

CHAPTER II

OVERVIEW OF THE VIDEO GAME VICTORIA 3

Victoria 3 is a grand strategy ‘Society Simulator’ video game focused primarily on simulating the economy and politics of the 19th-century (Anward, 2021). Released on October 25, 2022, the \$14,99 game has garnered relative popularity within its niche market of strategy video game players. Since releasing, it has sold approximately 1,6 million copies worldwide, grossing over \$57,4 million (VGInsights, n.d.). In terms of activity, it is estimated to have 6.941 active players every day. The player base is relatively spread out, but has a sizable audience in China, the United States of America and Germany, as visualized in Figure 2.2 (Gamalytic, n.d.). However, it is rarely spoken of in circles outside the strategy genre. Therefore, the goal of this chapter is to give a better understanding about the video game Victoria 3. This chapter will first dive deeper into the background of Victoria 3, the game developers behind it, as well as the vision for Victoria 3. Furthermore, to gain a better understanding about the game itself, this chapter will explain the main features of Victoria 3.



Figure 2.1 The Map of Victoria 3' Simulation of the World in 1836

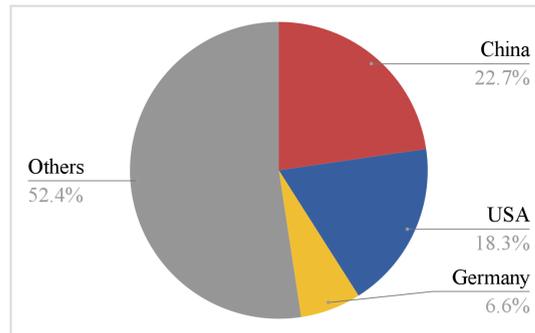


Figure 2.2 Victoria 3 Players by Country (Gamalytic)

2.1. About the Game

2.1.1. A Brief History Behind Victoria 3

Victoria 3's origins cannot be separated from the history of the development studio behind it, Paradox. Paradox Development Studio is a Swedish video game development studio which was first started in 1995 by Johan Andersson (2012). Before becoming independent, the studio was part of Target Games, a board game company specialized in strategy and role-playing games. Under Target Games, the development studio created computer versions of Target Games' board games. Their first ever release was Svea Rike, a historical strategy game set in Sweden, which was released in 1997. By 1999, Target Games had gone bankrupt and the developer studio would become a part of Paradox Entertainment (Andersson, 2012). Under Paradox Entertainment, the studio would release Europa Universalis (EU), a historical strategy video game based on a French board game with the same name.

Within a few years, Paradox would develop many more strategy games, amassing a catalogue which spans more than 1000 years of human history. As each game represented a different era with different political conditions and challenges for their respective times, no two games have the same experience (Salt, 2014). This is reflected in their game mechanics. For example, the Europa Universalis games, set in the early age of European colonial expansion in the years 1444 to 1821, focuses heavily on expanding national borders through imperialism. Meanwhile, another one of Paradox's games, Crusader Kings, brings players into the medieval era, lasting from the years 867 to 1453. Because of the medieval setting, stronger emphasis is placed on royal dynastic interests, rather than broader national goals. The Victoria series is no different.

On November 18, 2003, Paradox released the first game of the Victoria series, *Victoria: An Empire Under the Sun*, also known as *Victoria 1*. This game would distinguish itself from previous Paradox games by placing its main focus on internal political management, covering industrialization and socio-political developments within a country rather than warfare (*Victoria: An Empire Under the Sun - Victoria 1 Wiki*, n.d.).

In the game, players are able to develop their national economy by constructing buildings such as factories (*Victoria: An Empire Under the Sun - Victoria 1 Wiki*, n.d.). This development would be affected by the game's innovative complex world market system and the POP (part of population) system. The world market provides market goods for populations to consume, changing in price depending on supply and demand at a global scale. Goods can

also be withheld from the world market through policies such as tariffs and stockpiling. The POP system simulates an ever-changing population within a country, forming its economic and political basis. In *Victoria 1*, POPs were divided into 10 categories of classes with varying levels of wealth and political orientations. When POPs do not receive their desired market goods, they will increase in militancy, potentially triggering a revolution (*Victoria: An Empire Under the Sun - Victoria 1 Wiki*, n.d.). Most of *Victoria 1*'s features can be seen from its user interface (UI) as seen on Figure 2.3, where the image of ten people on the bottom left represent pops, while existing buildings appear above it.



Figure 2.3 A Screenshot of the Main Interface of *Victoria: Empire Under the Sun*

The complexity of the game made it notoriously difficult, with less than half of all players having completed the game, according to data aggregated by (Metacritic, n.d.). This difficulty also resulted in mixed reviews, with the game receiving an average rating of 58 out of 100 (Metacritic, n.d.). However, despite the seemingly average reception, the game was rather popular within the Paradox

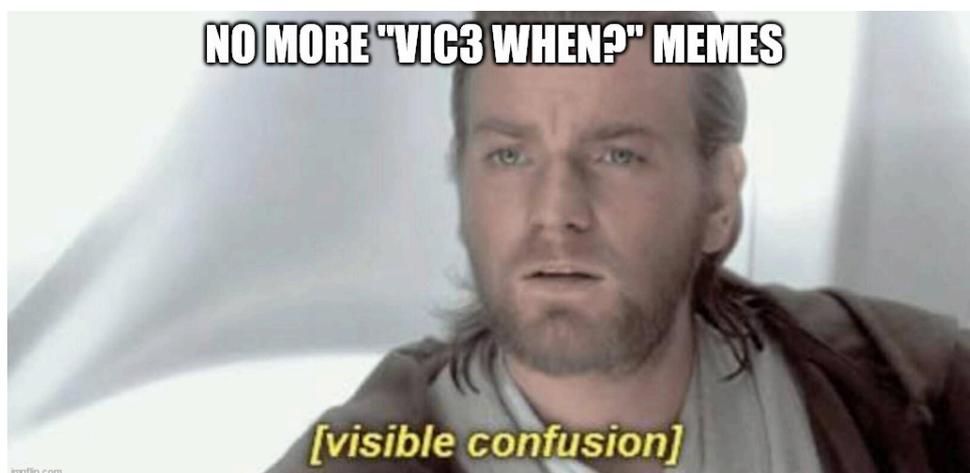
gaming community itself, with fans appreciating the economic depth of the game (*Victoria: An Empire Under the Sun - Victoria 1 Wiki*, n.d.).

Although *Victoria 1* would not be the most successful game released by Paradox, the series still saw a second installment with the release of *Victoria 2*. Released 7 years after the previous, *Victoria 2* would rework many of the existing systems, as well as modernizing the game through graphical and User Interface (UI) improvements, as can be seen in Figure 2.4. Unlike *Victoria 1*, which sacrificed some player freedom for the sake of historicity, *Victoria 2* removed these limitations, creating a more free and sandbox experience (King, 2009). The game would also improve the economic simulation by automating various mechanics which were previously controlled by players. These changes would prove to be well received, as the game received a favorable critic score, with an average of 75 out of 100 according to Metacritic (n.d.). Just like the first game, *Victoria 2* would also be extremely popular within the Paradox fanbase community. 15 years after release, the game sold more than 900,000 times, grossing approximately \$10.9m on Steam, the most popular gaming distribution platform (VGInsights, n.d.).



Figure 2.4 A Comparison Between Victoria 1 and Victoria 2 Graphics

After more than 10 years since the release of Victoria 2, anticipation grew over the possibility of a third installment in the series. This anticipation and speculation would present itself through the circulation of online jokes, often accompanied with the phrase “Vic3 when?” (Figure 2.5). This was not lost on Paradox. By early 2021, the speculation finally ended when Victoria 3 was publicly revealed.



**Figure 2.5 Entry by User Arclath2 during the Paradox Development
Studio-Hosted Victoria 3 Confirmed Meme Contest**

2.1.2. The Philosophy and Vision of Victoria 3

In the game's first developer diary, a series of short blogs uploaded to the Paradox online forum, Game Director Martin Anward outlined the vision for Victoria 3. The vision, or design pillars, were national gardening, diplomatic eminence, everything is political and era of change (Anward, 2021). The first of the pillars is national gardening (Anward, 2021). In Victoria 3, just like the first two games, the player's main focus is the development of their country. Enjoyment of the game should mainly come from building the economy and managing domestic politics, as the demographics of the country slowly evolve to whatever the player wishes it to be. The next pillar, diplomatic eminence, states that war in Victoria 3 is merely a continuation of diplomacy (Anward, 2021). This means that anything that can be done through war can and should be achievable through diplomatic negotiations. The third pillar is that the game is everything is political (Anward, 2021). Based on this pillar, almost every feature in the game should tie into the political situation of the country, represented by the population and interest groups. Finally, the last pillar is that the game simulates an era of change (Anward, 2021). Because the era of human history Victoria 3 simulates witnessed a near complete transformation of many aspects of society, the game tries to reflect this inside its game mechanics.

2.2. In-Game Mechanics of Victoria 3

In game design, a game consists of various coded rules and systems which govern the players actions (Sicart, 2008). These rules, also known as mechanics, give players the various tools they need to play. When playing the game, a player will have to repeat various actions set up through the mechanics to eventually win. This cycle is known as the core gameplay loop. This section will elaborate these concepts within the context of Victoria 3, starting from the goal of the game, before explaining the mechanics and core gameplay loop of the game.

2.2.1. The Goal of Victoria 3

Victoria 3, unlike most games, does not have a specific goal for players to achieve. However, the game does provide an option to play with specific objectives. These objectives are especially useful for players just starting out in the game and are unsure how to begin. These objectives include tutorial, economic dominance, hegemon and egalitarian society, which can be seen in Picture A1 in the Appendix. There is also a final objective called the Great Game for those who have purchased the Spheres of Influence DLC.

The first of these is economic dominance, focused on teaching the player how to increase their economic power in the game. In this game objective, as described in the game, the player should “aim to expand [their] production, market reach and trade influence until the world economy is firmly within [their] control. [The player’s] ultimate goal will be to control the lion’s share of global GDP” (Paradox Interactive, 2022). To complete this objective, the player must have 25% of the global GDP inside their market.

Hegemony provides the player with objectives to dominate the world as a superpower. The game describes hegemony as “Nothing short of complete domination of the global populace will satisfy you. Subjugate, conquer, or simply grow your own population until most of the world live inside your borders” (Paradox Interactive, 2022). To complete this objective, the player must control 40% of the world’s population.

The egalitarian society objective gives players objectives to reduce inequality in their country and raise the standards of living. When using this objective, the player will attempt to “become a guiding beacon of liberty and equality for the world to look up to, by assuring opportunity and raising Standard of Living across your nation” (Paradox Interactive, 2022). To complete this objective, players must have less than 10% of their country’s population as peasants, an average standard of living of 20 (see Table A1 in Appendix A) and a literacy rate of 90% or higher.

The final objective in Victoria 3 is the Great Game. This objective is based on the historic geopolitical rivalry between Britain and Russia in Central Asia during the mid to late 19th century. In this game objective, players, playing as either Russia or Britain, are pushed to establish geopolitical dominance over the region of Central Asia by conquering or engaging in diplomacy.

Victoria 3 provides players with various options of gameplay styles beyond what is already mentioned. If players do not want to be given objectives by the game, they can choose the sandbox option situated at the rightmost side of the menu. Players are highly encouraged to create their own goals when playing

the game. Many players have shared their goals for when playing the game in community forums, as well as content sharing platforms like Youtube. The goals that players take can be roughly categorized into a few categories. The first is world conquest, where players choose a country to take over the entire world by utilizing the game's war mechanics. Although this playstyle is actively discouraged by the developers and is extremely difficult to achieve, some players take the challenge regardless. In Figure 2.6, Victoria 3 player and Reddit user Dontcareaboitttpoa shares the result of their game as Russia, where they managed to take over the world 96 years after the game's start date.



Figure 2.6 Reddit User Dontcareaboitttpoa Conquers the World in Victoria 3

Other than world conquest, some players choose to play Victoria 3 with the goal of making their country larger. The most common examples of these would be the historic option of forming Italy and Germany, both of which did not exist as a country at the start of the game, but eventually became one within the game's timeframe. Players can also choose other options that the game provides such as Scandinavia, Arabia, Yugoslavia, India, Indonesia and many more.

Differing from the two previous examples of world conquest and border expansion, some players take the game's vision to heart and play with the goals of achieving an ideal society. This can be done by developing the economy, engaging in beneficial diplomatic relations and enacting various laws. An example of this would be a player taking a poor and pre-industrial country and developing it into a wealthy one. The mentioned goals are a non-exhaustive list that players can pursue and there are many more one can take when playing the game.

2.2.2. The Game Mechanics

To achieve the various goals a player may take, they must be able to effectively utilize the mechanics provided to them in the game. This will include knowing how to do the core gameplay loop in the game. The gameplay loop in Victoria 3 revolves around construction, laws, diplomacy, warfare and technology (Paradox Wikis, 2023).

2.2.2.1. Construction and the Economy

National building management is the main mechanism in which a player can develop their country's economy and political makeup in Victoria 3. Players can decide which buildings will be constructed or destroyed, as well as their locations. A player is expected to continuously develop their country, creating more buildings, increasing their GDP and improving the standard of living of the population.

Buildings in the game can be divided into three large categories or building groups. These include urban buildings, rural buildings and development buildings. Table 1, 2 and 3 in the appendix shows the buildings that exist within Victoria 3. Every building in the game will provide a benefit to the country, in the form of raw materials, finished goods, or vital state-level functions. As every country is geographically limited by their resources, every country will have a different strategy when approaching industrial development. Various other considerations must also be taken by a player when deciding to construct a building, such as available human resources, market price of related goods, as well as supply and demand (see Picture A2 in Appendix A).

The construction mechanics mentioned above will also directly tie itself to the game's economic simulation, which some consider to be one of the most advanced in a video game (riverlimburg, 2024). In a 2024 article, Riverlimburg thoroughly analyzes the game's economic simulation. The result of their analysis can be seen in their model of Victoria 3's economic engine (see Picture A3 in Appendix A).

At its core, the economic simulation in Victoria 3 flows, as money is created, destroyed and soaked into the global economy through various in-game phenomena. Players will perceive this dynamic through the national treasury, in the form of a gold reserve. The treasury of the player's country can increase in money through various means such as gold mines, revenue from buildings, trade revenue, minting, tariff income, dependents income and capitalist investment. On the other hand, money is burned through consumption spending, building input spending, tax waste and gold reserve excess. When more money is burned than earned, the national treasury will fall into a deficit, which could result in bankruptcy. Money can also be soaked through the government gold reserve, investment pool and the standard of living.

2.2.2.2. Law and Politics

The next gameplay loop after construction is managing laws. Laws in Victoria 3 represent the legal structures of a country. Players are expected to continuously change their country's laws until they are satisfied. These laws are divided into smaller categories, with each category having different laws to represent the different possible political structures a country may have. For

example, the governance principle category determines who the head of state is. A country with the monarchy governance principle will be ruled by a monarch, while a presidential republic will be ruled by a president. Other laws can also directly influence a country's economic activity.

Players can decide what laws should be implemented in their country. However, players cannot arbitrarily decide to change any law at any point in time, as they will have to engage with the game's internal politics system. When the player decides to enact a new law, the law will proceed through three main phases. In each phase, the proposed law will reach a checkpoint with a random roll for it to succeed, advance, result in a debate, or stall. The likelihood of success will increase when more political actors support the law.

In Victoria 3, the main actors behind politics are interest groups. Interest groups are actors that represent an association of people who have politically aligned views (*Interest Group - Victoria 3 Wiki*, n.d.). In the game, they are the armed forces, devout (religious clergy), industrialists (capitalists), intelligentsia (liberal academics), landowners (conservative aristocrats), petite bourgeoisie (middle class), rural folk (farmers) and trade unions (working class). Each interest group has their own ideology, supporting some laws over others. For example, the intelligentsia interest group gravitates towards liberal ideas of free speech and democracy, while the devout want to ensure the political relevance of traditional ideals and religious institutions. Interest group's ideologies will also be influenced by the interest group leader, prominent representatives with ideologies of their own.

Table 2.1 Interest Groups in Victoria 3 (Paradox, 2025)

Interest Group (IG)	Armed Forces	Devout	Industrialists	Intelligentsia	Landowners	Petite Bourgeoisie	Rural Folk	Trade Unions
IG Icons								
Ideologies	Jingoist	Moralist	Individualist	Anti-Clerical	Paternalist	Meritocratic	Agrarian	Anti-Slavery
	Loyalist	Patriarchal	Laissez-Faire	Anti-Slavery	Patriarchal	Patriotic	Isolationist	Egalitarian
	Patriotic	Pious	Plutocratic	Liberal	Stratocratic	Reactionary	Particularist	Populist
			Republican					Proletarian

Although not explicitly shown, each ideology listed here has a policy preference. For example, the Republican ideology is opposed to laws in favor of monarchy.

The strength of each interest group is determined by the political strength of their population within the political power structure they exist within (*Interest Group - Victoria 3 Wiki*, n.d.). In Picture A6 in the appendix, the intelligentsia in France can be seen with a national political strength, referred in-game as clout, of 9.4%. The population menu shows the amount of people that constitute the interest group, as well as their profession.

In democracies, an interest group can increase its political strength by competing in national elections. Ideologically aligned interest groups can form a political party, where gaining votes will increase the interest group's political strength (*Interest Group - Victoria 3 Wiki*, n.d.). For example, the intelligentsia and rural folk can join forces to create the Republican Union party (as can be seen in Picture A7 in Appendix A). Picture A8 in the appendix shows their election performance, where the party won 15.5% of the popular vote.

Returning to law changing, the stronger certain interest groups are, the easier it will be to pass laws they agree with and the harder it will be to pass laws they are against (*Laws - Victoria 3 Wiki*, n.d.). Therefore, to be able to pass their

desired laws, a player must strengthen the power of their preferred interest groups . This can be done politically, by passing laws that increase the power of the interest group. It can also be done economically by empowering the interest group, favoring the construction of buildings that employ professions that are attracted to the interest group.

Laws can also be passed by taking advantage of political movements, Victoria 3's representation of political pressure groups. Unlike interest groups, who represent mainstream political actors, political movements are meant to represent popular grassroots political organizations (*Political Movement - Victoria 3 Wiki*, n.d.). These movements can also be assisted by individual actors, known as agitators, who can appear in the middle of the game. Political movements in Victoria 3 are divided into five main categories, ideological, pan-national, cultural, cultural-majority and religious. All types of political movements will have a core ideology and will increase support for passing laws they approve of. On the other hand, when too many laws they oppose are enacted, the movement will increase activism. If combined with mass radicalization, which for example can occur when too many of the population is laid off from their jobs, the movement can eventually revolutionize, potentially triggering a civil war.

The last political actor in Victoria 3 is the political lobby. Political lobbies are political organizations, supported by one or more interest groups within a country, who oppose or endorse another country. Lobbies are created through diplomatic catalysts, an event that changes the direction of relations between two countries, or when another country funds the creation of a lobby. When a lobby

exists inside a country, they will demand the government to enact diplomatic actions that will benefit their agenda. For example, the Pro-country A lobby in country B can demand the country B government to establish a trade agreement with country A. Accepting a demand will appease the lobby, increasing the approval of the interest group behind the lobby. Conversely, declining to enact the lobby's demands will incur penalties, decreasing interest group interest towards the government.

2.2.2.3 Diplomacy

The third gameplay loop in *Victoria 3* is diplomacy. In *Victoria 3*, the player is responsible for their nation's geopolitical strategy. Players can form alliances, declare wars, form trade agreements and engage in various other diplomatic actions with other countries. When starting a game, players are suggested to analyze their geopolitical situation, taking note of the major powers in the region, potential threats, as well as potential friends.

The first diplomatic consideration for players will be their standing in the world. In *Victoria 3*, all countries in the world are ranked, with several categories to distinguish between the ranks. Country ranks represent the prestige and influence of a country in the world (*Rank - Victoria 3 Wiki*, n.d.). Each rank, measured mainly through a numbered prestige point system, provides different benefits and limitations to what a country can do in the world.

The in-game ranks are great power, major power, unrecognized major power, minor power, unrecognized regional power, insignificant power and unrecognized power (*Rank - Victoria 3 Wiki*, n.d.). Higher ranks will give a

country more influence capacity, allowing it to conduct more diplomatic actions. As well as that, the game distinguishes between recognized and unrecognized powers, where the former is meant to represent countries recognized by the European world order, mainly in Europe and the Americas.

Rank	Country	Prestige	GDP	SoL	Population
1	Great Britain	996	25.2M	10.6	26.0M
2	France	628	22.8M	11.1	34.5M
3	Russia	459	26.8M	9.2	56.3M
4	Prussia	250	9.9M	10.5	13.7M
5	Austria	227	16.6M	9.8	34.7M
6	United States ...	222	15.7M	11.1	15.6M
7	Ottoman Emp ...	122	9.4M	6.6	19.6M
8	Netherlands	96	1.8M	10.8	2.74M
9	Spain	85	7.7M	8.9	12.3M
10	Brazil	80	4.6M	9.9	4.04M
11	Sweden	79	2.7M	11.0	2.79M
12	Great Qing	648	77.9M	8.0	366M
13	Japanese Shog ...	90	9.6M	7.2	31.0M
14	Siam	49	1.0M	8.0	3.92M
15	British East In ...	427	37.4M	8.5	110M
16	Portugal	60	3.0M	7.7	6.54M
17	Denmark	53	1.2M	9.5	1.64M
18	Dutch East In ...	48	5.8M	8.2	9.51M
19	Bolivia	47	949.6K	8.4	1.39M
20	Belgium	45	3.1M	10.5	4.14M
21	Two Sicilies	44	3.8M	8.6	7.03M

Figure 2.7 World Ranking at the Start of the Game (Paradox, 2025)

The factors that determine a country's world ranking are prestige and recognition (*Rank - Victoria 3 Wiki*, n.d.). Prestige in Victoria 3 is determined by a country's economic, military and social influence on the world. Increasing prestige can be done in multiple ways. The first is increasing power projection by building a larger army and navy. Growing the country's economy, measured by every £1M GDP will also increase its prestige. Another method of growing prestige economically is by being the largest producer of a certain good.

Recognition is another important aspect to world ranking in *Victoria 3*. Owing to the game's 19th-century setting, *Victoria 3* seeks to portray the geopolitical imbalance between European countries and colonized nations (*Rank - Victoria 3 Wiki*, n.d.). Unrecognized countries are not considered equal on the world stage by recognized states. At the start of the game, most countries in Asia and Africa are considered unrecognized. Despite this, an unrecognized country can earn recognition by completing certain conditions.

Another factor to consider is whether the country is independent or not. For example, as seen in Figure 2.7, the British East India company, by virtue of being subordinate to Great Britain, is considered rank 15. This is despite having more prestige than most countries above their ranking. In *Victoria 3*, this simulation of countries in a subordinate relationship with another more powerful country happens through the subject system. Compared to sovereign nations, subjects will be limited in their ability to project diplomatic influence (*Subject - Victoria 3 Wiki*, n.d.). As well as that, subjects will become a member of their overlord's market, losing their economic independence.

Despite this, the limitations of being a subject can eventually be reversed. When a country is a subject, they will have a variable known as liberty desire (*Subject - Victoria 3 Wiki*, n.d.). Liberty desire represents a subject's willingness to follow their overlord's demands or desire for greater autonomy (see Picture A9 in the Appendix). Various different actions and conditions can both increase or decrease liberty desire. When liberty desire is above 75, a subject can demand greater autonomy or independence from their overlord (*Subject - Victoria 3 Wiki*,

n.d.). If the value is below 25, the overlord can decrease their autonomy or outright annex the subject. Subject autonomy is divided into three levels, going from fully autonomous subjects, to semi-autonomous subjects and finally non-autonomous subjects. Every increase in the level of autonomy gives the subject country higher degrees of diplomatic independence, allowing it to pursue an independent foreign policy.

A country with a global ranking of great power will gain the ability to create a sphere of influence, known in the game as power blocs (*Power Bloc - Victoria 3 Wiki*, n.d.). In Victoria 3, power blocs represent the sphere of influence of a major power, existing in the form of a major power-led multilateral association of nations. The shape of the power bloc is determined by its central identity, all attempting to depict a real world form of international organization in the game. The five power bloc central identities in Victoria 3 are trade leagues, sovereign empires, ideological unions, military treaties and religious convocations (*Power Bloc - Victoria 3 Wiki*, n.d.).

After identifying the country's place in the world stage, the player can begin the diplomatic gameplay loop by engaging with other countries. This will first depend on the relations between the player and other countries. The diplomatic standing between two countries in Victoria 3 is determined by a value between -100 and +100, going from hostile, cold, poor, neutral, cordial, amicable and friendly every 20 points. Relations with other countries can be increased or decreased by engaging in a diplomatic action.

Diplomatic actions can be divided into 5 categories. These include obligations, instant actions, ongoing actions, bloc leader actions, diplomatic pacts, as well as subject actions and pacts (see in Tables A9-A15 in Appendix A). Obligations are promises that a country can use to persuade another country to be more accepting of a diplomatic offer (*Diplomacy - Victoria 3 Wiki*, n.d.). To gain an obligation, one country must be indebted to another country. This can happen in multiple ways. The first is through the bankroll ongoing action, where a country sends money to a target country. The second method is by paying off the debts of a country when it has bankrupted its economy. The final method of obtaining an obligation is by assisting a country in a war.

Instant actions are a category of diplomatic actions in which the result of the action takes effect almost immediately (*Diplomacy - Victoria 3 Wiki*, n.d.). Instant diplomatic actions that improve bilateral relations are take on debt, redeem obligation, join power bloc, invite to power bloc and request embassy. On the other hand, actions such as expel diplomats and violate sovereignty are examples of an instant diplomatic action that damages relations. Trade states is another instant diplomatic action that, unlike the previous actions, does not increase or decrease relations.

Ongoing actions are a category of diplomatic actions that will continue to happen from the moment a player enacts it, until they decide to end it (*Diplomacy - Victoria 3 Wiki*, n.d.). This diplomatic action category is most useful for increasing or decreasing bilateral relations with another country over a long period of time. Improving relations, bankrolling and guaranteeing independence are

actions that will increase the relation between two countries. On the other hand, damaging relations, declaring a rivalry and embargoing will decrease relations between two countries. The last ongoing action is funding lobbies, which does not necessarily improve relations, but it will create a pro-country political lobby in the target country. Just as mentioned in the section on laws and politics, the political lobby, once created, will demand their country to enact various diplomatic actions in support of another country.

Bloc leader actions are diplomatic actions that can be taken by the leader of a power bloc (*Diplomacy - Victoria 3 Wiki*, n.d.). There are three diplomatic actions that can be taken by a power bloc leader. The leader of a sovereign empire can subjugate their members. Meanwhile, the leader of an ideological union power bloc can force a regime change in one of their members. The final action is imposing a state religion, which is exclusive to the religious convocation power bloc's leader.

Diplomatic pacts are a category of diplomatic actions in which both sides sign into a binding arrangement (*Diplomacy - Victoria 3 Wiki*, n.d.). Diplomatic pacts are further divided between mutual pacts and asymmetric pacts, differing in requirements and effects. Mutual diplomatic pacts include alliances, defensive pacts, trade agreements and mutual investment agreements. Asymmetric pacts in Victoria 3 are supporting independence, requesting to support independence, investment rights, granting investment rights, hosting a power bloc embassy, requesting a power bloc embassy, providing military assistance and requesting military assistance.

The final category of diplomatic actions are subject actions and pacts. These actions and pacts can only be used between a subject and its overlord, as well as a power bloc leader with its members (*Diplomacy - Victoria 3 Wiki*, n.d.). Using the diplomatic pacts, the ruling country can raise and decrease subject payments, exempt a subject or power bloc member from military service, grant a subject or power bloc member their own market, conduct knowledge sharing, evangelize their religion and support the subject regime. The subject may also request their own market to their overlord.

Subject diplomatic actions allow a country to appoint colonial governors, decrease or increase the autonomy of their subjects, grant or take states and enforce military access. The subject can also request actions from their overlord, such as an increase in autonomy, regime support, knowledge sharing and to take a state from the overlord.

2.2.2.4 Warfare

When peaceful diplomatic overtures are insufficient in achieving geopolitical goals, players can pursue these goals through forceful diplomacy. If the relation between the player's country and another country is sufficiently strained, the player can demand various concessions (see Table A16 in Appendix A). The opposing country will be given the choice between accepting or refusing these demands. If it refuses to accept the player's demands, a diplomatic crisis will initiate, increasing tension between the two countries (*Diplomatic Play - Victoria 3 Wiki*, n.d.). Other countries can also weigh into the crisis, supporting one side or the other. If neither side backs down, negotiations end and war will

break out. Military units will be used by all sides to achieve the goals demanded in the beginning of the war. Eventually, one side may emerge victorious, or neither win. This is the warfare gameplay loop for Victoria 3.

In Victoria 3, wars will always start as a diplomatic crisis, called a diplomatic play, where two sides demand face off against each other. The diplomatic play will last a few months, allowing the two sides to demand more concessions, or even invite other countries into the crisis on their side. The amount of actions a country will do during a diplomatic play is limited by maneuvers, a number representing the country's strength and influence. The amount of maneuvers will be determined mainly by rank, with great powers receiving 100 maneuvers, recognized and unrecognized major powers having 75, minor powers and unrecognized regional powers gaining 60 and insignificant and unrecognized powers merely receiving 50. These maneuver points can be used to demand more concessions or request another country's support. These demands, also known as war goals, will cost maneuver points.

In addition, most war goals that a player can take will increase a value called infamy (see Table A16 in Appendix A). Infamy represents a country's perceived aggression in the eyes of the world, with a value going from 0 to 1000. These values are categorized into four levels, which will affect how AI countries view and interact with the country. The infamy levels are reputable (0 to 24,9), infamous (25 to 49,9), notorious (50 to 99,9) and pariah (100 and above). An increase in infamy level will make other countries less likely to befriend the player's country. When a country becomes a pariah, other great powers will be

able to use the cut down to size diplomatic play, forcing it to release all of its conquests.

2.2.2.5 Technology

In Victoria 3, technology is a mechanic that heavily intertwines with the rest of the game. Technology is represented through a technology tree, “a structure that controls progress from one technology to a better technology, enabling the player to create better facilities or more powerful units” (Ghys, 2012). In Victoria 3, technology is used to improve industry, nurture political development, increase diplomatic reach and grow military capabilities. To achieve this, the game divides technology into three main categories. These include production, military and society. Production technology in Victoria 3 focuses mainly on the industrial developments of the period, in particular the automation of industry by machines. Meanwhile, military technology gives countries access to improve the capabilities of their armies and navies. Finally, societal technology will open countries to improved bureaucracy and new ideas, potentially triggering political change.



Figure 2.8 A Section of the Production Technology Tree in Victoria 3 Which Depicts Early Industrialization and Railway Development

Every country starts with some technology researched, based on an approximation of every country's historic development, which can be seen in Figure 2.9. Western Europe and North America start the game with the most amount of technology researched, giving them a head start in developing. The imbalance is pushed even more with education as Western Europe and North America have a higher literacy rate than the rest of the world in 1836. With the exception of Japan, the rest of the world would have to perform large education reforms to be able to catch up with the West (Osterhammel & Camiller, 2014).

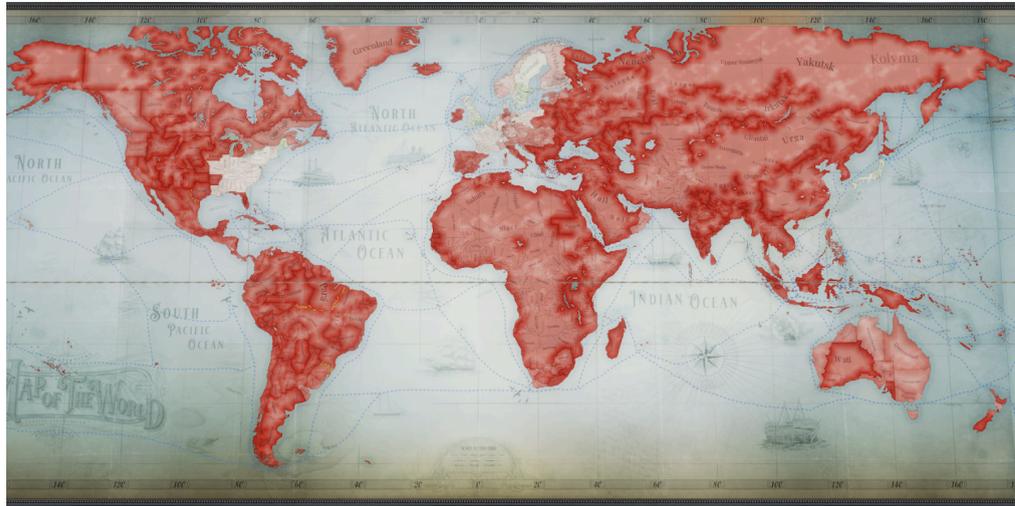


Figure 2.9 The Global Literacy Rate in the Start of Victoria 3