

G H O S T

OF TSUSHIMA

TMT : TEMPORAL MOTIVATION THEORY

Secondary Missions

The **secondary missions** in **Ghost of Tsushima** are an element inserted by the designers to allow the player to **completely immerse himself in the gaming experience**. They aim to **distance the player from the main storyline** and allow him to **explore the environments** more, **obtain objects** and **weapons**, delve into the **history** of the character and the cities (in addition to those of NPCs, peoples and their political/social structures). They increase the **longevity** of the game and the player's **agency**, connecting him more to the main character of the story, catapulting him into the **era of the Mongol invasions of Japan**.



Temporal Motivation Theory - Establish the values for the calculation

$$\text{Motivation} = \frac{\text{Expectancy} * \text{Value}}{1 + \text{Impulsiveness} * \text{Delay}}$$

As we do not have predefined value scales, the values that each variable can take on in the calculation will be **decided arbitrarily** by **considering different aspects of the gameplay**. For each variable, **values from 0 to 5** are chosen to indicate **different gameplay situations** in which the missions are carried out (*a value can be assigned for different reasons based on the type of mission and the aspects it requires*). With these values, the **motivation range varies between 0 and 25** and can be **converted into a range between 0 and 100**, thus calculating a **percentage of player motivation**.

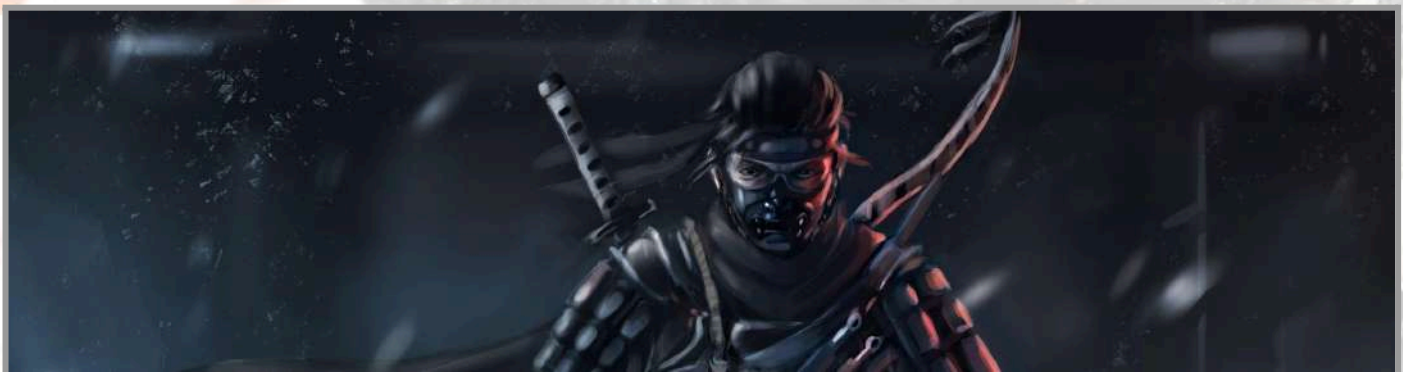


Secondary Missions - Aspects Analyzed

Typology - Expectancy & Value

The **typology of missions** has a fundamental role in the analysis, the **goals** and **what the player obtains** by solving them are **directly linked to Expectancy** (*the gameplay moment in which they are carried out allows the player to evaluate how confident he is regarding his skills*) and to the **Value** (*positive outcome*) that are assigned. **Impulsiveness** and **time** are influenced by the **typology** because they **force the player to move differently on the map** and may not contain fights, which makes them **possible in any moment of gameplay** (the player can procrastinate).

Aspect	Description
World Building	Exploration of the game world. They provide context about the people, culture, and history of the game world.
Character Development	Character development and background stories. They aim to create an emotional bond between the player and the character or between the player and NPC, allowing greater immersion in the game world.
Gameplay Variety	Combat challenges, puzzles, stealth missions, Gameplay change, completion.
Progression	Rewards like new Stances, collectables, gears, customization options for the character, charm and charm slots, Haik,
Immersion	The player's choices during the game influence the behavior of the characters within the game, giving life to each environment.
Environmental Storytelling	The game world itself communicates information about past events, the impact of the Mongol invasion, and the ongoing resistance of the people.
Side Stories and Lore	They add depth and richness to the game's narrative, building a more expansive and detailed world. They can add new samurai who travel with the main character and they meet again at the end of the game.



TMT - Expectancy

The **probability of success of a secondary mission** depends both on the **gameplay moment** the player is in at the moment and on the moment in which he **decides to face the mission.** Furthermore, the **build** of the character (*Legend, Weapon, Armor, Helmet, Necklace, Charm, Combat Forms*) influences the **confidence** the player has with his skills. The **Player type** affects the calculation based on the **playstyle of who is playing** (different types of players will react differently).

Expectancy Variable - Values

The values that are taken into consideration, based on the **type of mission**, are:

Arc	<i>Narrative arc, gameplay moment in which the player finds himself before to face the mission</i>
Build	<i>Equipment worn by the player to face battles (Weapon, Armor, Helmet, Charms and Stances)</i>
Authority	<i>Player skill level and character stats required to complete the mission.</i>
Legend	<i>Measurement of Jin's notoriety as he progresses toward becoming the Ghost of Tsushima</i>
Combat Exp	<i>Player's combat skill level (Skills, Stances) and previous experience in gameplay</i>

Value	Arc	Build	Authority	Legend	Combat Exp
0	Beginning	Starter Build (no Charms or Stances)	High	<i>Initial Legend.</i>	No Combat Experience.
1	Initial Arcs	Purchased/Found the first weapon	High	<i>The Broken Samurai</i>	Few Fights
2	Intermediate	Complete Build	Medium	<i>The Wandering Samurai The Unyielding Wind</i>	Faced several Fights
3	Intermediate	Complete Build (+ Equip from missions)	Medium	<i>The Shadow Samurai The Avenging Guardian</i>	Faced several Fights
4	Advanced	Complete Build (+ Equip from missions)	Low	<i>The Phantom Samurai The Demon's Blade</i>	Mastered Skills and Stances
5	Advanced	Complete Build (Final Weapons - Ghost)	Low	<i>The Raging Storm The Ghost of Tsushima</i>	Mastered Skills and Stances



TMT - Value

The **evaluation of the outcome received** from passing a secondary mission depends both on the **gameplay usefulness of the reward** (weapon, equipment, charms, objects that can be used in battle or can be sold) and on the **value that the player assigns to a specific reward** (customization, attachment to a specific Item). The **Player Type** influences the assignment of the value to the variable based on the **type of mission analyzed**.



Value Variable - Values

The values that are taken into consideration, based on the **type of mission**, are:

Reward Utility	The higher the utility , the longer the gameplay time in which the player uses that reward
Reward Cost	The price at which the Reward can be resold to obtain currency
Skills Upgrade	The bonuses that the reward provides to the character's stats if equipped
Affective Value	Emotional value that the player feels towards that reward (<i>Appearance, Lore, etc.</i>)
Char/Env Lore	How much information at lore level (<i>character or game world</i>) the reward provides

Value	Reward Utility	Reward Cost	Skills Upgrade	Affective Value	Char/Env Lore
0	Never Used	Low	None	None	None
1	Rarely Used	Low	Little Stat Boost	None	Few Info
2	Short period	Medium	Little Stat Boost	Little affection	Few Info
3	Long period	Medium	Medium Stat Boost	Little affection	New Lore Info
4	Most of Gameplay	High	High Stat Boost	Great affection	New Lore Info
5	Until the End	Very High	High Stat Boost	Great affection	New Lore Info



TMT - Impulsiveness The sensitivity of the Delay is given by the <i>moment of the gameplay</i> in which a mission can be carried out . It is influenced by the <i>player's skills</i> and the <i>character stats/builds necessary to complete the mission</i> .	0	The mission must be completed immediately in order to overcome the current main mission. The player has the necessary skills and builds
	1	The mission must be done immediately in order to overcome the current main mission, the player must obtain rewards to improve his build
	2	The mission can be carried out in the next narrative and gameplay arc . The player has the necessary skills and builds
	3	The mission can be carried out in the next narrative and gameplay arc . The player must obtain rewards to improve his build
	4	The mission can also be carried out at the end of the gameplay . The player has insufficient skills and builds to tackle the mission
	5	The mission can be carried out at any moment of the gameplay . The player does not have sufficient skills and builds to face the mission



TMT - Delay The time required to complete a mission depends on the time it takes the player to <i>reach a certain location on the map</i> and the duration of any battles present.	0	The mission takes place in the player's location . No fight
	1	The mission takes place in a location adjacent to the player's . No/few fights
	2	The mission takes place in a location adjacent to the player's . Numerous or prolonged combats (Boss)
	3	The mission takes place in a place far from that of the player . No/few fights
	4	The mission takes place in a place far from that of the player . Numerous or prolonged combats (Boss)
	5	The mission takes place in a location opposite on the map to that of the player. Numerous or prolonged combats (Boss + Mob)

Side Quest Analysed - Tales of Tsushima

Tales of Tsushima are a **series of side quests** that are tied to **specific characters** and offer **additional stories** and **character development**. These side quests provide players with the opportunity to learn more about the **people and culture of Tsushima Island** and deepen their **connection** to the game world. Each Tale of Tsushima typically revolves around a **particular character** and their **personal journey or struggles**. They focus on supporting characters and other NPCs that Jin Sakai meets during the **main story** and through **open world exploration**.



TMT Results from Data Analysis

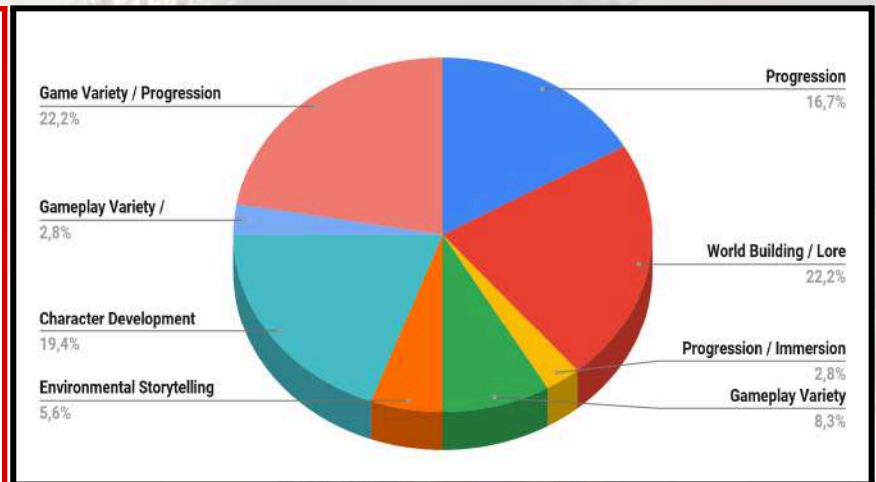
📌 TMT Motivation - Tales Of Tsushima

For each mission of the **Tales of Tsushima** series the following have been analyzed the **aspects** indicated in the previous paragraphs. The **Value** has been divided into **Bartle's 4 Player Types** to allow for a more **in-depth analysis** on the behavior of different types of players when faced with the **various types of missions** proposed by the game.

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Count of Typology - What type of missions are most frequent?

The **majority** of the secondary missions analyzed present a **progression objective** for the player (**38.9%**). The main motivation that pushes players to continue with the secondary storyline is the **advancement in the gameplay (accomplishment)**, the obtaining of **rewards** (*Weapons, Charms, Equipment, Collectables*) and the **logic** to be used in **combat** and **puzzles** (*with variations from the gameplay of the main storyline and Lore insights*).

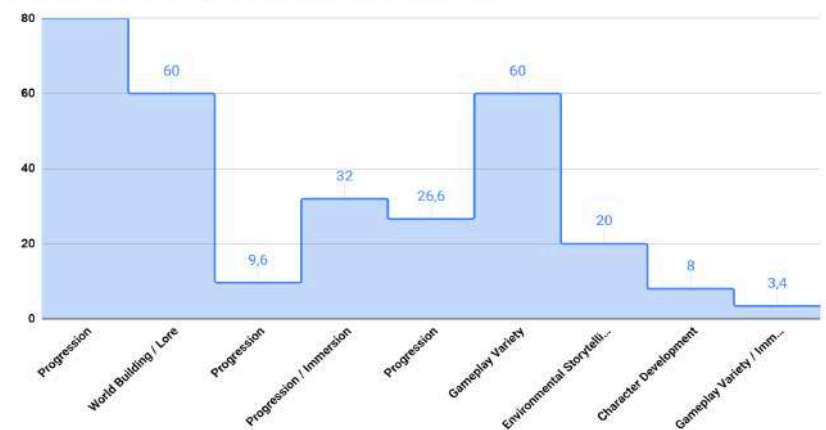


Final Motivation (in%) for each Player Type respect to Typology of the Missions

Achiever Player Type

Player Achievers have a greater probability of motivation on the most frequent missions in gameplay, namely the **Progression and Game Variety missions**, in which **rewards, objects and equipment** are obtained to continue the game more easily. The **Game Variety missions** allow the use of **Logic** and make the player feel an aesthetic of **accomplishment** in having overcome them. The **mission Delay** affects them partially (it allows them to think about the next move to make).

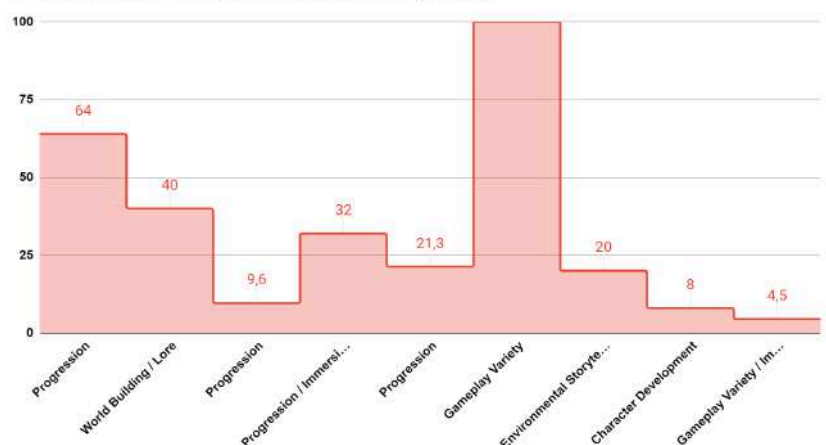
Final Motivation in % Achiever respect to Typology



Killer Player Type

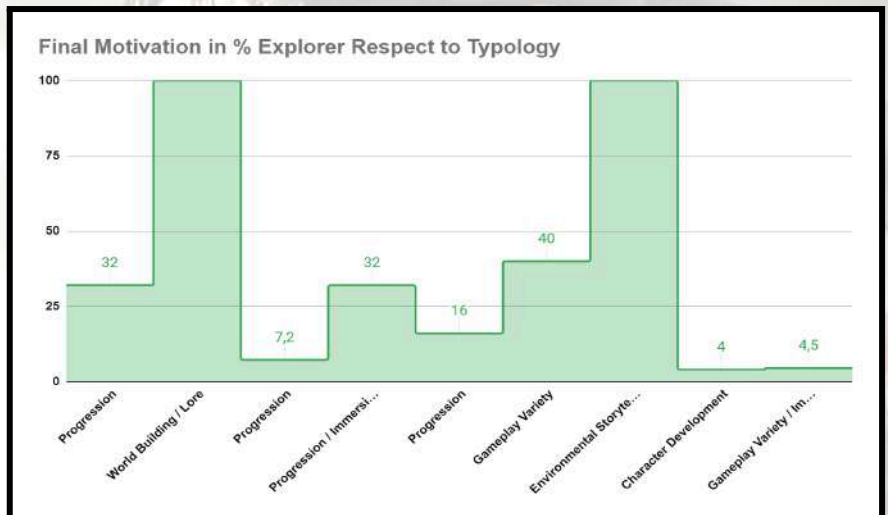
Player Killers have a higher chance of motivation on **Gameplay Variety, Progression and Immersion Typologies**. These are the missions that generate **strong aesthetics (Excitement)** and allow the player to face **advanced level fights (Side Boss), reflex challenges**, immersion in the game (**Stealth Missions, Fear and Sensation**) and **tension** (Stealth). *Delays and Expectancy* are very important, the **build** necessary to tackle the mission and the **time** it takes to **do/achieve** it risk **demotivating the Player**.

Final Motivation in % Killer Respect to Typology



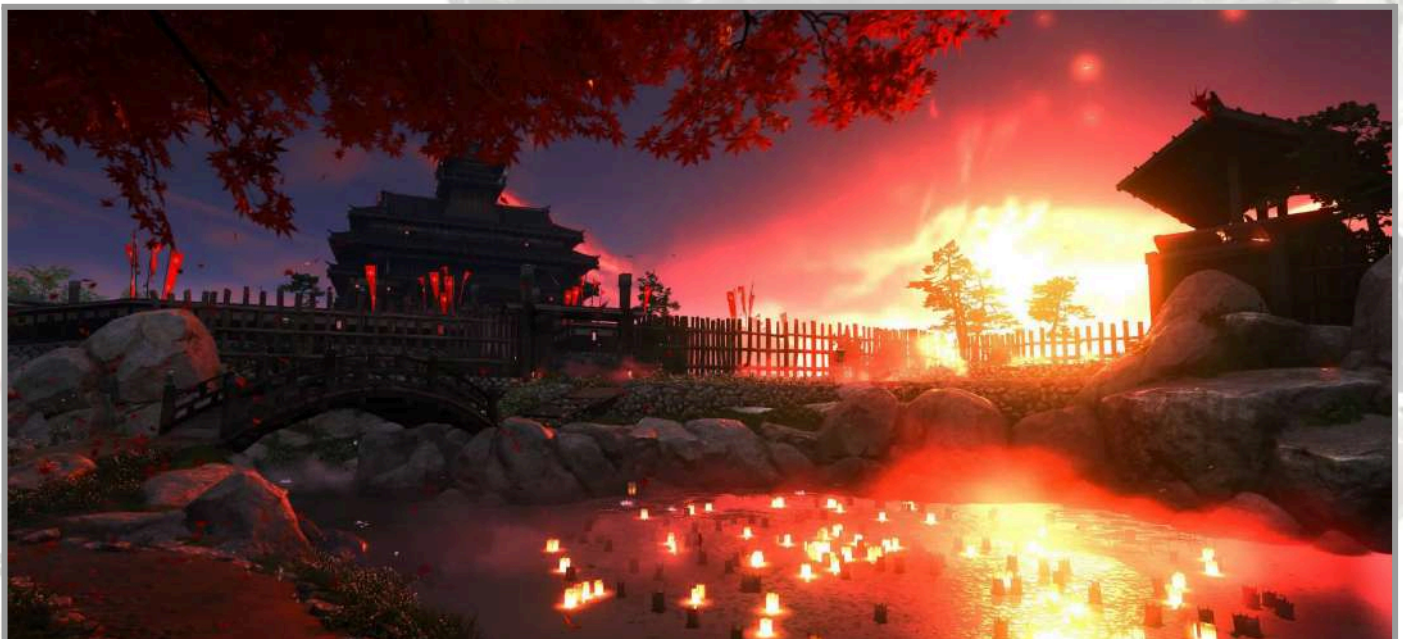
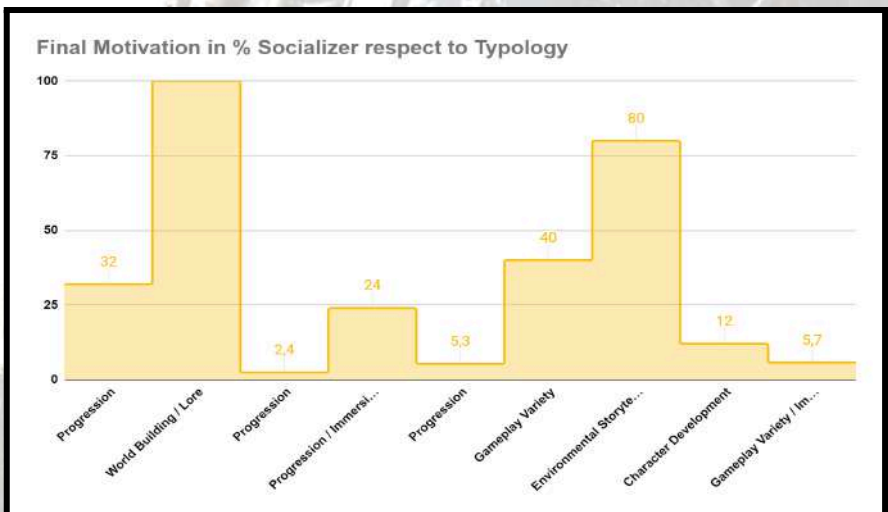
Explorer Player Type

Player Types Explorers are more motivated to carry out **World Building/Lore** and **Environmental Storytelling** type missions. They intend to **explore** the locations of the game to **discover secret passages, hidden areas, rare objects** and everything that each location represents **at a plot level**. **Exploration** and **Discovery** are the generated aesthetics, the mission **Delay** is **irrelevant** (the player wants to use all the time he prefers to explore a game environment to the fullest)



Socializer Player Type

Player Types Explorers are more motivated to carry out **World Building/Lore** and **Environmental Storytelling** type missions. They want to reach new areas so they can **share with other players** all the **hidden secrets, easter eggs** and **game bugs** they can find. **Socialization, Fellowship** and **Expression** (player customization, rewards for changing appearance) are the **main aesthetics** generated by this type of mission, missions that do **not** present **prolonged combat** or **Delays** are preferred.



Other Nudges connected to the analysis



New Year's effect

Using the **New Year's Effect** it is possible to analyze the **reasons why a distraction from the main path is inserted**, both on a *narrative and gameplay level*. By combining this type of analysis with the **Nudge TMT**, it is possible to **add a mathematical analysis** of the **motivation** of each type of player and how he is **pushed** to abandon what he is doing in order to **pursue a side mission**.

Apophenia

In **each mission** analyzed the character will get to know **new NPCs** and will delve deeper into their **history**, their **behaviors**, their **connections** to the game world. Through this information he can **immerse himself** more in the **lore**. It is possible to **discover new locations and collectibles** that further enrich the player's knowledge and answer his questions regarding *why certain elements were included in the game*.



Conclusions

The **analysis** through the **Temporal Motivation Theory** has the **objective** of analyzing the **behavior of a player** when faced with the **choice of continuing with the main path or deviating** in favor of a secondary mission. The main aspects are **how motivated he feels** (*depends on the character's Skills and Equipment at that moment*), what **reward** he gets by satisfying it (*Gameplay or Lore Utility*), how much the game allows him to **procrastinate before carrying out it** and how much actual **time** is needed to finish it.

Each **Player Type** reacts **differently** to the **perception of the usefulness** of the mission, in fact different player types will prefer **opposite types of missions**, focusing more on those that allow them to significantly **improve their gaming experience**.

The **mathematical analysis** of these behaviors provides the answer to **why a player decides to avoid a game element that was added at a specific moment of gameplay**.

