Game Development with Ren'Py

Introduction to Visual Novel Games Using Ren'Py, TyranoBuilder, and Twine

Robert Ciesla



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Printed on acid-free paper

This book is dedicated to my friend Jukka Virnes (1978–2018).

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About the Author



Robert Ciesla is a freelance writer from Helsinki, Finland. He has a BA in journalism and a knack for writing urban fiction and directing short films. Robert has worked on many video games on several platforms since being a kid in the mid-1990s. His personal web site is www.robertciesla.com.

About the Technical Reviewer



Daniel Luque Soria has been a Python developer for 5 years. He has worked as an Odoo developer in several companies. In his spare time, he has developed visual novels and Ren'Py-related tools and contributed to the Spanish localization of Ren'Py. He's currently focusing on game development with Unity3D.

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Introduction

If there's one genre that doesn't usually spring to mind when thinking of popular video games (or video games in general), it's anything text-based. Many gamers see these types of games as something archaic or boring, perhaps preferring to indulge in yet another first-person shooter. The reality, however, is very different.

Although an old genre, interactive fiction and its more modern cousin, the visual novel, are an increasingly thriving segment of the industry. For example, *Clannad HD Edition* by developer Key outranked some of the most popular action game franchises in Steam sales charts.¹ Although initially a mostly Japanese phenomenon, today visual novels are sold and/or downloaded in the millions worldwide. *Doki Doki Literature Club!* by Team Salvato, a free visual novel with optional paid add-ons, reached two million downloads in 2018 and continues to exhibit a massive, global fan following.

The three tools presented in this book, Ren'Py, Twine, and TyranoBuilder, offer everything you need for creating interactive fiction or visual novels for multiple platforms. Best of all, the first two are completely free to use. Gaining experience in any of these exceptional tools also opens doors to other development systems, should the need for this arise, as well as grants you with some general-purpose programming skills.

¹*Clannad HD* climbed on top of *Grand Theft Auto V* and *Call of Duty: Black Ops III* in the Steam sales charts of 2015. The game also received over \$540,000 during its crowdfunding phase. Steam by Valve Software is the largest online distribution platform for video games.

INTRODUCTION

With this book I aim to give you, the budding developer, the means you need to create your very own interactive adventures. Yet this book is not only a DIY manual for fans of text-based games, nor is it a history lesson, although that's certainly a part of it. First and foremost, I want to stir your creative capabilities and use language, any language, to its fullest capacity in creating commercially viable and meaningful titles of your own. Whether you choose humor, romance, fear, or some other part of the human experience as your main influence in your initial games, I urge you to hold nothing back, within limits of course, and enter the fray with complete confidence. At best we are, after all, creating immersive universes others can enjoy and relate to, like writers do.

CHAPTER 1

Stories and How to Craft Them

Words, like 3D graphics, are information. Unlike fancy 3D graphics, syllables put to good use convey a strong element of imaginative interpretation from the reader's part. One's imagination is quite simply sent soaring when reading. All of the abstract potential and lived experience stored in our brains surfaces when interpreting syllables and sentences (at least when one is enjoying what one is reading). It can be argued that a person can therefore provoke more complex inner emotions with pure language than with visual representations of things.

There's a reason literary classics like Homer's *Iliad* and Camus' *The Stranger* live on and storylines of 3D game franchises die after a few years in the market. This is not to downplay a huge part of the industry, but to remind developers that it's okay to challenge the player in co-creating your work in this powerful manner. It's okay to focus on emotional impact, which of course is no way limited to text-based games. But quite often too much emphasis is put on visuals at the expense of a gripping storyline and a rewarding dramatic arc. Outward minimalism can be a great co-creator to bringing out one's artistic ambitions in the world of video games as well.

CHAPTER 1 STORIES AND HOW TO CRAFT THEM

In this chapter we'll first examine some of the most common dramarelated concepts that are useful for anyone working in the field of writing fiction. Then, we'll explore the world of Aristotelian poetics. This is followed by an in-depth look at Joseph Campbell's "monomyth," a very popular trope in the world of entertainment, as well as the associated 12 character archetypes. Finally, we'll delve into some useful practices for all visual novelists.

A Little Introduction to Dramatic Elements

Some terms have become canonized throughout the history of literature, dating back to ancient Greece. Let's take a look at some of the most fundamental concepts and how they relate to newer forms of literature and thus also interactive fiction. These terms are useful for all types of storytelling. We'll start with the central concept of protagonist, then take on more terms in an alphabetical order.

Antagonist

An *antagonist* is a villain in a story (see Figure 1-1), that is, someone who makes life that little bit harder for our protagonist(s). Good antagonists challenge our heroes, providing them with obstacles that enable their growth. What usually separates an antagonist from an anti-hero is the end goal. The former may use dubious means to achieve a more or less morally sound goal. The latter will gladly rule over the world by any means necessary.

Note The following antagonists are best avoided due to oversaturation: moustache-twirling (more or less) southern gentlemen, powerful caped space kings, witches, and evil wizards who are definitely in the last age bracket before "dead" on all official documents.



Figure 1-1. Dr. Unpleasant, an antagonist (at least in the context of this book) at your service. The evil grin is a giveaway.

Protagonist

A *protagonist* is a leading character (see Figure 1-2) whose actions and decisions are watched most closely by the reader or gamer. Think the enigmatic Gordon Freeman from the *Half-Life* franchise or The Adventurer from the 1980s *Zork* series of interactive fiction games. More complicated projects may naturally include numerous different protagonists, each with their own challenges and dramatic arcs.

CHAPTER 1 STORIES AND HOW TO CRAFT THEM



Figure 1-2. Reginald Pennelegion, the protagonist from Taking Back August, this book's tutorial game

Not all protagonists are necessarily heroic or even morally sound. The beloved janitor Roger Wilco from the classic *Space Quest* series of games is a bit of a klutz, while Vegeta from the *Dragon Ball Z* universe can be somewhat of a snob (to say the least). Not all main characters need be from the goody-two-shoes school of drama. A bruised and bitter anti-hero can indeed be a fun protagonist to write about and to deliver brutal truths about the human condition in the process.

Alter Ego

An *alter ego* is a personality distinct from a character's usual self and a popular trope in visual novels. Think Clark Kent from the Superman universe. Alter egos may be necessary to hide one's true identity (think secret agent) or they may be borne out of some kind of mental issues, as is the case with characters suffering from multiple personality disorder.

Catharsis

A *catharsis* is sometimes the dramatic purging of a character's emotional baggage and/or stress. It is experienced after the completion of a major task, and it usually grants the character new skills and a peace of mind. In the visual novel sub-genre of dating simulators, forming a relationship or getting married constitutes a form of catharsis. In more fantasy-based games, defeating a powerful dragon or a malicious space lord is perhaps a type of catharsis as well.

Conflict

One of the most important concepts in any type of drama is conflict. Conflict is an often resolvable challenge, pitting a character against other characters or circumstances. The resolution of conflicts results in some type of prize, be it new skills or a better set of prospects for the hero/heroine and their allies.

Conflict isn't limited to the strenuous relationship between a main character and his or her antagonists. It can take place fully within the psyche of the leading character, in the form of phobias, neuroses, or other issues. Conflict can therefore be external or internal or a combination of both. Naturally, conflict can also manifest as political strife or be related to technology; a somewhat popular pop culture trope is "man vs. machine," after all. Great drama often ensues from conflict between humans and society at large, or nature, too.

Cliché

A cliché is an overused concept. Time turns most fresh ideas to clichés eventually. Many fans of visual novels are fine with some of the clichés in the genre, such as the ubiquitous high schooler protagonist. This may be because many people have themselves been an awkward high schooler at some point.

Deus Ex Machina

A relatively popular dramatic device, *deus ex machina* refers to an external, often all-powerful source that resolves some rather unsurmountable difficulties. The expression is Latin for "a god from the machine." Think of a powerful giant robot appearing out of nowhere to help your heroes or perhaps a benign artificial intelligence taking over the proceedings.

Double Entendre

Double entendre refers to a sentence which has two meanings. It can be either intentional or accidental. The former variety is often risqué in its nature, while the latter is not.

- Example #1: I'm having an old friend for dinner, a cannibal told me once.
- Example #2: Something went wrong in the car crash, expert says.

Exposition

The background information on characters and their everyday lives is called *exposition*. It's needed to make your protagonist more relatable for your audience. Scenes of exposition might explain some of the motivations for the characters in your visual novel, based on their personal history and interests.

Flat/Round Character

A flat character is more or less a background figure. He, she, or it isn't without a purpose, however. They simply aren't given that much time in your saga. Think of a mysterious shopkeeper who sells magic items and vanishes after a transaction.

A round character, on the other hand, is what your heroes and villains are characterized as. They are given the most exposition in your visual novel. They often have rich personalities and complicated motivations for their actions and desires. The word "flat" can also be used again to describe a main character who isn't well-rounded and believable enough to carry the story.

Fourth Wall

A fourth wall refers to agreed-upon invisible wall which divides the events of a dramatic work from its audience. When someone is "breaking the fourth wall," it means a character in a play, movie, visual novel, or other such work acknowledges members of the audience.

Examples of visual novels breaking the fourth wall include *Doki Doki Literature Club!* by Team Salvato (see Chapter 3) and *Snow Sakura* by D.O. to name just two; the genre lends itself well to this practice.

Narration/Narrator

Narration refers to one or more characters addressing the audience/ gamers directly, giving information or commenting on the twists in a story. A narrator can be either the protagonist or a separate, often anonymous entity. A narrator usually has more information than the heroes themselves.

Onomatopoeia

This term refers to noises that imitate their own meaning. *Onomatopoeia* is the vocal approximation of the associated sound (see Figure 1-3). Some examples are animal sounds, such as "meow," the feline classic, or "coo" made popular by pigeons. Other examples include "bang" in the context of a gun firing or the clock-inspired "tick tock." You get the idea. Onomatopoeia has been used to great effect in comic books and many visual novels.



Figure 1-3. Some examples of onomatopoeic visual expression

Personification

Personification is the approach of giving human attributes to abstract concepts, such as the sun or weather. When applied to non-human beings or objects (e.g., animals), it's known as *anthropomorphism* (see Figure 1-4). This is a very popular approach in art and culture dating back to the earliest days of recorded history. Many successful video game franchises feature personified protagonists and antagonists.



Figure 1-4. An anthropomorphic egg

Point of View (POV)

A point of view is simply the angle from which a story is told. This point of view can be divided into three types: objective, omniscient, and limited omniscient. An *objective POV* refers to a character who isn't any more knowledgeable than the audience, whereas a character with an *omniscient POV* knows everything about the proceedings. *A limited omniscient* POV sits between these two.

The typical visual novel protagonist perspective can be therefore described as a *first-person objective POV*. An all-wise oracle character would be described as a *third-person omniscient POV*.

Simile

A simile is simply the comparison of two different things using connecting words such as *like* or *than*.

For example: *He was cooler than a refrigerated zucchini. She was quiet like a phantom.*

Soliloquy

This term refers to a kind of monologue, which is only aimed at the audience (i.e., the player). During soliloquies other characters present in the scene stay quiet and blissfully ignorant of what was just being said.

Aristotelian Poetics

Greek philosopher **Aristotle** (384–322 BC) perhaps first outlined the still thriving principles of drama in his monumental work, *Poetics*, from 335 BC. Although his concepts may seem outdated to some, they are the core structure behind many popular and long-lived works of literature

and related fields. You may pick and choose the concepts that suit your particular needs as a game designer.

According to Aristotle, all art is a modified imitation of life. Interestingly, he referred to language-based art as "the unnamable art form," dividing it into tragedy, comedy, and the epic poem. Out of these three genres, tragedies and epics carried more value, since they could better convey moral lessons which were paramount back in the day. One may reach the conclusion that morality is often overlooked in current popular culture, especially in video games.

There are six core qualities of Aristotle's tragedies:

- 1. Morals: An overall noble quality to uphold decent morals.
- 2. Realism for the audience to relate to.
- 3. Fitness of character: Appropriate characteristics for the cast (e.g., brave knights, sneaky thieves).
- 4. Consistency: Characters need to continue living out their established qualities throughout the work.
- 5. Necessity of action: The law of probability or necessity must govern the work.
- 6. Idealism: Be truthful, but more beautiful than life.

As for comedy, the genre seemed to present to the world lesser, more frivolous characters and was thus lesser of an art form of the three. The art form of comedy was not entirely without merit in Aristotle's opinion, as it could serve well the purposes of political satire, thus at best reducing the tension between the rulers and the ruled. In modern times some of that logic may be lost. Just think of, say, those numerous comedic films starring **Adam Sandler** which may or may not influence the betterment of society (no offense to Mr. Sandler, of course).