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The Mountain Forge: Designing an authorial 3D cinematic

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Abstract: This work presents all the steps taken during the designing of an authorial 3D cinematic, called “The Mountain Forge” — “*A Forja na Montanha*”, in Brazilian Portuguese. It is intended to describe part of the creative process, as well as to justify some of the design choices taken during the development. The script was based on the literary fantasy, as well as electronic games like Albion Online (Sandbox Interactive, 2017). The narrative portrayed in cinematic shows the way to the forge on the mysterious mountain of the dwarves, passing through fantastic scenarios that lead to its interior.

Keywords: 3D cinematic – creative process – design – literary fantasy.

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In this project, all stages were produced by a team of a one designer only, including the major steps of pre-production, production and post-production, which will be explained later in this short essay. After studies and experiments, a cinematic piece divided into five scenes was obtained, which narrates the lyrical and contemplative script proposed in the briefing of the project.

The creation of the cinematic — from its initial concept until the animated result — was strongly motivated by the exploratory and experimental desire, adjectives that fit perfectly in the world of animation. This is endorsed by the free and personal language typical of a cinematic short film, which expresses and reveals the own vision of each director. This creative dynamic guided the entire methodological process. Thus, the low poly aesthetic was chosen because it requires less processing during rendering, as well as for its visual appeal, which contributes to the tone of the narrative.

The essence of the whole script comes from various inspirations gathered from the literary world, with focus on the fantasy genre. They served as a direct contribution to the plot and the animated scenarios. Literary works such as “The Lord of the Rings” (2011) and “The Hobbit” (2011) by J.R.R. Tolkien and “Inheritance Cycle” (2012) by Christopher Paolini were great sources of creative inspiration. The search within personal and collective repertoires is a fundamental starting point because it helps the designer to nourish, to gather and to determine

the initial foundations of the animation project, such as defining the aesthetics, tone of the narrative, plot, among other practical factors.

An animation is developed in three main stages: pre-production, production and post-production. Each stage contains specific moments in the animation development, which are necessary for the hierarchical advancement of the production. During the pre-production step, for example, all the initial concepts are designed, such as the creation of the script, initial sketches of the scenarios, storyboard and the assembly of moodboards.

With the script writing, the path that the spectator will take until reaching the so-called Mountain Forge was defined, passing through several scenarios, which have their own chromatic characteristics and elements. A striking point that was defined from the beginning at cinematic is the total focus on the environment and its elements, delegating to them the function of presenting the narrative. Without dialogue, it tells the story through a visual and contemplative flow with camera movements and framing, color palettes, scenery composition, visual effects and ambient sounds.

The sketches were created manually, with the use of graphite pencils. Their main function was to create initial concepts of the environments, focusing on possibilities of space and ideas to be better applied and developed in the modeling stage. That was followed by the organization of the storyboard, whose main contribution was to define

the sequences and camera movements. The framings were refined and adjusted during production. The storyboard was done manually as well, using graphite pencils. Also during the pre-production step, a moodboard was created, in which different references and palettes were gathered. This was intended to contribute to the narrative focus, as well as to create the feeling of approaching the core of the mountain, in the transition of colors from cold to warmer palettes.

The next step, the production, is summarized in the usage of all the elements already developed in the previous stage for the construction of the cinematic and its elements. In this phase, the modeling software Blender 3D was used for the modeling, creation of materials, animation, and visual effects creation steps. The modeling stage consists of the construction of objects and scenes, from the manipulation to the insertion of basic geometric shapes. At this stage, the block out was developed based on the sketches made in pre-production. From there, they were refined, and their details were added in the modeling.

During the application of the materials, all the colors and their aspects were defined and inserted into the elements and scenarios. For the creation of materials, nodes are used within the software, which create a network connecting several specifications that together result in the final materials assigned. The animation process was carried out with the movement of the camera and its framing through the scenarios, as well as the displacement of some elements that make up the scene. Visual effects were developed from particles and generated procedurally – that is, by the software itself with specifications provided by the 3D artist.

The final post-production phase is responsible for lighting, rendering and unifying all the generated images into a single video file. All edits were performed in Adobe Premiere software. After converting the images into videos, several media files are generated, which are gathered and edited in the software. The sequence of scenes was assembled and unified with dry cuts. The sound system was assigned at this stage. Sound elements referring to ambient sounds and objects in the scene were placed and synchronized.

Lighting is done through the placement of light points within the 3D environment. The light is emulated according to real-world characteristics, making it possible to explore different nuances, arranging the points of light in different locations in the scene. In the final step, the rendering is performed, which is the assembly of images captured by the cameras within the 3D environment converted into frames. The form of rendering within Blender used was Eevee, which is a lighter form of rendering in real time. As a result, a cinematic divided into five scenes was obtained.

The production was a great practical challenge, in several areas, due to the intrinsic complexity of 3D modeling, scene animation and sound design creation – all these steps done in a space of few months. In the end of the processes, it was possible to develop a complete animation project until the final step, from the initial sketches until the final edited video with sound effects.

The result is an authorial product. The allegory of passage of time, manifested through the paths inside the mysterious mountain, is a mirror of the journey that the author had to take to find himself. The choice of dwarves and forges for the plot was not arbitrary: within the world of literature, the author and designer of this cinematic always admired these obstinate beings in their pursuit of their goals and in the creation of legendary works.

The biggest difficulties were concerned to regulating the creative flow, especially in the initial stages, when the designer hardly know exactly how to execute certain ideas. They were implemented according to the technical and conceptual development throughout the project. And, of course, it was needed to control some megalomaniac tendencies, constantly reminding that there was a deadline. All the project was designed by only one entertainer, oriented by two design teachers – normally, animations are developed by complete teams of graphic designers, motion designers, musicians, illustrators, screenwriters, marketers, sound designers, and so on.

Until now, the proponent of this project had not had the opportunity and burning intention to dive headlong into a complex project like this, a choice that evidently took him out of his comfort zone and brought the feeling of victory of a job that was well done at the end.

This short film is a legacy of a life of passion for all kinds of narratives and stories, whether audiovisual or written. The result can be viewed on the Google Drive platform at the link: drive.google.com/file/d/1JeGM838YFmyDhgnF8uyGZLmXzShhwGCY/view.

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Resumen: Este trabajo presenta todos los pasos seguidos durante el diseño de una cinemática 3D de autor, llamada «The Mountain Forge» («A Forja na Montanha», en portugués brasileño). Su objetivo es describir parte del proceso creativo, así como justificar algunas de las decisiones de diseño tomadas durante el desarrollo. El guion se basó en la fantasía literaria, así como en videojuegos como Albion Online (Sandbox Interactive, 2017). La narrativa representada en la cinemática muestra el camino hacia la forja en la misteriosa montaña de los enanos, pasando por escenarios fantásticos que conducen a su interior.

Palabras clave: Cinemática 3D – proceso creativo – diseño – fantasía literaria.

Resumo: Este trabalho apresenta todas as etapas realizadas durante a concepção de um cinemático 3D autoral, chamado “The Mountain Forge” — “A Forja na Montanha”, em português brasileiro. O objetivo é descrever parte do processo criativo, bem como justificar algumas das escolhas de design feitas durante o desenvolvimento. O roteiro foi baseado na fantasia literária, bem como em jogos eletrônicos como

Albion Online (Sandbox Interactive, 2017). A narrativa retratada na cinemática mostra o caminho para a forja na misteriosa montanha dos anões, passando por cenários fantásticos que levam ao seu interior.

Palavras-chave: cinemática 3D — processo criativo — design — fantasia literária.

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