stealth

Once again the player is introduced to a new button via an on-screen message whilst the game freezes, allowing the player time to understand and press the button to attack (Figure 11). This mechanic is also expanded upon by being able to attack enemies whilst out of stealth. While out of stealth, this becomes a punch instead of a stealth attack, and the enemy needs to take several hits before falling unconscious.

At this point the player knows all of the controls and how to interact with the environment. At this point 40-60 minutes has passed depending on the player. Throughout the game new items and challenges are introduced but the controls never change, the player just gets better at using them and is aware of what to look out for.

This way of expanding on existing mechanics and combining them together instead of introducing new mechanics makes the controls very strong and intuitive to use.

Shadow of the Colossus (Eastern Action-Adventure)

Shadow of the Colossus (Shadow of the Colossus, 2005) is an Action-Adventure game made by Team Ico in 2005 for the PS2 and later remastered for both the PS3 and PS4. The version I will be using is the PS3 version since there are no gameplay changes between the PS2 and PS3 versions, whilst slight changes are found in the PS4 version.



Figure 12: Wander entering the temple

The game opens with the player character known as Wander entering a temple (Figure 12). A voice speaks and the player find out that the girl traveling with Wander is dead. It is possible to revive her if the player kills all the 'Colossi' with a magical sword that uses the power of light.

The voice explains how the player can find the direction they must go by raising their sword and following the light beam it casts.

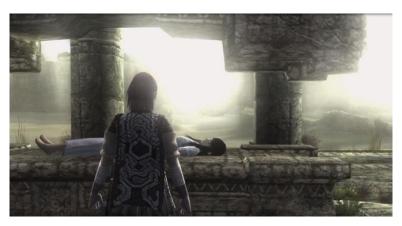


Figure 13: The player gains control of Wander

As the camera zooms out, the player gains control of Wander as the scenes is presented to the player (Figure 13).

The first thing the player is shown is how to jump via an on-screen message and button prompts (Figure 14). This is followed by the player learning how and when to raise the sword to find the path (Figure 15) in the same manner.



Figure 14: On-screen text for raising the sword



Figure 15: The light showing the way

The player is also shown how to get on and ride their horse in the same way.

Movement is similar to the conventional movement controls known from many games, however the rules for movement however are changed slightly when the player rides their horse. While riding it is now possible for the player to keep going in a direction without having to hold that direction. This is done to make mounted combat easier, but it is never taught to the player and is instead learned naturally through gameplay.



Figure 16: Climbing vines

The player soon learns how to climb on certain surfaces (Figure 16). However, the prompt shown in Figure 16 is not revealed until after the player begins crawling on the surface. The game expects the

player to experiment with the buttons and figure out certain aspects of the movement controls for themselves, such as sliding along ledges. The buttons used for climbing can be used to combat roll when running and which can be used to move under barriers.



Figure 17: Selecting different weapons

The player has two weapons that they can use. A bow for ranged attacks and a sword for close combat and precision attacks. Each can be used the same way while riding the horse. The game tells the player how to switch between these weapons with text (Figure 17).



Figure 18: Finding the weak points

While fighting the Colossi, the player must use all they have learned to defeat them: They must use the swords light to locate the weak points (Figure 18), roll to avoid being stepped on, shoot the colossus with arrows to distract it, climb the colossus' fur to reach the weak points and then stab them until the colossus dies. If the player takes too long a voice along with text will give the player hints indicating what to do next.

The stamina meter (Figure 19) - shown as a pink circle - will slowly shrink when the player is holding on to something. This is not always noticed right away, so a beeping sound will begin and its' speed will increase as the player's stamina decreases. The stamina can then be regenerated by releasing the grasped surface and is shown by the pink circle expanding out to the dashed outer line. Wander will let go and fall if all stamina is lost while he climbs. Stamina is also used when the player nocks an arrow and regenerates when the arrow is shot and the player rests. The stamina circle is expanded slightly each time the player defeats a colossus or when they eat the tail of white-tailed lizards found around the game world. It is also possible to increase the health-bar by eating the fruits of fruit trees found around the game world.



Figure 19: Stamina, chosen weapon and health

At this point the central game mechanics have been introduced and the player is ready to take on and defeat the colossi. Wander is knocked unconscious and transported back to the temple where the next objective is revealed after defeating each colossus (Figure 20).



Figure 20: Return to the Temple

Shadow of the Colossus has an element of trial and error and exploration to its gameplay. The player is expected to explore their possibilities and expand their knowledge by themselves rather than having the game tell them what to do. I have personally talked to players that have never made it past the first colossus because they didn't understand what they were supposed to do. The tutorials are only shown once and even then, they sometimes seem misplaced or too vague to fully understand. It is possible to see the controls in the menu and change them to different preconfigured layouts if the player wishes to.

The tutorials are very minimalistic since they are often explained trough text and not always with the player performing actions. This could be a specific choice designed to make the gameplay more explorative and to add to the mystery of the story which is also very vague.

The Elder Scrolls V: Skyrim (Western Action-RPG)

The Elder Scrolls V: Skyrim (The Elder Scrolls: Skyrim, 2011) is an Action-RPG made by Bethesda Games Studio, released in 2011 for the PS3, Xbox 360 and PC. It was later rereleased on PS4, Xbox One, Nintendo Switch as well as VR. I will be using the PC version since there is no difference in gameplay and it has better performance.

In the Elder Scrolls V: Skyrim, the player takes the role of the Dragonborn, a person born with a dragon soul and the ability to use special powers. They must journey through the land of Skyrim to defeat the elder dragon Alduin, who wants to take over and rule Skyrim with his dragons. Through their journey, the Dragonborn must learn to master their powers and help the people of Skyrim. They do this by completing quests and defeating enemies, so they finally can fight Alduin.



Figure 21: The opening scene.

Skyrim opens with the player waking up bound in a moving wagon with who are presumed prisoners as seen in Figure 21. It is not immediately obvious that the player can move the camera until the man next to them begins speaking to them and asks for their attention. Nothing tells the player how they can move the camera, but the player might assume they should be able to because the character talking is slightly out of frame. This might prompt them to press the buttons on their controller or move the mouse around to then realise that this is how they move the camera.



Figure 22: Prompt telling the player how to look around.

Even if the player doesn't discover out how to look around by themselves, the game will shortly tell the player how to move the camera using centred text with the button, or mouse as seen in Figure 22. The player is now naturally prompted to look around at the characters as they speak and comment on their situation.



Figure 23: Character creation.



Figure 24: Character Customisation.

The player is soon asked to step forward and say who they are. This takes the player into the character creation screen (Figure 23) where they can customise the character they want to play. The player can choose their character's gender and have many choices of race that each have their own strengths and weaknesses. This is indicated with a short summary for each. The player can also customise their character's appearance with an abundance of sliders available for each physical feature seen at the top of the screen (Figure 24).



Figure 25: The dragon attacks.



Figure 26: Movement controls and waypoint.

The player is not prompted to move by themselves until a dragon swoops in and attacks the player (Figure 25).

The player is told they must flee and follow the character that has a waypoint over his head, while being shown what buttons they use to move (Figure 26). This is a very intense situation and the player must react and adapt quickly to what is happening.



Figure 27: Waypoint and objective.

The player is also given their first objective which tells them what they are supposed to do next. The arrow shows where they are supposed to go - in this case who to follow - to complete their objective (Figure 27).

The arrow is present above both the character that the player is following and the bar at the top of the screen (used as a compass). The waypoint on the compass will always show the direction in which the objective is.

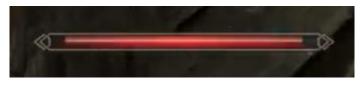


Figure 28: The health-bar.

The player is soon shown their health-bar which can be seen depleting slightly when the player takes damage (Figure 28). This tells the player what they must look out for when they want to check their health.



Figure 29: Interaction.

Next the player is told how they interact with the world around them. They are presented with a few options and an objective. They learn that most interaction is done using the 'E'-button and are prompted to this via an on-screen message (Figure 29). In this case they are given an objective to loot a deceased soldier and which button to use to do this. They are also told that they can talk to Ralof, who they are following, using the same button. The player therefore learns that they can do multiple and different actions using the same button.

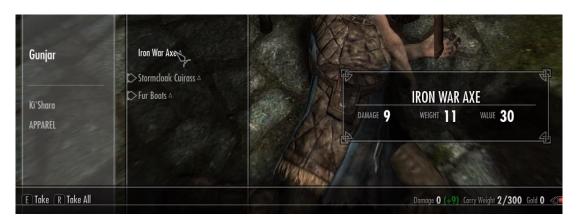


Figure 30: Looting the body.

The player is presented with an item menu in which they can interact with the soldier. Here they can see what items there are, their type, weight and value. The player might also notice that they themselves are carrying some weight, indicated in the bottom right. This screen also shows them how much they can carry in total. If the player carries more than the maximum weight allowed, they will become over encumbered and their movement speed will be reduced; losing them the ability to perform certain actions. They are also shown what buttons they can use to interact with this item menu and the different categories.



Figure 31: The player's items.

The player must now equip the armour and weapon they looted from the body. The black arrow indicates what the player has equipped and shows, in the case of the Iron War Axe, what hand they are holding it in (Figure 31). The player learns this by experimenting and clicking the items to find out what clicking on it does. In the weapons tab, it also says how much damage a weapon can do.

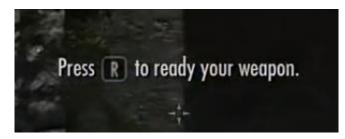


Figure 32: How to ready a weapon.

The player is told how to ready their weapon (Figure 32) and that they should try to swing it. This is done using the left mouse-button and is largely learned by the player themselves when they click the mouse. This is also an example of how similar control conventions from different games can repeat amongst different titles. This means that the controls come very naturally for most video-game player.



Figure 33: Attacking guards.

Only when the player and Roluf enter into combat does the game tell the player how to attack. It also tells them how they can do a power attack (Figure 33) and how to block (Figure 34). The player is again told that they can complete more than one action using the same button.



Figure 34: How to block.



Figure 35: Stamina information.

While in combat, time freezes and the player learns that they have stamina and become aware of how it works (Figure 35). This pop-up message will un-pause the game when dismissed. The stamina mechanic makes the combat more restrictive, since it can limit or prevent what the player is able to do. They must therefore keep this in mind when they play.



Figure 36: Door requirements.

Next the player learns that some actions require certain items before they can be performed, in this case they need a key to unlock the door (Figure 36). This tells the player to look out for special items in the environment and how to use them.



Figure 37: Items in the environment.

The player might also find other items in the environment that they can use, collect or even consume (Figure 37).



Figure 38: Lockpicking and how it works.

One of the unique mini-games present in Skyrim is lockpicking. It puts the player in a state where they must try to pick a lock. In this state the controls the player is familiar with are changed and used in new and different ways than they are used to (Figure 38). When the player fails, their lockpick breaks and they can only try again if they have more left. Some locks are harder than others and require the player to be very precise when they attempt to pick it.



Figure 39: Lockpicking skill, difficulty and number of lockpicks.

Figure 39 shows the first time the player is introduced to one of the game's skills by seeing their skillbar.



Figure 40: Skill increase.

When the player's skill increases a level, they are informed so by text showing the skill number they increased to, together with their level progress-bar (Figure 40).

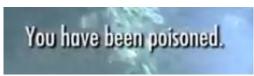


Figure 41: An effect.

Sometimes certain attacks or food can cause effects. In this case (Figure 41), the player is attacked by a spider that causes an effect and poisons the player. When the player is affected by an effect like this, they are informed by text in the upper left corner of the screen. Sometimes the effects also cause the player's health, stamina or magic to deplete. They learn this by being attacked by enemies, consuming items and other ways.



Figure 42: Getting noticed by the bear.

The player learns how to use stealth when they are forced to sneak by a sleeping bear. They learn the controls in the same way as the other controls, with text on the screen. The player is given an eye-icon in the middle of the screen (Figure 42) that indicates if they have been noticed or not. The player is hidden if the eye is fully closed, but the eye will slowly open if they are being too loud and they will be fully noticed when the eye fully opens. The enemy will attack the player if they are discovered whilst sneaking. The game also tells the player to look out for their surrounding when sneaking, since there can be traps that make noise and give the player away and potentially damage the player. However, the player can do more damage to an enemy if the player attacks them whilst they are hidden (Figure 43).



Figure 43: Sneak attack.

The player discovers new weapons and how to use them as they progress. They will naturally experiment with these weapons and learn by themselves how to use them. This includes items such as such as shields, bows and longswords.



Figure 44: Free at last.

At this point (Figure 44) the player has learned all they need to know to play the game. A few things like the use of magic is still not fully explored but works on the same principles as normal weapon controls and is taught the same way later in the game.

As an RPG the game expects the player to choose their own path and decide what they want to do to proceed. They are actively encouraged by the game to explore and figure out possibilities; there is no one way to play it. This is shown by the compass on the top which will always show the player the closest point of interest. This naturally draws the player to the many locations and enemies in the environment. The many items and their uses are also up to the player to explore through crafting and usage.

Kingdom Hearts 2 Final Mix (Eastern Action-RPG)

Kingdom Hearts 2 (Kingdom Hearts 2, 2005) is an Action-RPG developed by Square Enix in 2005. It was later remastered and bundled with a few other games in the series. This was released as Kingdom Hearts HD 2.5 Final Mix in 2014 for the PS3 and 2017 for the PS4. I will be using Kingdom Hearts 2 Final Mix found in the PS3 bundle. The only difference between Kingdom Hearts 2 and Kingdom Hearts 2 Final Mix is that the story is longer and has more endings in this Final Mix version.



Figure 45: Kingdom Hearts 2 Final Mix start menu.

Kingdom Hearts 2 is the third release in a long series of games set in the Kingdom Hearts universe, which borrows characters from many Disney and Square Enix franchises. These include Mulan, Pirates of the Caribbean and Final Fantasy, to name a few. The player takes control of the character Roxas in the introduction and later Sora for the rest of the story. Throughout the game, Sora must travel to different worlds mostly themed around Disney franchises, where they must defeat the Darkness - a force of monsters made from darkness. Sora accomplishes by wielding a powerful weapon called the Keyblade that can unlock the hearts of worlds and can defeat the Darkness. On his journey Sora has the help of his companions Goofy and Donald Duck, as well as his friends and the people he aids.

The first introduction to the game and how to play it is set in an original world made for the game with a few characters from the Final Fantasy franchise. Disney characters are introduced later after the tutorial.

The game opens with a short movie showing events from the previous games, followed by Roxas waking up in his bed (Figure 46).



Figure 46: The first shot of Roxas.

This is followed by a couple of cutscenes (Figure 46), establishing the story and its' characters.

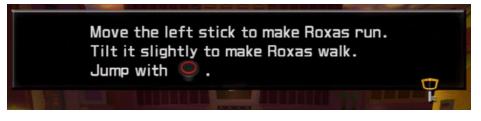


Figure 47: Textbox with instructions.

The game tells the player how to move and jump via on-screen textboxes (Figure 47) and then gives the player an objective so they can try out and use these controls (Figure 48).



Figure 48: The first objective.

The player also quickly learns how to move along via textboxes - by pressing the correct button that makes the next textbox appear. When a textbox can be closed it is shown with a key-like symbol bobbing slightly in the corner (Figure 47 and 48).

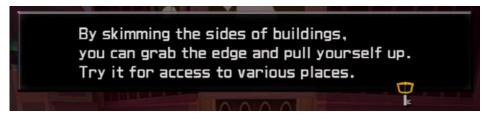


Figure 49: Extra mechanics.

Throughout the introduction of the game a few mechanics are told to the player only through textboxes with no chance to try them out (Figure 49). This means that impatient players might skip and miss these extra mechanics and will only use and learn them by accident or if they already know them. Kingdom Hearts 2 largely uses the same control scheme used in the first game, Kingdom Hearts, so the game might expect the player to have played the previous game and already know the controls when they start playing.



Figure 50: Introduction of the command panel.

The player is then taught how they can use reaction commands with the triangle button and how it appears on the screen (Figure 50). The same button is used for different kinds of interactions and the game tells the player what they can do when they stand next to something they can interact with (Figure 51). For example, talk to a person or open a chest.

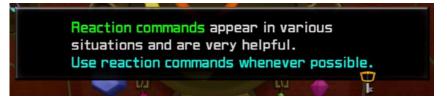


Figure 51: Reaction commands.

When talking about reaction commands and the commands themselves, the game uses a very clear green colour (Figure 51). This helps the player associate these kinds of actions easily with the button used since it is green as well.

Press R1 to lock on to specific things. When locked on to something, the camera will automatically follow the target.

Figure 52: How to lock the camera on something.

The game then tells the player how they can lock their camera to follow a specific target (Figure 52), in this case a cat. This a very essential mechanic also used in the games combat. It is here introduced to the player in a much more peaceful way to make sure the player is comfortable with how it works, when they later are taught how to use it in combat.



Figure 53: The first choice.

At the start of learning the mechanics of combat, the player is given their first choice (Figure 53). Players familiar with the Kingdom Hearts series will know that this is when the player chooses their fighting style. The player must choose one of three weapons to use in a fight. The game tells the player what each weapon is good at when they go to pick it up, and they have the option to choose another if they don't like it (Figure 54).

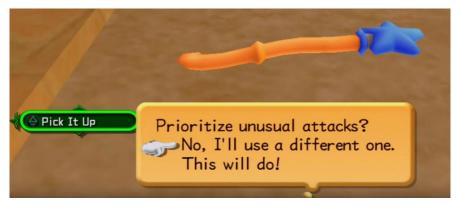


Figure 54: The magic weapon.

Each kind of weapon has their own style of combat attached to them and the player must choose which one they like the most. The options are: unusual/magic, defensive and offensive. Some of the players attributes increase to reflect what they have chosen (Figure 55).

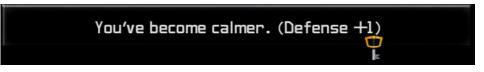


Figure 55: The defensive weapon chosen.



Figure 56: HP and MP

Before combat the player is told how their HP (health points) work and what they look like (Figure 56). If the green bar depletes and reaches zero the game ends, in this case it only ends the battle.

The green HP bar will deplete according to how much damage is taken (Figure 57).



Figure 57: Taking damage.

MP (magic points) are also introduced briefly but not explained until later when the player is able to use them. The player uses MP to cast magic spells and must regain them by either letting them slowly regenerate or use items that restore them. MP is represented as a blue bar (Figure 56).

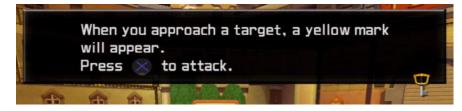


Figure 58: How to attack.

The player is now taught how to attack (Figure 58) and is immediately given an objective to attack and fight another character. The player is also taught how to do combos and how to parry an attack. This is all explained through textboxes that freeze the game, so that the player can register this information. The game then unfreezes when the player dismisses the textbox and they can try out what they just learned.

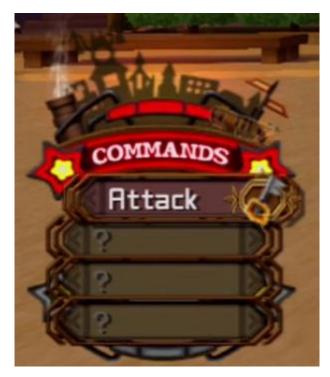


Figure 59: The commands interface.

The commands interface is always visible when the player moves around, and they can see what they are able to do as well (Figure 59). This interface slowly fills out as the player gains new commands that they can use. The slots can be customized by the player as they learn new abilities and gain items, so they can do certain commands quickly, akin to using a hotkey for certain abilities.

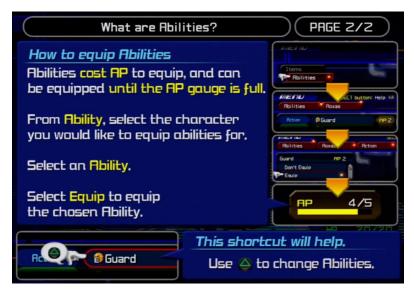


Figure 60: What are Abilities?

The player is also given a new separate AP (ability points) bar in their ability menu that shows how many abilities they have equipped at once (Figure 60).

At this point the player has been taught all the basic controls in the game and only needs to be taught the more technical mechanics such as attributes and experience points. The player is given a series of tasks that slowly makes them comfortable with the controls and command system. The player will slowly work out how the systems work, why they are important through these tasks and a series of textboxes telling them how they work before they let the player try it out as they go.

Many of the mechanics are used in the same way as other mechanics, so this makes them very easy to understand and use for the player when they are taught them the first time.

Comparison of Uncharted 2 and Shadow of the Colossus

Both games are Action-Adventure games and as such, most games in this genre have simple control systems that the player must learn and perfect throughout the game. This is also true for these two games.

Each game starts out with the first section containing everything that the player needs to know in order to play the game. In Uncharted 2, it's the crashed train and museum flashback where the player is first told how to do each action in a safe manner. The player is given specific tasks they must complete to proceed, before moving on to use the same actions in different contexts. Shadow of the Colossus does something similar but instead of giving the player specific tasks, it instead creates an environment where the player can explore what they are able to do before they are given objectives.

Both games have on-screen messages to show the player what button to use to perform certain actions, such as picking up items from the ground and switching between weapons.

Uncharted 2's approach is much safer, and it is almost impossible for the player to fail whilst they are learning what each button does, while Shadow of the Colossus throws the player right into an encounter which is very possible to fail, but at the same time forgiving so the player doesn't feel discouraged.

Their on-screen interface is also similar and very simplistic, only giving the player the exact information they need in that moment - for example how much health they have, or which weapon they have equipped. Shadow of the Colossus has this information visible all the time so the player constantly can see how much stamina or health they have left and what weapon they have selected.

Uncharted 2 only shows this information when it is relevant. The player can see how wounded they are by what the screen looks like, with blood splatter visible around the edges when injured and the screen turning greyscale when close to death. The only other information on-screen is the weapon the player has selected and how much ammo it has. The on-screen UI also disappears in Shadow of the Colossus when the player is not confronting a colossus or when it is not relevant to the player. The UI only shows up outside of combat to show that their stamina-bar grows after using an item.

This lack of on-screen UI means that both games are highly cinematic, and the player can almost forget sometimes that they're playing a game and not watching a movie.

Comparison of Skyrim and Kingdom Hearts 2 Final Mix

Skyrim and Kingdom Hearts 2 are both Action-RPG's and as such have a series of complex systems built into them. They both build on the aspects of traditional pen and paper role-playing games, such as having attributes and complex combat systems. This means that the player can choose what their character's strengths and weaknesses are, and have different ways to approach most situations depending on what the player chose.

Both games give the player the choice between different combat styles, but only Kingdom Hearts 2 makes all choices available from the start whilst Skyrim only introduces close combat weapons and shields in the introduction and then later magic and ranged combat. Each combat style is however not thoroughly explained in Kingdom Hearts and is instead briefly summarised after which the player can choose what they would like to do. This choice does not have a big impact on the rest of the game.

Skyrim is very thorough in its explanation of controls and shows the player exactly which buttons to perform each action. Kingdom Hearts does the same but does so through easily skippable textboxes, and instead expects the player to already be familiar with the controls from the previous game. It merely reminds the player how the controls work or wants the player to figure it out for themselves by giving them an area where they can do what they want.

Skyrim's on-screen UI is very simple, and in many cases, only appears when it is relevant for the player, such as the health-bar only showing up on-screen when the player takes damage. This is also true when they use their mana or stamina. Most other information or button prompts are shown when the player comes close to something they can interact with or when something happens, such as a quest update. The only on-screen UI element that is almost always visible is the compass at the top of the screen, which shows active quests and special locations.

Kingdom Hearts 2 instead has its on-screen UI always visible, displaying information such as health and commands. This shows the player what their status is, such as health, and what their available actions or commands are.

This difference in on-screen UI gives Skyrim a much more cinematic feel whilst Kingdom Hearts 2 feels very much like a game. Skyrim teaches the player how to play in small bites at a time that they get to try out immediately, while Kingdom Hearts 2 instead tells the player what they're able to do in big chunks. This doesn't always give room for the player to try what they're taught.

Comparison of Action-Adventure and Action-RPG based on the previous comparisons

The biggest difference between the two genres is the amount of information that must be taught to the player before they're able to confidently play the game. The adventure games typically have simple systems that are easily explained and simple to use, while the RPG genre can have very complex systems that the player needs to explore and try out many times to understand. This means that the tutorials found in Adventure games can sometimes be much shorter than those found in RPG games. This is also true for the four examples used previously.

Uncharted 2's tutorial is much longer than that found in Shadow of the Colossus, but Uncharted 2 also makes the player do each action in many ways, such as first using a gun to shoot a lock and then to shoot an enemy. Each is the same action but set in a different context. Shadow of the Colossus instead briefly tells the player what they can do with a few instances where they are required to perform these actions before they're given their first challenge.

This is also true for the RPG games, where Skyrim gives the player a series of tasks they must complete to proceed, whilst Kingdom Hearts 2 tells them what they're able to do and allows them to explore for themselves in many cases.

This shows that the Western approach to tutorials is much more methodical with a series of tasks that must be completed before the next task is given. In contrast, the Eastern approach is to instead give a few or only the most important of tasks to the player for completion and then expects the player to learn the rest by themselves and experiment a bit more.

On in-game tutorials

In this section I will answer my second work question: What is an in-game tutorial? This is first answered based on literature and then the exemplar games described in the previous chapter are used to describe different kinds of tutorials and how they are executed. Firstly, I will identify what a tutorial is, and then I will categorise different kinds of tutorials.

Most of the chosen games don't only use one type of tutorial and instead use a few different types for certain purposes or elements. Hybrid tutorials are the most common; however, I will identify the main characteristics of the game tutorials to leverage insights about what different types of tutorial are used in the exemplar games.

Tutorials in games can be very different and have very different effects depending on how they're made and executed in-game (Anthropy & Clark, 2014).

Tutorials in games are usually made to introduce the player to the game and teach them how to play. This is done through interactive situations set up to provoke certain interactions that are important for the player to play the game. This could, for example, be learning how to pick up an item, a very simple action which could be very important for the whole game. Most games have several tutorials, meant to teach the controls and systems to the player in a safe environment (Rouse & Ogden, 2004).

Tutorials can be designed very differently depending on the experience the designer wishes the player to have. Many tutorials use a very direct or mechanical approach which can make the tutorials feel very separated from the core gameplay, even when they are important for the player to play the game. This means that the player can find them boring and want to finish them as soon as possible (Rouse & Ogden, 2004, p. 129). In contrast, other tutorials are integrated into the gameplay to "hide" them from the player and give them a better experience. This means they don't actually feel like they're playing a tutorial but instead are making progress in the game (Rouse & Ogden, 2004) (Anthropy & Clark, 2014).

This more integrated approach has become very popular in modern video games and has been used in different ways and to a varying degree. It is even possible to have no tutorial if that is the experience the designer wants the player to have, provided the gameplay can support it (Rouse & Ogden, 2004).

Having no tutorial would mean that the player must have prior knowledge of the game or similar games to play them. Even then, the player has no way of knowing for sure until they try to play the game themselves. Old arcade games were usually very simplistic both in gameplay and interaction; they usually lacked any deeper tutorials other than basic instructions presented in the beginning of the game or sometimes on the game cabinet itself. These kinds of games were often designed to be hard to learn and hard to master. This was done so the player was more inclined to fail, resulting in them putting in more coins to try again (Salen & Zimmerman, 2003) (Fullerton, 2014). Arcade games also usually have very simple or few controls for the player. This combined with the few instructions leads the player to experiment more by themselves and see what happens when they press certain buttons. This works because the rules of the game are simple and easy to understand (Anthropy & Clark, 2014).

The more rules the game has, the harder it is for the player to understand. Therefore tutorials are needed to explain these rules to the player. The tutorial might not have a great impact on how well

the player is able to play the game, but the experience of playing the tutorial can have a great impact on the player's perception and feelings towards the game (Rouse & Ogden, 2004).

This is the reason why many designers try to hide or integrate the tutorial into the gameplay rather than having a more traditional tutorial. By doing this, the tutorial feels like a real part of the game that doesn't break the player's immersion when playing and makes it much more fun and engaging for the player (Rouse & Ogden, 2004).

We see this integration of tutorial into gameplay very clearly in Uncharted 2 mentioned earlier. Here the player is given a series of tasks that work to teach the player what to do and how to play, but they are presented in a series of events in an action-packed story that makes it, so the player barely thinks about what they are doing before they are doing it. The gameplay is still very linear, and the player is only able to do very few things, but because of the way the game is presenting itself, the tutorial becomes very well hidden.

This is also called a Goal-Oriented Tutorial. In these kinds of tutorials the player is given a series of tasks they must complete before they can proceed to the next part of the tutorial. It is also possible to give the player multiple goals they must complete before the next task is given. This is a type of tutorial that suits most players but can sometimes become long and tedious for some (Bateman & Boon, 2006). These kinds of tutorials can also be spread out evenly throughout a game to create a steady pace for the player.

The same is true for Skyrim, which also throws the player into a tutorial disguised as a series of story events. Again, the player has little power over what is happening until they are out of the tutorial and ready to play for themselves.

While being a Goal-Oriented Tutorial, it also uses elements from a Staggered Complexity type tutorial. In these kinds of tutorials, most functionalities of the game are unavailable until the player unlocks them (Bateman & Boon, 2006). In Skyrim and Uncharted 2's case, picking up a weapon unlocks the ability to use a weapon and thereby the ability to fight back.

The Goal-Oriented type of tutorial works well for Uncharted 2 and Skyrim because the games narrative can run parallel to the games tutorial if it is designed well enough. In both games the player learns how to navigate, perform combat and use stealth, all the while the story moves along at the same time.

Both games also use another type of tutorial called Control Flashcards. This is when the controls being taught to the player are shown on the screen when the player needs them or can use them. This kind of tutorial works well to quickly get the player to perform certain actions, but works best when mixed with other tutorial types to create context for the controls (Bateman & Boon, 2006).

By combining these two types of tutorials, the player experience becomes fast-paced and flowing. When encouraged via a goal telling the player what to do (using Control Flashcards) the experience becomes fluid and enjoyable.

Shadow of the Colossus's tutorial is also hidden in gameplay, but instead gives the player the information they need and a space to try it out for themselves. This is then later put to the test together with a smaller tutorial, when the player must fight the first colossus. In this game, all mechanics are available from the very start for the player to play around with. This game also uses the Checklists with Prompts type of tutorial.

In the Checklist with Prompts type of tutorial, the player is given a list of things they must do for the tutorial to be completed. This list is not always available to the player as it is in the Goal-Oriented Tutorials, but can instead be hidden and only ticked off when the player performs certain actions. This ensures that they prove that they know how to complete these actions. This is achieved via prompts which the player performs and then the prompt disappears (Bateman & Boon, 2006, pp. 145-146).

We see this in the very beginning when the player gains control of the player character, as the button to jump is shown on-screen. This button prompt goes away but is shown again if the player is required to perform a certain action and then disappears afterwards.

Kingdom Hearts 2 does not hide its tutorial and tells the player very mechanically how to play and how the game works. It also has an abundance of rules and complicated systems which are required to be mastered by the player throughout the game. Many of the mechanics are presented through textboxes and from talking to characters in the game.

This type of tutorial is called Help Signs. With this type of tutorial, the player can choose to read or ignore the tutorials they are presented. This means that players who already know how to play the game don't need to spend time learning the controls again and can skip the tutorial while new players can still learn everything there is to know. This type of tutorial can have barriers where the player must learn certain information before they are able to continue (Bateman & Boon, 2006, p. 143). This means that it can sometimes use elements from other types of tutorials as well.

When the explanations become text heavy it turns into an Imbedded Manual kind of tutorial. This means that the player can read detailed descriptions of mechanics and how to use them. This is especially true for Kingdom Hearts 2's tutorials on more advanced abilities later in the game. Descriptions of most of the game's mechanics are also available through the game's menus after they have been viewed. This type of tutorial is good at conveying very detailed descriptions of game mechanics that may be difficult to explain in the games narrative. Players can also review this information at later stages of the game (Bateman & Boon, 2006).

The reason why Kingdom Hearts 2's tutorial is constructed this way may be because the game's target group is mainly players who have already played the first game or similar games such as Final Fantasy. The Help Sign tutorial type suits these kinds of games well because they rely on the player to invest time into playing and learning how to play. The same is true for the Embedded Manual type of tutorial.

As shown above there are multiple ways to make a tutorial and many types of tutorials such as: Control Flashcards, Training Movies, Linear Exercises, Goal-Oriented Tutorials, Help Signs, Imbedded Manuals, Context-Sensitive Commentaries, Checklist with Prompts and Staggered Complexity (Bateman & Boon, 2006). The ones not mentioned above are Training Movies and Linear Exercises.

Training Movies are a simple type of tutorial where the player is shown how to play the game in short movies that play before the player is given control. This type of tutorial works well in games with simple controls and simple interaction options (Bateman & Boon, 2006, p. 143).

Linear Exercises have many similarities with Goal-Oriented Tutorials but are much more slow-paced and focus on individual elements of the games interface rather than giving the player goals to complete. This kind of tutorial works best for most players if it is possible to skip it (Bateman & Boon, 2006, p. 143). All these types of tutorials work well for different purposes and it is important to consider this when designing a tutorial.

On Gameplay and Game Mechanics in Tutorials

In this chapter I will examine my third work question "How do Game Mechanics and gameplay relate in a tutorial?". Firstly, how game mechanics are defined and categorized - and then secondly how are they used to teach the player in an in-game tutorial? The exemplar games are used to exemplify as in the previous chapter. The main literature applied in this chapter is by Jesse Schell (Schell, 2014) and Anthropy & Clark (Anthropy & Clark, 2014).

Tracy Fullerton describes game mechanics as the rules of the game (Fullerton, 2014), while Rogers and Swink describes them as the actions the player is able to perform in the game (Rogers, 2014) (Swink, 2008). Schell uses a much broader description of game mechanics and defines six categories that correlate with the definitions made by Fullerton, Rogers and Swink and expands upon them and details them further.

According to Schell's definition, there are six main categories of game mechanics: 1. Space; 2. Objects, Attributes, and States; 3. Actions; 4. Rules; 5. Skills; and 6. Chance (Schell, 2014).

Space regards mathematically and logically how a game exists, such as the dimensions and boundaries that encapsulate and make a game possible (Schell, 2014, pp. 130-135). For example, in the beginning of Uncharted 2 when the player climbs the fallen train, the dimensions are set in a 3D space as the player can move up, down, to the sides, forwards and backwards. As the player climbs they meet boundaries to their movements as they can only climb on the railings put in place for them. The player will fall out of bounds of the game upon trying to violate these boundaries. This causes the player character to die. In most open-world games, the boundaries can also be described as the physical boundaries on the edges of the map that prevent the player from leaving the area. In this case the boundaries take the form of unclimbable mountains, but these mountains are purely aesthetic for the boundary to make sense in the game universe. Logically it is a boundary set in place to control the players experience (Schell, 2014).

In all the exemplar games, space is taught through movement control tutorials while the boundaries are taught visually or by negative reinforcement gameplay. An example of this is when the player character falls off a cliff in Uncharted 2 or is stopped by an unclimbable mountain in Skyrim or Shadow of the Colossus. Space and boundaries are essential for movement and understanding where the player can and cannot go. These boundaries are often especially strict in a games tutorial, to make sure that the player is presented to each game mechanic in a controlled manner inside the game's rules (Fullerton, 2014, pp. 84-89).

Objects, Attributes, and States are the elements put into the space. For example, an enemy in Uncharted 2 is considered an object, attributes are information about that enemy, such as health points. This enemy also has a repertoire of States which can be described with adjectives and can change dynamically, such as going from an idle state where they don't know where the player is, to an alert state where they look for the player, to an attacking state where they are attacking the player, and back to an alert state (Schell, 2014). Another object could be a chest in Skyrim, its attributes are the items it contains, and its states are locked, empty or containing items.

In the case of Uncharted 2, the attributes for the enemy are secret to the player, so the player wouldn't know how much health an enemy has until they have been beaten. While the player character's attributes many times is displayed to the player, such as how much ammunition they have in Uncharted 2, what player level they are in Skyrim and Kingdom Hearts 2, and how much stamina they have in Shadow of the Colossus (Schell, 2014, pp. 136-140).

While a game uses adjectives to describe the states in the game, "verbs" are also present in the form of Actions. Actions is what the player can do in the game (Schell, 2014), like move, climb, shoot and dodge (Anthropy & Clark, 2014, pp. 14-15). It is generally a good idea to have a few verbs that can do many different things, instead of many verbs that are very specialised (Anthropy & Clark, 2014, pp. 17-20). An example from the tutorial in Uncharted 2 could be the simple action of jumping. The player character can jump over a gap, he can jump up a wall to grab a ledge and he can jump from one ledge to another. The action's verb is regarded as "robust" when the player can use it for many different purposes instead of only one (Schell, 2014, pp. 141-142) (Anthropy & Clark, 2014, pp. 18-20). Another example is the player character's ability to whistle in Shadow of the Colossus, this action can be used to call the players horse, but it can also be used to distract or attract the attention of a colossus.

Having too many or complicated verbs can become frustrating for the player because it can become hard for the player to remember them all or control the right one at the right time. Having verbs that are robust or can work together can be very satisfying for the player to use and is much easier for them to remember (Schell, 2014, pp. 143-144). One way to avoid having too many actions is to make some of them automated, such as picking up items in Okami (Okami, 2006), this is an action which must be manually done in Uncharted 2. In Okami, the player simply just moves the player character onto or close to an item to automatically pick it up. This means that the "pick-up" action has been combined with the "move" action and this makes the "move" action more robust (Anthropy & Clark, 2014, pp. 18-20).

According to Fullerton, the rules of a game are what fundamentally make it playable, such as, the player must press a specific button to jump, they must be on level 5 to enter level 6, and they need to collect the key to open the door. They are also the rules that dictate what the player can and cannot do and by extension, what their goal in the game is. The rules of a game must tell the player what they are supposed to achieve, how to achieve it, make it so they believe they can achieve it, and at the end reward the player for achieving the goal. This is what creates gameplay (Schell, 2014, pp. 144-149) (Fullerton, 2014, pp. 74-77).

Gameplay consists of elements and interactions created for the player to play a game following the game's rules. This form of play does not always happen because the player wishes to achieve a certain result, but instead because they gain a form of pleasure, excitement and self-fulfilment from participating in this play (Salen & Zimmerman, 2003, pp. 302-303).

The player is introduced to each element in a way that makes them easy to understand and expands upon itself. For example, in Uncharted 2, the player enters an area with a gun on the ground that they are told to pick up. As they pick up this object, UI elements show them attributes for this object, in this case how much ammunition it has and can hold. Next, the player learns how to aim the gun when they must shoot the lock and thus enters a state where they aim the gun followed shortly by the player having to shoot their first enemy. In a very short time, the player is introduced to all the objects, attributes and states involving a gun.

Skill is a mechanic that focuses on the player themselves and their ability to play the game, instead of the game itself. There are three main categories of skills that a game can demand from the player; physical-, mental-, and social skills. Physical skills require the player to move around, either with their physical body or their controller(s) as well as reaction time. Mental skill requires the player to use their memory, observe and to solve puzzles as well as decision making. Social skills are the player's ability to play with or against other players as well as the player's ability to predict what other players might do as they play the game. These skills must be considered to ensure good game-

balance; the game must neither be too hard nor easy to play (Schell, 2014, pp. 150-152). The tutorial is in place to teach the player how to play the game and conquer the obstacles the game puts in front of them while at the same time introducing the player to the rules that make up the game.

In the case of the exemplar games, the player's mental skill is put to the test for the most part. Uncharted 2 has an emphasis on puzzles the player must solve to proceed but also requires the player to react in time and uses a few Quick-time-events, where the player must quickly press the right buttons sometimes in a specific order to succeed.

Skyrim also requires the player to use their mental skill to solve puzzles and make decisions. However, it has recently become possible to play Skyrim in virtual reality, which puts much more emphasis on the players physical skills and abilities, since they now must physically swing their arm to swing their sword in the game and turn their head to look around the game world.

Chance creates the element of uncertainty in a game and makes it unforeseeable to the player what might happen as they play. Chance is best known from card and dice games, where drawing certain cards or rolling a certain face on a die, determines the players chance of winning the game. Chance is also used in digital games and RPG's especially still use terms such as "dice-roll" to describe the player's chances of doing extra damage to an enemy. Chance also ties back to the player's skill since the players chances of doing well can be affected by how good their skills are (Schell, 2014, pp. 153-169) (Salen & Zimmerman, 2003, pp. 173-187).

The element of chance is considerable in both Skyrim and Kingdom Hearts 2. Both have enemies that have a chance of dropping items the player might need to perform certain actions, this is especially prevalent in Kingdom Hearts 2 where it can take a long time for certain rare items to drop from enemies. It is also possible to do critical damage in both games and enemies have a chance to spawn unexpectedly in both games at random.

Chance also ties in with the element of risk for the player. This could be the risk of losing money in a card game, which is perceived by the player and he must then consider if they want to take their chances at winning or risk losing their money (Schell, 2014, p. 166).

This perceived chance could be compared to the player's perceived chances of winning a fight in Skyrim. The player must consider their current chance of winning and the risk of losing depending on own perceived skill, the enemy's perceived difficulty, and the player's current vulnerabilities and health points. If the player perceives their chances of winning as low, they can run away from the fight or they can play carefully to give themselves a better chance (Schell, 2014, pp. 167-169).

All six of these mechanics are important to tutorials and is taught to the player in different ways in the exemplar games. It is also the combination of these six mechanics, together with controls, game levels and other features that creates the framework for the game's core gameplay (Fullerton, 2014, p. 449) as it is these elements that create a space for the player to play in (Salen & Zimmerman, 2003, pp. 302-303).

Space and boundaries are taught visually by putting up walls the player cannot climb and pits that the player cannot jump or survive falling into. Objects, attributes and states are also visual since this is what the player sees and reacts to through gameplay. It is mainly the Actions of the game that must be taught since they are not always apparent to the player. The situation where the player must use a certain action is first shown to make the player think about how to deal with the situation. In Uncharted 2, the player is first shown the player character hanging from the train and they must then learn how to climb that train. In Shadow of the Colossus, the player is shown the

player character riding a horse and they must then learn how to climb up on that horse and ride it. In Skyrim and Kingdom Hearts 2, the player is confronted by enemies and must then learn how to defend themselves against them. The Actions also tie in with the Rules of the game, since it is the Rules that dictate what is possible in the game and how. The amount of different Skills needed to play the game is low at first and then slowly becomes greater as the game becomes more difficult and demands more of the player. Chance is mostly taught through gameplay and becomes more evident as the player becomes familiar with the game and its Rules.

All the exemplar games are considered 'hardcore games' because of their complexity, difficulty, and time investment needed to play them. But a few of them, namely Uncharted 2 and Skyrim, can be considered much more welcoming to a casual audience because of their simple mechanics, in-depth tutorials, player guidance and difficulty (Juul, 2009). Especially the RPG nature and easy game saving system in Skyrim makes it a game which can be put down and picked back up with relative ease, because it makes it possible to stop and start anywhere in the game. The game also scales the attributes of the games enemies to fit the player's current player-level. This means that it is possible for most players to play Skyrim and succeed at it, even if they have very little experience with digital video-games, since the game does not heavily punish the player for not spending enough time playing it.

Games that use Goal-Oriented tutorials could arguably make the gameplay easier for the player, since these kinds of tutorials present the player with goals following each other (Bateman & Boon, 2006, p. 144), creating a steady stream of tasks and introductions to game mechanics. These kinds of tutorials are often concentrated in the beginning of the game to teach the basics of the game to the player and then spread out throughout the whole game. This teaches one mechanic at a time and makes room for the player to become comfortable with these mechanics before moving on to the next.

Both Juul, Bateman & Boon describe the two player groups of casual and hardcore players (Juul, 2009) (Bateman & Boon, 2006, pp. 53-77), as opposites that generally don't have the same needs and goals when playing games. Bateman & Boon further suggests that these groups overlap each other and create several subgroups based on the player's personal goal and the pleasure they find in play (Bateman & Boon, 2006, pp. 53-77). This is the base for gameplay (Salen & Zimmerman, 2003, pp. 302-303).

These kinds of goal-oriented tutorials can therefore benefit these hardcore games in a constructive way so they can become more available to a casual audience, since Goal-Oriented tutorials are favourable for casual players and do not hinder the hardcore players (Bateman & Boon, 2006, p. 144).

Action-Adventure and Action-RPG characteristics in tutorials

In this chapter I am examining my fourth work question: "What are the characteristics of Action-Adventure game and Action-RPG tutorials?". How are tutorials used in each genre? Are there any similarities and differences to how they teach game mechanics? Could elements from one genre be used in the other and what would the result be? Or do these elements only work for that respective genre?

I will describe the central elements in each genre, how they are taught in tutorials and how the games in each genre differ from each other. This is meant to open the identification and discussion on differences between Eastern and Western game design traditions, which I am discussing in the next chapter. The main literature used for this chapter is Rogers (Rogers, 2014) and Schell (Schell, 2014).

The Action-Adventure genre is a combination of genres that puts emphasis on puzzle-solving and hand-to-eye coordination, typically with a connecting story to set the stage for the game (Rogers, 2014, pp. 9-10). As mentioned in previous chapters, this makes for a very skill based genre, since the player must exercise their mental skills, and to a lesser degree physical skills, to solve the puzzles and obstacles presented by the game (Schell, 2014, pp. 150-152).

Uncharted 2 has a heavy emphasis on puzzles, often in the form of areas in which certain actions must be performed, or the player must find a certain solution to a problem to proceed. The player is given hints as to what they must do in the form of cutscenes, camera zoom-ins and dialogue, and they have an in-game notebook that keeps track of these hints. Important objects or places are also given a distinct yellow colour, light or a glow to draw the eye of the player and make them more noticeable. The developer, Naughty Dog, is well-known for using yellow ledges and elements to guide the player to where they must go, and it has almost become a trademark of their game design. This can be seen in most of their later games such as the Uncharted series and The Last of Us (The Last of Us, 2013), but can also be found in games of other genres such as Sniper Elite 4 (Sniper Elite 4, 2017), which is a tactical shooter. This technic is especially evident in the starting tutorial of the game. Most climbable ledges or elements such as ladders are painted yellow or are naturally yellow in the environment, beams of light guiding the way and glow/shine show important objects. It is in this tutorial where the player is first introduced to all these attention-grabbers that will be used throughout the whole game and which are essential for the players navigation.

Uncharted 2 teaches the player how to complete puzzles by pointing out what they need to look out for. This is visualised in a certain way to make certain elements stand out. This way, the player learns to look for these elements and clues in the environment such as specific colours and beams of light. If they get stuck, the game reminds them by either pointing out what the point-of-interest is via camera movements or dialogue from the characters present at that moment. Games like these also use cutscenes to show many of these clues to the player as they play, and tell of an engaging story to make the player want to move the story along (Anthropy & Clark, 2014). This makes puzzle solving feel very fluid as the game proceeds and the puzzles become harder, whilst the player improves their puzzle solving skills as they play.

The puzzle elements in Shadow of the Colossus are not as object-focused as in Uncharted 2. The gameplay in Shadow of the Colossus focuses much more on the players ability to process information provided in intense situations and react accordingly. The puzzles presented often revolve around finding a Colossus' weakness and figuring out how to get to it. Many of the colossi are very different in how they must be fought and defeating them involves a significant element of trial and error where the player dies and must try again, using what they learned from their previous

attempt. Light is also used as guidance in this game, but the player themselves control the light instead of the game shining beams of light that the player must follow. This is one of the very first mechanics taught to the player in the tutorial and it is heavily used throughout the game as the main guide and pathfinder. Most of the environments in Shadow of the Colossus are considerably bare, so elements stand out and the player quickly learns that they must use whatever is present in the environment to their advantage when they battle the colossus.

As an example, one of the colossi encountered is an armoured, bull-like creature that will charge at the player. The only way to get to safety is for the player to climb up and run along raised structures in the environment where the colossus cannot reach them. As the player proceeds, more and more of the structures will be destroyed by the colossus until it finally is struck by falling debris that cracks its armour and exposes its weak spot and only now can it be defeated. Each of the colossi are different and it is up to the player to figure out how to defeat them by using the elements present in that specific environment. In this case, the player is taught how to fight the colossus by the game showing it through dramatic elements and story-telling as the player must move through a series of events and reach a certain goal before they are able to physically attack the colossus (Fullerton, 2014, pp. 97-100).

Uncharted 2 and Shadow of the Colossus differ from each other by how much the game chooses to tell the player and what it wants the player to figure out for themselves. In that sense, Shadow of the Colossus puts much more emphasis on the player's own ability to observe and use those observations to proceed in the game and experiment. The game offers different solutions or approaches in some instances. Uncharted 2's experience is much more controlled and offers only one solution to a challenge, but because of the way the experience is constructed, it creates a form of forced interaction. This makes the player feel like they make a conscious decision when in fact, the level has been specifically designed to make them make a certain choice. This is in my experience especially prevalent in Uncharted 2.

Towards the end of Uncharted 2, the player is chased through the streets of a village. The streets give the player many different paths they can choose, but because of the guiding elements in the game, the player will most likely always choose the correct path even though they feel like they chose the path completely independently. This happens because the game has conditioned the player to have goals within goals. In this scenario the player's main goal throughout the chase is to escape and to do this the player must make a series of choices. They make these choices based upon what they have learned previously in the game, such as the colour yellow and beams of light marking the right path. Finding the right path through the village then becomes their goal within a goal. Choosing the right path rewards the player with the feeling of pleasure knowing that they chose correctly (Salen & Zimmerman, 2003, pp. 343-350).

Action-RPGs mix the genre elements of Action games and RPGs. RPGs, like the name suggests, puts a special emphasis on role-playing, sometimes as specific characters or as a character that the player creates themselves, and a big part of most RPGs involve battling enemies with those characters. Combat in RPGs go hand-in-hand with item collecting, management of those items, and the character's abilities and stats (Rogers, 2014) (Schell, 2014). Action adds the element of hand/eye coordination and skill to the genre (Rogers, 2014, p. 9).

These elements are at the forefront in both Skyrim and Kingdom Hearts 2. Combat is in fact one of the first tutorials given to the player in both games. The biggest difference is Kingdom Heart 2's element of support characters in combat, which are slowly introduced after the player becomes familiar with their own combat systems.

Skyrim teaches the player about combat by first having them pick up a weapon and thereby also teaching them about the inventory system and item management. The player and their companion are then attacked, and the player must defend themselves and defeat the enemy. This is accomplished via on-screen button prompts to show how the player can use their weapon. This tutorial presents very little risk to the player, but it shows the basics of an enemy encounter, so that the player knows how to react in future. As the player proceeds they learn how to approach different kinds of enemies and perform different kinds of actions, such as stealth. The player is slowly introduced to everything they can do as they play the game and discover the game's world, but most of the later introduced game-mechanics work fundamentally the same as the ones that were taught in the beginning. For example, magic-casting is introduced later, after the tutorial and uses the same control scheme as when using a weapon. A spell must be equipped to a hand like a weapon and is used the same way as a weapon. This shows that tutorials are not only present at the beginning of a game but can be a continuous occurrence throughout the course of the game.

Kingdom Hearts 2's combat-system is unique and different from the one found in Skyrim. It is reminiscent of the combat-systems found in turn-based RPGs such as the Final Fantasy series, as it is based on a menu selection system. The combat-system is introduced slowly with one element at a time starting with attacks, followed by items and magic as the game progresses. Most of the game tutorials are taught through text-boxes that tell the player what they must do and how to do it. This makes it so the tutorial in Kingdom Hearts 2 is much longer than the one found in Skyrim. The combat in Kingdom Hearts 2 depends on the player's skills and mastery of the mechanics and contains an element of trial and error which is not as prevalent in Skyrim.

Another game in the genre, Bloodborne (Bloodborne, 2015), also teaches some of the same mechanics in its tutorial by using text-boxes to describe the function of each button. This tutorial ends as soon as the player defeats their first enemy, at which point the player can explore and learn how to play the game by themselves. It can be argued that Bloodborne almost lacks a tutorial because the game expects the player to teach themselves how to play and beat the game instead of the game telling them how to play. The player loses all of their currency and are returned to a checkpoint each time they die and can only reclaim this currency when they return to where they died without dying. This makes the player very conscious about their skill and their risk of dying, thusly they must improve their skill and mastery of the game-mechanics to progress.

Each combat-system in all the exemplar games put an emphasis on timing attacks, blocking attacks, using special abilities or magic and the use of items whilst in combat. Kingdom Hearts 2 and Bloodborne especially require high skill to play. Both can be considerably difficult and have a considerably high learning curve, but each takes radically different approaches to teach the player how to play. One has a long and in-depth tutorial whilst the other is short and minimalistic, while both encourage the player to explore the possibilities on their own.

None of these Action-RPG games use light beams or colours to navigate the player to where they need to go, but instead they rely on an in-game map and markers to point to where the player must go. They sometimes have a mini-map in the corner of the screen that shows the players position, in addition to the map and markers.

These maps are useful in RPG games since they often have more than one objective at a time, so the player can choose what they want to do first and how to go there. Okami also has multiple objectives at once and thus uses a map to help the player navigate the world even though it is an Action-Adventure game and an Action-RPG. Shadow of the Colossus also has a map, but instead of showing the objective it instead shows where the player has already defeated a colossus. Both

games are examples of game-worlds in which the player can return to previously visited places as they please, whilst in Uncharted 2 and The Last of Us they are both linear experiences where the player does not return to previously visited places.

Based on the observations made of the games mentioned in this project report, games developed by Western developers also tend to fit the more casual audience in terms of easily accessible gameplay than games developed by Eastern developers. Kingdom Hearts 2 uses a mix of Goal-Oriented tutorials, Help-Sign tutorials and Imbedded Manuals. This can be speculated to be because of its use of Western culture that attracts a Western crowd and it must therefore make itself more accessible with the use of these tutorial designs. However, this mix also means that some parts of the tutorials can become underdeveloped, meaning that the tutorial fails to teach the player what they need to learn. It should therefore be avoided to use too many different design types, so that the player does not get confused. This however can be very difficult if the game has many different mechanics where each is taught best by using different design types (Bateman & Boon, 2006, pp. 142-147).

Some games such as Bloodborne have become an example of a game suited for hardcore players because of its minimalistic approach to tutorials. It can be argued that this hardcore design would suffer greatly if more in-depth tutorials were added to the design. These kinds of hardcore games are revered by players and would most likely be shunned if the game did not deliver this challenging experience. Choosing the right kind of tutorial that benefits the game best therefore not only becomes a question of what fits the game's genre best, but also what fits the player group best (Bateman & Boon, 2006, pp. 94-96).

A compromise would be to elegantly hide the tutorial in a way that the player does not notice that they're playing a tutorial. Uncharted 2 and Skyrim did this nicely by having the tutorial be heavily contextualised with the games story, creating the series of events that makes sure the player is introduced to the game mechanics they need in order to play the game in a safe environment (Rouse & Ogden, 2004, pp. 128-131).

Kingdom Hearts 2 would benefit greatly from a more hidden tutorial that would shift the focus more to the games story, since the story and its characters are the main focal point of the game and lessen the slow pace in the beginning of the game. The main obstacle is the heavy use of text-boxes that the player must read, especially the tutorial text-boxes where the player must also understand the game mechanics being taught.

In contrast, Shadow of the Colossus could benefit from having a few more tutorial elements present in its design. The tutorial elements it presents rely heavily on the player's ability and skill to act fast in tense situations and can therefore be unclear in these scenarios. Markings in the environment and on the colossus could benefit the player greatly if they are unsure how to proceed. This way the game can keep its minimalistic approach to tutorials while still showing the player what to do. This would borrow the approach from Uncharted 2 by guiding the eye using colours and markings.

Conclusion

In this chapter I discuss the findings of the previous chapters and how they have affected my understanding of tutorials in Action-Adventure and Action-RPG games.

Firstly, I consider my research question:

"How satisfying is the in-game experience of an exemplar game mechanic tutorial, in an Eastern and Western single-player Action-Adventure and Action-RPG game, with consideration to gameplay?"

This has then been broken down and explored through four work questions in each of their respective chapters.

Work Question 1 was designed to describe four exemplar games, two Action-Adventure games and two Action-RPGs, that each follow four conditions set forth by me, to be representable in this report. Each game must abide by the following criteria:

- a) The game must contain game mechanic tutorials.
- b) The game must have been played and completed by me.
- c) It must be possible to play the game from start to finish without an internet connection.
- d) Each game must be critically acclaimed in its' genre.

Through this work question and the exemplar games, I have learned and identified differences in Eastern and Western tutorials and game design. Eastern tutorial design generally values the players own exploration of game mechanics, whilst Western tutorials tend to be rigid and very carefully designed. This is often accomplished through controlled environments with un-skippable events.

I also verified that that this was also true for the extended list of games, containing The Last of Us, Okami, The Witcher and Bloodborne.

In the next work question, I explored what in-game tutorials is. Work Question 2:

"What is an in-game tutorial?"

In this chapter I explored the different kinds of tutorials found in games and decided which were used in each of the exemplar games and what this meant for the players experience in each game.

I found that the 'Goal-Oriented' type of tutorial was very popular because of its ability to easily teach players of all skill-levels and experience and so this type of tutorial suits most player. It is a type of tutorial that makes it possible for an experienced player to skip the tutorial, whilst less experienced players can take their time to fully grasp the mechanics.

I also found that it worked very well to hide or interlace the tutorial into the game's story, to give the player an experience that was favoured by most player-types. Most of the exemplar games did this very well with only Kingdom Hearts 2 being slightly more mechanical with its heavy use of text-boxes, which could become very distracting from the game-world and what was going on.

In Work Question 3 I explored game mechanics in tutorials whilst considering gameplay:

"How do Game Mechanics and gameplay relate in a tutorial?"

In this chapter I explored what game mechanics are and how they work together to create gameplay, whilst also considering their importance in each of the exemplar games.

Through this I focused on essential game-mechanics in each genre and what is required by the player by when playing each game. A very important part of this is introducing mechanics in the right order for the player to fully understand the connection between elements, such as enemies and what they can do and what the player can do to them, as well as the possibilities presented by the game's environments.

I also further explored the casual and hardcore player-types and found that the tutorial type found in certain games made them appeal to player groups that normally wouldn't play that type of game. I found that this is true for Skyrim especially because of the way the player learns to play the game and how the games difficulty is dependent on the players level. This is in contrast to the game having set difficulty ranges throughout the game, as seen often in other games in the same genre.

In the fourth and last work question, I explored the characteristics for Action-Adventure game and Action-RPG tutorials:

"What are the characteristics of Action-Adventure game and Action-RPG tutorials?"

Here I focused on the essential elements found in each genre and how they were taught in the tutorials. For Action-Adventure games it was puzzles and in Action-RPGs it was combat.

I found that Action-Adventure games rely on the player's mental skill and ability to recognise and remember what they have previously experienced to adapt quickly to stressful situations. Uncharted 2 used colour and light-beams to guide the player and make them recognise these colour and light elements as guides. This meant that the game could use these elements later in the game to steer the player into certain paths without the player necessarily noticing.

Combat in Action-RPGs is very reliant on the player's physical skill as well as mental skill to be able to react in the right way in certain situations. For example, the player must be able to recognise when they need to dodge an attack and react in time to successfully dodge. It can be discussed if combat in some cases becomes a sort of fast paced puzzle in some cases, for example boss battles where specific actions must be performed to win.

Whilst considering the four exemplar games, I did not encounter any direct opposites or noticeable deviations from my findings. A much deeper analysis of each would be needed to identify if there are any and what they would be. Deviations are most likely present in other games that I did not consider as exemplar games, and so a greater selection of games would be favourable in future research.

It is my hope that my work on this report will help me in my future career as a game developer and that it will strengthen the projects I will work on. I believe that the knowledge I have gained can also be used in other industries, such as software and board games design.

Through my observation I have learnt much about the very fundamental elements necessary to understand what is needed in a tutorial exactly, and in which priority they should be taught in.

It is from these observations that I can determine that designing tutorials in a game is a difficult task that takes much experience and trial to learn and master. Each game is different with its own

strengths and weaknesses that must be considered when deciding how to teach the player. Even then, it might not be the right direction for that particular game.

It is my belief that working on this report has helped me gain a better understanding of games, their mechanics and how to teach a player to play games.

This knowledge would have changed my overall process at my time at DADIU and saved me much time when I was designing our game's tutorial. I also believe that the game's tutorial would have been much better, now that I know the fundamental structure of game mechanics. I would also have much greater insight into what specific needs our game had and it would have given me a much better overview of the whole process and the tools at my disposal. This in turn would have led to a more efficient pipeline and much less uncertainty, especially considering how late in the process we made the tutorial.

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Metacritic Links:

Link1: Uncharted 2: Among Thieves: <u>http://www.metacritic.com/game/playstation-3/uncharted-2-among-thieves</u>

Link2: Shadow of the Colossus: <u>http://www.metacritic.com/game/playstation-2/shadow-of-the-colossus</u>

Link3: The Elder Scrolls V: Skyrim: <u>http://www.metacritic.com/game/playstation-3/the-elder-scrolls-v-skyrim</u>

Link4: Kingdom Hearts 2: http://www.metacritic.com/game/playstation-2/kingdom-hearts-ii