



## PICTURESQUE

- Game Concept -

Version: 1.0  
Last update: 09/22/2019  
Author: Kevin SULTAN  
Email: [contact@kevinsultan.com](mailto:contact@kevinsultan.com)

# SUMMARY

- 1. GAME CONCEPT ..... 3**
  - 1. MAIN INFORMATION ..... 3
  - 2. CONCEPT ..... 3
  - 3. EVALUATION SYSTEM ..... 4
  - 4. GAMEPLAY ..... 4
  - 5. SOCIAL FEATURES ..... 5
  
- 2. EVALUATION SYSTEM ..... 6**
  - 1. CONTENT & STORYTELLING ..... 6
    - 1. ELEMENTS OF INTEREST ..... 6
    - 2. MOOD ..... 7
  - 2. TECHNICAL QUALITY ..... 8
    - 1. COMPOSITION ..... 8
    - 2. LIGHTING ..... 10
    - 3. DEPTH ..... 12
  - 3. PRACTICAL EXAMPLE ..... 13
  
- 3. ENVIRONMENTS ..... 16**
  - 1. SEQUOIA FOREST ..... 16
  - 2. PACIFIC ISLAND ..... 17
  - 3. JAPANESE CASTLE ..... 18
  - 4. DESERT CITY ..... 19

## 1. GAME CONCEPT

### 1. MAIN INFORMATION

<b>Title:</b>	<i>Picturesque</i>
<b>Genre:</b>	Educational game / Experimental game
<b>Audience:</b>	Explorers / Achievers / Socializers
<b>Themes:</b>	Photography / Nature

### 2. CONCEPT

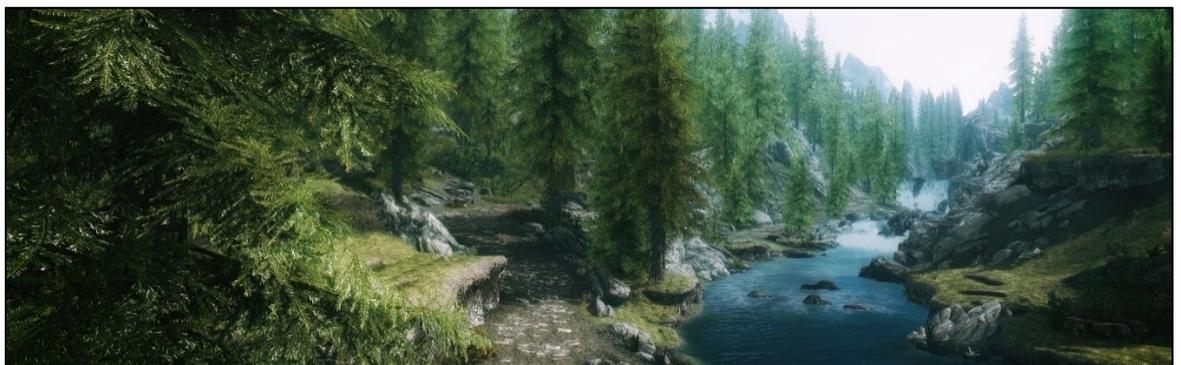
*“The world is full of magic things, patiently waiting for our senses to grow sharper” – William Yeats.*  
The world is moving fast, and everyone tends to ignore that inner voice that is constantly reminding us to take a big breath of air and to enjoy the moment.

*Picturesque* revolves around the concept of **gamifying photography**. It offers a relaxing experience while driving players thanks to a practical evaluation system inspired by the *Dead Rising* series. This system is based on real-world criteria that genuinely teach players how to improve their skills.

The game is **accessible to anyone** no matter whether players already have a preliminary knowledge in photography. It offers an educative framework that dynamically adapts to their skills. Neophytes enjoy simplified mechanics such as an automatic exposure, and are encouraged to gradually switch for more complex mechanics that are closer to real-world techniques.

Indeed, the player embodies a professional photographer taking part in safaris for clients. Yet, each safari assigns a list of objectives that become **harder and harder to achieve over time**: clients expect photographs of increasing quality, but also impose more and more specific constraints. Players must then learn advanced techniques to meet their expectations.

The game offers to players the opportunity to go on **photo safaris all around the world** – no matter the weather or the distance. It takes place in environments from Sequoia forests to deserts that all have unique identities, color palettes, landmarks, fauna and flora. It promotes the diversity of our world, and encourages players to see it from another angle.



The ultimate objective of the game is both to teach players all the tropes of photography, and to inspire them a new passion. The educative framework is just a start: the most interesting feature is the ability to **evaluate the quality of any photographs players shot in-game but also in the real-world**. Nowadays, everyone has a phone with a camera. Players are then encouraged to go on hikes, to re-discover places, and to share their best photographs with the rest of the community.

### 3. EVALUATION SYSTEM

Photography is an art that is difficult to gamify due its subjective nature. The challenge of the game then consists in re-defining photography itself, and in setting a framework that quantifies the quality of players' photographs. The mathematical aspect of the evaluation system is not exposed to players for accessibility purposes. Instead, they receive appreciations for each aspect of the photograph, encouragements, and tips to improve their skills in the aspects they struggle with.

There are 2 dimensions to consider:

- The **quality of the picture**
  - Composition
  - Lighting
  - Depth
- The **content of the picture**
  - Content and storytelling
  - Mood



### 4. GAMEPLAY

Each safari is a combination of an environment, a weather, a time of day, and elements of interest that can be humans, animals, or natural elements such as rock arches. **The scene is pre-scripted** in a specific way – which means that intelligent beings also behave the same way every time players take part in this safari.

Players abilities directly depend on the **difficulty mode** they chose.

The easiest mode is dedicated to neophytes. It provides them with god-like powers and simplified mechanics:

- Freely fly through the scene
- Alter the weather
- Alter the time of day
- Slow down time, stop it, rewind it
- Automatic exposure
- Composition overlays
- Unlimited capacity
- ...

The hardest mode is dedicated to amateurs and experienced players – offering them an experience closer to reality:

- Subjected to physical constraints
- Cannot alter the weather
- Cannot alter the time of day
- Cannot control time
- Exposure triangle
- No overlay
- Limited capacity
- ...

**Rational Game Design** is used to decompose the challenges of shooting amazing photographs into individual Player Skills that are gradually introduced. This methodology also dynamically adapts the list of objectives according to the players' scores such a way it keeps them just challenged enough, and constantly encourages them to improve their skills.

## 5. SOCIAL FEATURES

*Picturesque* is to photography what *Rocksmith* is to music: it's all about passion. Yet, there is a **driving force to share a passion** with as many people as possible. The social features are then a crucial component of the game.

The game includes any tutorials / tips necessary for players to enjoy the experience. However, it also goes beyond that thanks to an **external website that gathers the whole community** into a safe environment where they can learn about advanced techniques, specialized equipment, and take part photography challenges, and share their creations.

*Picturesque* has the potential to **retains players for years and years** thanks to its system also able to analyze and to evaluate the quality of any photographs shot in the real-world. There is no limit to the content players can share.

In addition to retain existing players, this website can **attract amateur photographers** that may not be aware of the experience the game offers, and could be converted as new players. It then serves both as a retention and acquisition tool.

Enjoying photography does not require high-end cameras anymore. Smartphones are now able to capture photographs that directly compete with dedicated devices'. Today, there are **2.71 billion smartphone users in the world, and 3.484 billion active social media users** that share content every day. Any of them have the potential to fully enjoy the game and to be part of its community.



**30 DAY PHOTOGRAPHY CHALLENGE**

EXPERT PHOTOGRAPHY

- Day 1: Self-Portrait
- Day 2: Rule of Thirds
- Day 3: Black & White
- Day 4: Texture
- Day 5: High Angle
- Day 6: Low Angle
- Day 7: Silhouette
- Day 8: Sunset
- Day 9: Bokeh
- Day 10: Lens Flare
- Day 11: Landscape
- Day 12: Portrait
- Day 13: Dynamic Tension
- Day 14: Light Painting
- Day 15: Colorful Water Drops
- Day 16: Balanced
- Day 17: Unbalanced
- Day 18: Frame within a Frame
- Day 19: Panorama
- Day 20: Depth
- Day 21: Water Splash
- Day 22: Slow Sync Flash
- Day 23: Panning
- Day 24: Harris Shutter
- Day 25: Shallow DoF
- Day 26: Light Graffiti
- Day 27: Street Photography
- Day 28: Architecture
- Day 29: Night
- Day 30: Hidden Camera Mirror Photo



## 2. EVALUATION SYSTEM

### 1. CONTENT & STORYTELLING

#### 1. ELEMENTS OF INTEREST

Photography relies a lot on storytelling. We have all seen that one photograph which makes us pause and think. It's all about **capturing a moment with tension, inspiration, and emotions** without using motion pictures or words. In other words: to have an impact.

The main component of a photograph are the **elements of interest** that are visible in the frame: humans, animals, special objects or natural elements such as rock arches. The more unique an element of interest is, the more points it provides. Likewise, the lack originality gradually decreases the score of every elements photographed again and again. Players are then encouraged to analyze the scene and look for any elements and details they may have missed.



Players should consider 2 other components as well: the moment, and the emotion.

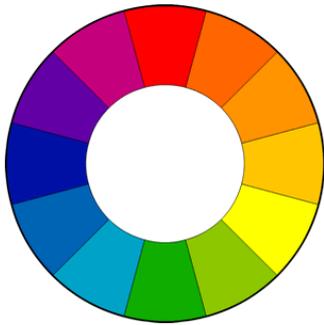
The first one highlights the most remarkable attribute of a photograph: the ability to freeze a literal split second, to capture details imperceptible to the human eye, to set memories in the stone. Any actions the elements of interest carry out tell a story that contributes to the score of a photograph. However, shooting a photograph that **suspends the moment** is a best way to convey its intensity.



The last component deals with the emotions emanating from the photograph. The audience can easily empathize with the emotions humans and animals express thanks to their facial and body language. However, it is harder for photographers to **bring out emotions** from objects and natural elements as it highly relies on the audience's perception and prior experiences. Players can still accomplish this challenge – especially thanks to the mood of the color palette.

## 2. MOOD

Colors can convey specific moods if correctly balanced. A photograph composed of the right color scheme can create an ambiance of elegance, warmth, tranquility, or playful youthfulness.



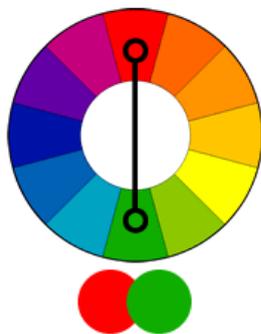
The color wheel has been designated to easily find colors that look good together. Traditionally, there are a number of color combinations that are considered especially pleasing. There are called **color harmonies** and consist of two or more colors with a fixed relation in the color wheel.

The color circle can be divided into **warm and cool colors**. Warm colors (red, yellow, orange) are vivid and energetic while cool colors (green, blue, purple) give an impression of calm.

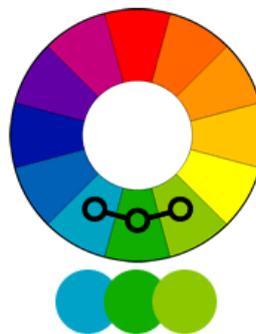
**Complementary colors** are opposite on the color wheel (eg: red and green). The high contrast of complementary colors creates a vibrant look – especially when used at full saturation.

**Analogous color schemes** use colors that are next to each other on the color wheel. They usually match well and create serene and comfortable designs. These schemes are often found in nature and are harmonious and pleasing to the eye.

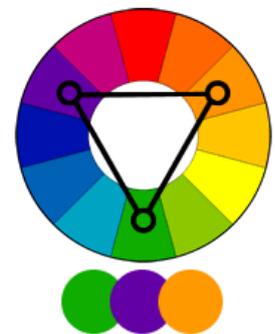
Finally, a **triadic color scheme** uses colors that are evenly spaced around the color wheel. Triadic color schemes tend to be felt as intermediary combinations between vibrant and serene.



*Complementary colors*



*Analogous colors*



*Triadic colors*

Internet overflows with many algorithms extracting the main colors composing pictures. Pairing these algorithms with the color theory makes extremely easy to define whether a photograph is vibrant, serene, or balanced.

Shooting photographs of specific moods can be objectives to complete – but also a **coefficient affecting the score of a photograph**.



*The analogous color scheme of this photograph emphasizes the serenity of the resting lynx*

## 2. TECHNICAL QUALITY

### 1. COMPOSITION

Composition refers to the way the elements of interest in a scene are arranged within the frame. There are no hard rules – but guidelines that have been used in art for thousands of years and really do help achieve more attractive compositions.

*Picturesque* includes an algorithm that automatically detects the position of the elements, and allocate bonus points if players have used known composition layout. Here few examples:

The **rule of thirds** consists in dividing the frame into 9 equal rectangles. The idea is to place the important element of the scene along one or more of the lines.

*Notice in this photograph the front tree off center, the back trees on the middle row, the horizon aligned with the bottom row, and the lake in the bottom-left corner of the frame.*



Symmetrical scenes are perfect for **centered compositions**. These compositions can be centered either horizontal or vertically.

*Notice in this photograph how the lake perfectly aligns with the middle of frame, and how the reflection of large tree creates the symmetry.*



Including a **foreground** interest in a scene is a great way to add a sense of depth.

*Notice in this photograph how the cleat on the foreground emphasises the distance to the building on the background.*



Including a “**frame within the frame**” is another effective way of portraying depth in a scene. Frame don’t have to be man-made objects. Using a tree trunk, or branches can convey a similar feeling.

*Notice how the archway perfectly frames the St Marks Basilica at the far end of the piazza.*



**Leading lines** help lead the viewer through the image and focus attention on important elements. Anything from paths, walls, or patterns can be used as leading lines.

*Notice in this photograph how the path lead the viewer to the right of the frame before swinging in to the left towards the tree.*



The **rule of odds** is quite simple. It suggests that an image is visually more appealing if there are an odd number of subjects. It states that an even number of subjects is distracting as the viewer is not sure which one to focus their attention on. An odd number is seen as more natural and easier on the eye.

*Notice in the photograph the 3 arches, and the 3 customers standing in front of it.*



## 2. LIGHTING

Lighting is a key factor in shooting a high-quality photograph. It determines not only **brightness and darkness**, but also tone, mood and the atmosphere. Therefore, it is necessary to control and manipulate light correctly in order to get the best texture, vibrancy and luminosity.

Please note that another section of the document is dedicated to the mood and atmosphere of a photo. We will consequently focus here on the technical aspects of lighting: its exposure and its source.

A photograph's **exposure** determines how light or dark an image appears. Achieving the correct exposure is a lot like collecting rain in a bucket. While the rate of rainfall is uncontrollable, 3 factors remain under your control: the bucket's width, the duration you leave it in the rain, and the quantity of rain you want to collect. You just need to ensure you don't collect too little ("under-exposed"), or too much ("over-exposed").



*Under-exposed*



*Correct exposition*



*Over-exposed*

In *Picturesque*, players must then find the right exposure to counterbalance the natural lighting of the scene by setting:

- The aperture – the area over which light that enters the camera
- The shutter speed – the duration of the exposure
- The ISO speed – the sensitivity of the camera's sensor to a given amount light

The relationship between these elements is complex, and referred as the "**exposure triangle**". Moreover, they also affect other aspects of the photography – such as the depth of field for the aperture. This is reason why the exposure triangle is reserved to the hardest difficulty modes, and is simplified in the other ones as a single gauge that automatically adjusts the natural lighting.

The **source the light is coming from** has a huge impact on how it falls on the subject.

- Light originating from behind the camera, and pointing directly onwards give a very flat lighting. It causes more shadows to fall in the background of the image.
- Side lighting produces a far more interesting light, as it shows the shape of the subject much more and cast it in partial shadow giving it a more dramatic look.
- Lighting sourced from the back of the subject generate a line of light around the subject that is called “rim light”. If not compensate enough, back lighting results in a contre-jour.

Photographers have many tools at their disposal to create artificial sources of light in the real-world. However, players can **only rely on natural sources of light** in *Picturesque*.

The Sun is of course the main source of light during daytime, and the Moon and the stars the main sources during nighttime. Light can also be emitted by campfires and bioluminescence sources such as fireflies, jellyfishes, or mushrooms.



*A firefly*



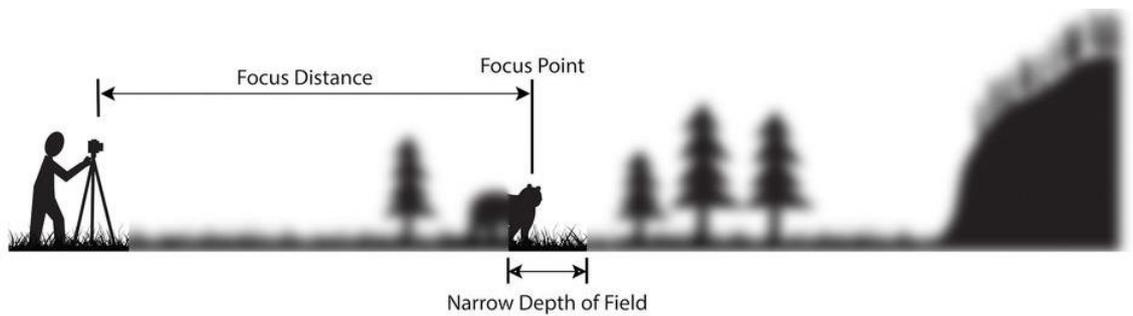
*A firecamp*

Note that playing in one of the easiest difficulty modes allows players to freely alter the time of day and the weather. This ability gives them a better control of the lighting conditions although they can't directly affect the positions of sources of light.

### 3. DEPTH

Photographers has the same dilemma that painters have faced for centuries: how to show a three-dimensional subject in a two-dimensional frame. This goal can be achieved by setting the right **depth of field and focus**.

The depth of field is one of the most important concepts in photography. It is the distance between the closest and the farthest elements in a photo that appear acceptably sharp. The focus is the central point from which the picture gradually transitions from sharp to blurry.



Nowadays, any cameras and phones include systems that automatically add some depth. However, professional photographers master the depth of field at a high level. Adding the right depth helps creating a sense of place, and focusing on the core elements.

In *Picturesque*, the evaluation system applies a **coefficient to the focused elements** to the detriment of the other ones. It is especially efficient to optimize players' scores while paired with special elements of interest and events. Here few examples:



### 3. PRACTICAL EXAMPLE

Let's analyze this photograph of a squirrel trying to reach for a walnut:



#### ELEMENTS OF INTEREST:

The photograph includes 3 main elements of interest: a branch, a squirrel, and a walnut. The branch and the walnut barely provide any points while the squirrel is a small animal that is **hard to capture** and that consequently grants a lot of points.

We also assume the player has already taken a lot of photographs from the vegetation, but this is the first picturing a squirrel and consequently enjoys a **bonus for originality**.

The player managed to **suspend the moment** right before the squirrel either reach the walnut, or fall in the water. There is a tension, a suspense. This moment probably lasted a couple of seconds but it is now set in the stone, and the audience will always wonder whether the squirrel succeed, or not.

The photograph pictures **strong emotions** as well. The squirrel stretches its whole body all along the surface of water – taking risks to reach this specific walnut that (we can guess) it is eager to eat.

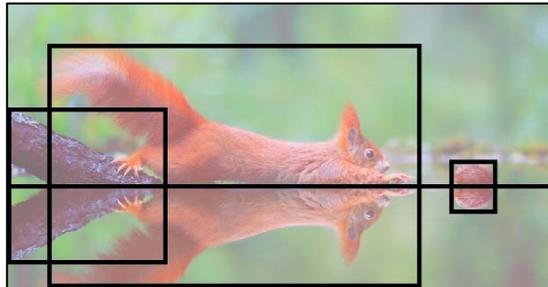
#### MOOD:

The color palette emphasizes this tension thanks to the high **contrast between complementary colors**. The elements of interest all are orange / reddish / brown, and greatly stands out from the background that is primarily green. The whole results in a **vibrant palette that energizes the scene**. Here the main colors an online algorithm has extracted.

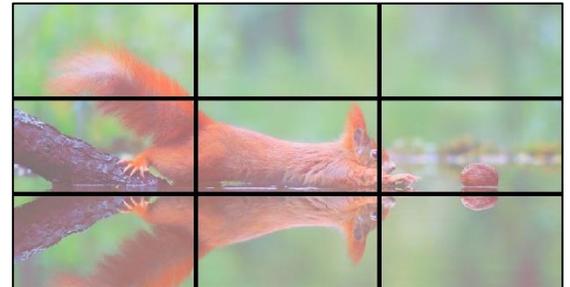
	#89A67C
	#74A65D
	#BF4D34
	#592020
	#D99C9C

### COMPOSITION:

The photograph is obviously based on a **symmetrical layout** made possible thanks to the reflection of the elements of interest on the water. We can also notice the composition uses the **rule of thirds** to give a sense of movement – from the branch on the left to the walnut on the right while focusing on the squirrel at the center of the photograph and keeping all the elements of interest in the middle row. Finally, there are 3 elements of interest which also respects the **rule of odds**.



*Symmetrical layout*



*Rule of thirds*

### LIGHTING:

The photograph is **correctly exposed**. Indeed, it offers a strong contrast and allows the audience to see any details on the elements of interest: the bark of the branch, the fur of the squirrel, and even the wrinkles of the walnut husk – both on the elements of interest and on their reflections. The **sunrays emanate from the top right corner** of the photograph, and propagate shadows on the elements without altering the quality of the photograph.

### DEPTH:

The photographer **focused on the elements of interest** while using a **narrow depth of field** that blurs both the water on the foreground and the vegetation on the background. The elements of interest then directly attract the eyes, and a score coefficient is applied to them.

FINAL EVALUATION:

At the end, the player obtains for this photograph a **score of 2,905 points**. As previously explained, this score is not displayed to the player for accessibility purposes. It is however used according to the Rational Game Design, in order to estimate their skills and dynamically suggest new challenges. Instead, the player receives appreciations for every aspect of the photograph, encouragements, and tips to improve their skills.

In this specific case, the player was playing in Easy difficulty mode, and consequently doesn't enjoy a bonus as they could easily freeze the scene and set the right exposition and lighting. The player would have obtained a higher score by shooting this photograph with real-world constraints, and its quality would be good enough to be featured in *National Geographic!*

Vegetation	<ul style="list-style-type: none"> <li>• Base points</li> <li>• Originality</li> <li>• Blurred</li> </ul>	100 x 0.5 x 0.5	25	Okay!
Water	<ul style="list-style-type: none"> <li>• Base points</li> <li>• Originality</li> <li>• Blurred</li> </ul>	100 x 0.5 x 0.5	25	Okay!
Branch	<ul style="list-style-type: none"> <li>• Base points</li> <li>• Originality</li> <li>• Focused</li> </ul>	100 x 0.5 x 1.5	75	Okay!
Walnut	<ul style="list-style-type: none"> <li>• Base points</li> <li>• Originality</li> <li>• Focused</li> </ul>	140 x 0.5 x 1.5	105	Good!
Squirrel	<ul style="list-style-type: none"> <li>• Base points</li> <li>• Originality</li> <li>• Focused</li> </ul>	300 x 1.5 x 1.5	675	Excellent!
Storytelling	<ul style="list-style-type: none"> <li>• Suspended moment</li> <li>• Strong emotions</li> <li>• Vibrant palette</li> </ul>	(250 + 250) x 1.3	650	Excellent!
Composition	<ul style="list-style-type: none"> <li>• Symmetry</li> <li>• Rule of thirds</li> <li>• Rule of odds</li> </ul>	300 + 300 + 300	900	Excellent!
Lighting	<ul style="list-style-type: none"> <li>• Good exposure</li> <li>• Side lighting</li> </ul>	225 + 225	450	Good!
<b>SUB-TOTAL:</b>			<b>2,905</b>	<b>Good!</b>
Easy mode coefficient			x 1	
<b>TOTAL:</b>			<b>2,905</b>	<b>Good!</b>

### 3. ENVIRONMENTS

#### 1. SEQUOIA FOREST



## 2. PACIFIC ISLAND



### 3. JAPANESE CASTLE



#### 4. DESERT CITY

