UC Santa Cruz
UC Santa Cruz Electronic Theses and Dissertations

Title

Sonder: an examination of how choice creates meaning and the narrative effects of agency.

Permalink

https://escholarship.org/uc/item/0dn2z92t

Author

Focht, Cyril

Publication Date

2019

Copyright Information

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

SANTA CRUZ

SONDER: AN EXAMINATION OF HOW CHOICE CREATES MEANING

AND THE NARRATIVE EFFECTS OF AGENCY

A thesis submitted in partial satisfaction
of the requirements for the degree of

MASTER OF SCIENCE

in

COMPUTATIONAL MEDIA

by

Cyril Focht

June 2019

The Thesis of Cyril Focht
is approved:

_____

Professor Noah Wardrip-Fruin, Chair

_____

Professor Elizabeth Swensen

_____

Lori Kletzer
Vice Provost and Dean of Graduate Studies

CONTENTS

ABSTRACT

Sonder: an examination of how choice creates meaning and the narrative

effects of agency.

By

Cyril Focht

Choices in storygames are broadly understood in terms of how they affect causation and agency, however there is little scholarship in how choices add meaning to narrative context. This work extends that knowledge by looking at how Sonder, a storygame developed alongside this thesis, uses choice to convey characterization. We also discuss how Sonder frames the relationship between player and character, how current theory of agency can be used to understand this relationship, and how it uses agency to a narrative effect.

CHAPTER 1

INTRODUCTION

1.1 Sonder

Sonder, a piece of hypertext fiction developed alongside this thesis, is an anthology of short storygames about a day in people's lives. Each story follows a single protagonist, offering the player a glimpse into their lives, but not positioning the player as embodying those characters. Plot occurs mostly through the protagonists' conversations with other characters, with non-dialogue action used mostly in scene transitions. During dialogue some words are highlighted, which are options for the player to advance the dialogue. When highlighted words are moused over, a tooltip appears with some of the protagonist's thoughts about the conversation. Choices outside dialogue are highlighted descriptions of the protagonist's action. They are in-line descriptions that cycle through options when clicked, so only one option appears at a time. Examples from Sonder used in this thesis are limited to Chris's story, as his is the most developed at the time of writing.

Sam: "So, up to anything this **afternoon**?"

Sam: "So, up to anything this **afternoon**?"

the Christian fellowship that I usually avoid

Figure 1: Dialogue in Sonder. The word 'afternoon' is highlighted to indicate that it advances the dialogue when clicked (above), and displays Chris's thoughts when moused over (below).

1.2 Character and Player

The main design goal of Sonder is to show characterization using interaction, letting the player get to know the characters by exploring the choices afforded to them. Choices are often designed around asking what the player might want to do, rather than what those choices say about a character. Many choice-based storygames focus on providing a wide variety of options in a given situation, having many of those choices significantly impact outcomes in the story, and making choices feel more weighty. As the range of options increases, it consequently detracts the character's agency.

The tension here is that when the player is afforded more influence within a narrative space, the character they embody necessarily has less agency. If the player enacts a character with some degree of independent autonomy, this can be read as

2

the player imposing their will upon a character—not unlike a character responding to an audience shouting at a movie screen. Presenting a semi-autonomous character enacted by the player entails asking a different set of design questions, such as what decisions a character might make, opposed to what decisions a player would make. In these cases it is useful to look at a character less as an avatar through which the player enters a game world, and more as a narrator whose point of view filters the player's experience of the narrative. A useful perspective in looking at this relationship is to read the affordances of a narrative system as a dialogue between player and character.

1.3 Choice and Affect

Rather than asking questions about the significance of outcomes that follow choices, a player's motivation for making a choice, or even the player's feeling about having made a particular decision, Sonder uses choice as a means of exploring a character by looking at what choices that character considers and how the outcomes affect the reading of those choices. To understand how Sonder uses choice as characterization, I present a framework of choice hermeneutics. This framework builds on existing research of choice poetics and hypertext theory to interpret how choices are meaningful in themselves and how they add meaning to their surrounding context. Because choices suggest causation they also create juxtaposition, between events before and after a choice, between the choice and those events, and in the structure of possible outcomes.

1.3 Outline

The next chapter will review an overview of literature in player agency, narrative point of view, and poetics of choice. Chapter 3 will develop a framework of choice hermeneutics—drawing from an existing, complementary theory of choice poetics—and demonstrate this framework by analyzing the approach to choice design in Sonder as a means of characterization. Chapter 4 will feature a discussion of design approaches in Sonder as they relate to aesthetic distance, and how the use of choice influences character agency. Chapter 5 summarizes the previous two chapters and discusses ways in which this work can be expanded to continue expanding upon theories of choice poetics, study narrative point of view more broadly in interactive narrative, and examine ways increasing aesthetic distance can benefit interactive narratives.

CHAPTER 2

LITERATURE REVIEW

2.1 Choice Poetics and Narrative Design

Storygames frequently use choice as a means of interacting with and influencing narrative. While plenty of work has been done to understand the role choices can play in interactive narrative and how they can be understood, there is still plenty of work to be done on in this area. Aarseth (1997) laid some of the groundwork by applying approaches from literary theory and computer semiotics to develop perspectives of cybertext and ergodic literature. These perspectives reflect the relationships between player, author, and text, how interaction affects the reading of a work, and the role of structure in works that don't follow a traditionally linear structure.

Mawhorter et al (2014) lay out a preliminary framework of choice poetics, which investigates mode of engagement, choice idioms, and dimensions of player experience. Modes of engagement are focused on player decision-making, and outline common motivations of players with respect to choices. Choice idioms refer to patterns of choice structures in interactive narrative, looking at the structure is a useful step in analysis of affect. Player experience offers a player-centric look at how choice idioms are used and how choices can affect player experience.

Nay and Zagal (2017) apply a virtue ethics lens to choice analysis in a handful of storygames. One argument they make is that the use of choice defines moral

character. From this perspective, choices with no significant impact on outcomes are still meaningful because they offer insight into character, so virtue ethics becomes a useful analytical lens here because it is not concerned with outcomes. In their paper they mention the possibility of applying this lens to analyze a character, absent from player intention in making a choice, however they only present analysis of characters in terms of the player's decision-making based on the choices afforded to them. In the cases they discuss, characters are defined by the players and their analysis is mostly centered on the ways in which this manifests.

From a design perspective, choice is often approached by asking what the player might want to do in a given scenario, rather than what a character would do. Even in cases where the options are limited to those that a character would choose, there is often still a wide enough breadth to accommodate the player's desired choice. In a talk on her design approaches in branching narrative games, Maloney (2017) mentions using choice as a pillar of a character's personality. When working on a game that's part of a larger franchise the player is usually familiar with the characters beforehand, so they have some idea of what that character will and won't do. Her approach is to create distinct choices, based on things the character would do, that lead down different narrative rails. The character is well-defined, but by making the rails so distinct from one another, the choices cater to the player building their own version of that character.

Bernstein (2014) looks at writing game characters and choices in terms of objectives and obstacles. He uses a framework which includes unity of purpose, action, and trait. Unity of purpose is the degree to which a player's motivation aligns with a character's motivation, unity of action is the alignment between actions a character would take and actions the player desires to take, and unity of trait is the degree to which a character shares traits with the player. He argues that these elements become less important in the order listed, so unity of purpose is critical, but unity of trait is largely optional. There are however, a great deal of interesting and engaging stories that violate every part of this framework. The idea of a tragically flawed protagonist can't exist within this framework, and that is—in part—because the framework is heavily player-centric.

The hypertext community has been using links to convey meaning for decades, and plenty of this analytical and design knowledge can be applied to choices in storygames. Hyperlinks are often compared to modes of transportation, driving the user from on page to another and used as a means of navigating the narrative space. Tosca (1999) asserts that this metaphor of transportation is lacking, and suggests that comparing them to bridges might be a more useful perspective. A bridge connects two masses of land, but is also a structure in itself, which is worth looking at both on its own terms and in terms of how it connects the land. Links create a juxtaposition between ideas, as well as adding their own semantic value to the ideas being connected.

In a follow-up paper Tosca (2000) extends linguistic relevance theory to analysis of hyperlinks. Relevance theory, in short, is concerned with how a speaker achieves the greatest cognitive effect with smallest processing effort. A basic example of which would be asking someone if they know what time it is. It is more common to respond to such a question by stating the time rather than a simple yes or no, as there is an implication associated with the question that it would be followed up by asking what the time is. In a hypertext context, links convey their own meaning, which—based on the context of the link—conveys an idea of possibilities that could result from following this link. Because of this, links have a suspended meaning until the result has been observed. Since the result changes the context of a link, a given link can have different meanings before and after following it.

Morgan (2002) takes a similar approach, drawing on linguistic-rhetorical traditions as a lens to the functions links can serve as connectors. She derives two functions of hyperlinks within a text, conjunctive and disjunctive. Conjunctive functionality, she suggests, is the way in which a hyperlink creates meaningful relationships between two nodes. Disjunctive functionality, on the other hand, describes ways in which hyperlinks are used for dissonant effects. Much of the meaning created by these hyperlinks not only has to do with the context of the starting node and the text of the link itself, but also a user's combination of expectations and lack of awareness of the destination node—which is how disjunctive function occurs.

2.2 Agency and Narrative Point of View

8

Agency is a crucial part of the relationship between player and character, and this relationship is important to understanding narrative point of view. Murray (1997) first introduces the concept of agency, characterizing it as the ability to take action within a system. Her use of the term is loosely defined, and while she argues that participation and agency are separate phenomena, her discussion implies that agency is correlated with the range of distinct actions that can be taken.

Mateas (2001) responds to Murray's discussion of agency by integrating Laurel's (1986) proposed Aristotelian interactive poetics. He responds to a question posed by Murray regarding how stories can be combined with agency, suggesting that agency results from the actions suggested by the story. Wardrip-Fruin et al (2009) deepen these discussions by contrasting player desires with the affordances supported by the system. A key distinction they make is that the aforementioned player desires are worth consideration insofar as they are prompted by the system.

Mason (2013) makes a similar move to expand the vocabulary of agency, as well as immersion. She distinguishes between diegetic and extra-diegetic agency, and follows by distinguishing mechanical and narrative immersion. Diegetic choices are those that the player makes as a presence in the story world, and extra-diegetic are made more as a removed observer. Narrative immersion refers to the audience's presence within a narrative, whereas mechanical immersion is more akin to a flow state, in which the player is engrossed in performing actions. She uses these

distinctions in an attempt to disentangle these effects from one another, and use this disentanglement to better understand how an audience relates to an interactive text.

Fendt et al (2012) empirically investigate the degree to which a player's sense of agency is affected by the amount of impact their choice has on an overall story. They present players with a choose your own adventure story, one with significantly branching paths, one without branches but acknowledges player choice, and one that does not acknowledge player choice, then ask the players to answer survey questions about their sense of agency. They find that there is little difference in a player's sense of agency between their choices having significant impact compared to their choices only being acknowledged. They conclude that a player's sense of agency is more closely tied to feedback from a system, rather than significant changes in narrative outcomes.

Kway and Mitchell (2018) arrive at a similar conclusion, finding that agency is tied less to consequences of choices and more to the affective significance of a choice. They note that agency is tied closely to a player's ability to engage in meaningful expression with a character, within the constraints of that character's personality. They find that this expression—and the perceived agency it leads to—is a result of changes in character behavior, reflect not by what a character does, but how they do it.

These discussions of agency are generally approached from the perspective of the player, so often overlook their implications in terms of how narrative relates to the player, especially character. Vella (2016) addresses this question, quite directly, asking what constitutes a character when player interaction is accounted for. He grounds his approach in literary theory, looking at elements that make characterizing statements to an audience, drawing on elements that are applicable from literary theory and pointing out elements unique to interactive media. Particularly of interest are the capabilities and limitations subcategory of ludic elements, dealing with how affordances of a system make characterizing statements.

Jørgensen (2010) looks at games which use the player character more as a foil to companion characters. She argues, in the examples she uses, that the player character drives the plot, however the motivations and character progressions occur through the supporting characters and that they are the focal point of the narrative, not the player character.

Short (2011) describes a taxonomy of ways in which games approach the player's relationship to protagonist and story world in interactive fiction. With changes in the player's role, there also must be changes in how the player negotiates a story with a text. This taxonomy takes into account elements such as what ways the player is able to influence the world, how the game positions player choice, and whether the player is enacting a character or influencing events in a world.

As we see, agency if often thought of as an end in itself, but the way it gets used can achieve other effects. This research forms an understanding of how agency can be used as a way of communicating to the player, through the affordances of a system.

2.3 Storygames

A number of existing storygames use choice to achieve effects similar to those in Sonder. Of the storygames in this review, the most similar to Sonder in terms of choice design is *Bloom* (2015), which uses the contents of choices to characterize the protagonist. Choices that are presented to the player reflect aspects of Cordy, the protagonist, revealing some insight into her thoughts.

Night in the Woods (2017) mostly uses choice to guide narrative direction, however there are moments where the choices are used to convey Mae's mental state. For example, in a conversation after leaving a party, the text of options shown to the player communicate Mae's intention, but the dialogue following those options doesn't match. This misalignment shows Mae's drunken state and reinforces the sense that she is stumbling over her words.

Life is Strange (2015) designs choices so that options are diametrically opposed to one another. This reinforces the game's themes of confusion in adolescence and the internal conflict that goes along with growth. However, another effect this has is

that choices often don't convey a single, internally conflicted, Max Caulfield, but multiple versions of Max which are revealed in various story branches.

Kentucky Route Zero (2013) deliberately plays with multiple versions of characters manifesting in different branches. It uses choice to collaboratively write character with the player. The core of each character is shown to the player, with some flexibility in their details, and the player decides which version of each character is played out through choices.

EXTREME MEATPUNKS FOREVER (2018) uses choice to indicate which character is the next to speak in conversation, which affects the flow of conversation. The choices here are used less to show or shape a character, and more to guide narrative in a way that expresses the characters' relationships to one another.

CHAPTER 3

CHOICE HERMENEUTICS

3.1 A Complement to Poetics

Choices in storygames do more than create narrative branches, and mean more than cause and effect. Previous research on choice has focused on poetics of choice, the effects choices have on the player, but hasn't addressed hermeneutics, how choices add meaning to narrative and how that meaning can be interpreted. Mawhorter et al (2014) have lain out a theory of choice poetics, looking at how choices impact player experience and engagement with an interactive narrative. While there is a significant overlap due to the complementary nature of poetics and hermeneutics (Mawhorter 2016), the framework they present—consisting of modes of player engagement, choice idioms, and dimensions of player experience—lacks many important aspects that a theory of choice hermeneutics would address. Short (2019) points out that one major shortcoming of this framework is that it doesn't account for reflective choice (Manning 2018). Addressing this criticism is the main goal of this chapter, as reflective choices are addressed more by a hermeneutic framework than a poetic one.

Centering the approach to analysis on the player's experience leaves out the way meaning is conveyed through choices themselves. The semantics of linking structures missing from the choice poetics framework have been discussed in hypertext literature regarding semantics of hyperlinks (Tosca 1999, Tosca 2000, Morgan 2002), as shown in the previous chapter. Tosca (2000) uses an analogy

relating links to bridges, as they convey meaning in themselves as individual objects, but also convey meaning in the way they connect two nodes. Following from this line of reasoning, choices in storygames can have a similar semantic effect, used for more than traversing a narrative and communicating more than cause and effect. This linking structure creates juxtaposition between the choice, the events surrounding it, and the structure of possible events that follow it.

Like Mawhorter's (2014) framework of choice poetics, the hermeneutics framework I present is limited to discrete, explicit choices. It only accounts for storygames that state options to the player, such as in hypertext. Forms such as parser-based fiction, where options are not stated to the player, or games that feature real-time decisions, in which the timing of a choice affects outcomes, are not covered by this framework.

The approach to choice design in Sonder revolves around the ways in which choices reflect aspects of the characters making those choices; Vella (2016) points out "If the player-character is defined by what they can do in the gameworld, they are equally defined by what they cannot do". The existing choice poetics framework does not lend itself to a mode of analysis in line with such design intentions. An analysis of choices in Sonder through the lens of the framework presented in this chapter will be used to demonstrate it as an interpretive tool.

3.2 An Extended Model of Choice Structure

The model of choice structure presented by Mawhorter et al (2014)—consisting of framing, options, and outcomes—identifies the base of choice structure. This model is sufficient for a theory of poetics but lacks some important aspects for a hermeneutic approach. Hyperlinks and choices have a similar structural base, so it stands to reason that the structure of Tosca's (2000) theory of links would be similar to this model of choice structure. A departure node and arrival node are semantically connected by a link—like how framing leads to a choice which then leads to outcomes—but this model doesn't account for some important, more nuanced elements. A list of these elements is as follows: **Departure Context**, which includes **Overall Context** and **Immediate Context**; a **Choice**, which includes a **Choice Point**, **Choice List**, **Options**, and a **Selection**; and **Arrival Context**, which includes **Relevance**, **Character Action**, **World Action**, and **Gestalt Structure**.
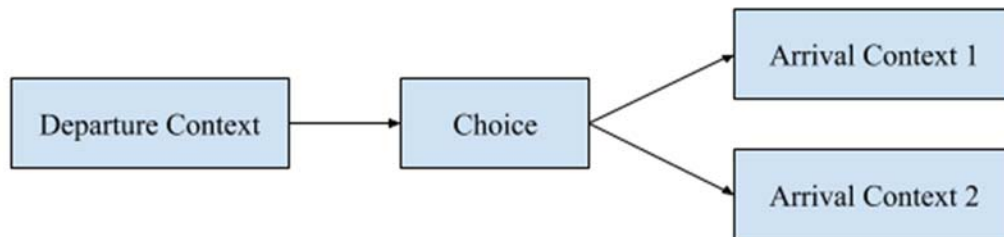

Figure 2: Simple diagram of choice structure.

Departure Context—similarly to a departure node in hypertext—is the known information leading up to where a choice is made. The distinction between departure context and framing is that departure context encompases all information leading to a choice. With respect to choice, most of its significance is the way it

16

frames a choice. However, I see a need to use different language to account for information that might not be part of how a choice is framed, but still affects the reading of a choice. Departure context includes the **Overall Context** of everything known about the narrative leading up to a choice, and the **Immediate Context** prompts a choice to occur. To compare this to hypertext would be the difference between every node leading to a given link as opposed to the node in which that link occurs. The framing of a choice predominantly occurs in the immediate context, but there can be significant amounts of framing done in the overall context which affect the way the immediate context frames a choice.
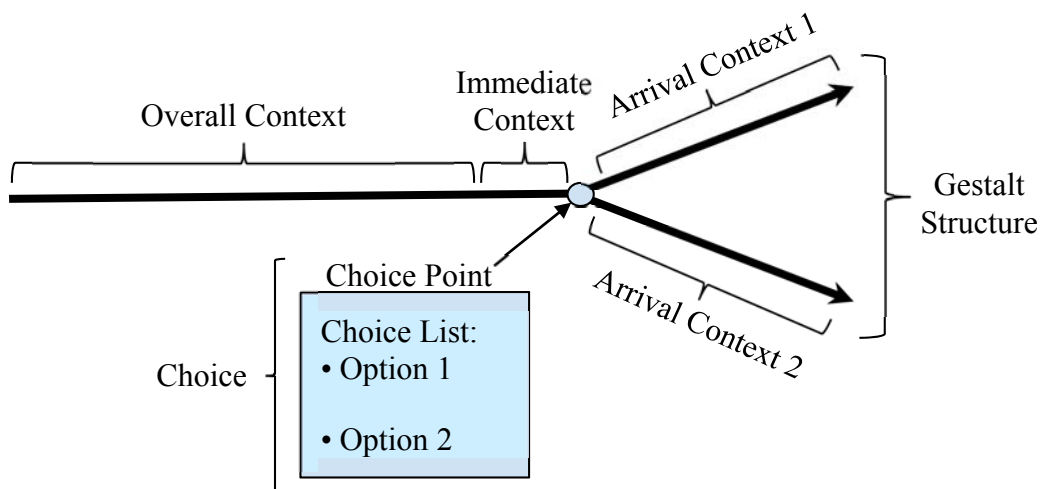
Figure 3: Detailed diagram of choice structure.

Departure and arrival contexts are connected in the middle by a **Choice**. Mawhorter et al (2014) refer to this as the options of a choice structure, but options only describe an aspect of this larger structure—like with framing—and in this case it is important to disambiguate. A **Choice Point** is the point at which a choice occurs, or any point at which the player provides some meaningful narrative input. At any

choice point, the player is shown a **Choice List**, which is the list of options the player can select from. The choice list is composed of **Options**, the individual elements that can be selected from the list, of which the **Selection** is the option the player traverses to the arrival context.

	Explicit	Implicit
Inclusion	Explicitly included	Implicitly included
Exclusion	Explicitly excluded	Implicitly excluded

Table 1: Types of options which can occur in a choice list

The content of an option is important to its reading, but the way in which an option is presented can affect the reading as well. For example, options can be explicitly or implicitly included or excluded in a choice list (Table 3.1). Among explicit options, whether included or excluded, the ordering of options can have significance.

- **Explicit Inclusion** describes options that are stated to the player to be selectable. Any text or options in a menu that can be selected are explicitly included. The way content of options is presented can affect the reading, such as ordering of options. In Chris's first scene, when he sees Cornell being verbally abused, the choice list is composed of Chris sitting with Cornell or walking past him.

18

- **Explicit Exclusion** describes an option that is brought to a player's attention, but the player does not have the ability to select that option. These options can be used in conjunction with explicitly included options to communicate things that a character considers but is ultimately unwilling or unable to do. The moment when Chris sees that his mom is calling him, the first option shown to the player is to hang up the phone, but this option is not selectable by the player, demonstrating his desire not to speak to his mother and forcing himself to do so.

- **Implicit Exclusion** describes anything that could be possible at a choice point, but is understood to be outside the scope of what is likely at that choice point. On a surface level, a character could at any point roll around on the floor, or something else similarly out of the ordinary, but not only would that be outside the scope of what a character would do, such actions are generally far outside the realm of things a character would even consider. This makes a larger statement, however, when there are options a player might expect to see in a choice list that are not included. When Chris arrives late to class, seeing that selecting the nearest seat on the list suggests that there might also be options for him to sit in another seat, but the exclusion of those options speaks to a hurried response to his tardiness.

- **Implicit Inclusion** describes options that can be selected, but are not stated to be selectable. This includes things like responding with silence in games

like The Walking Dead, where the option is always present but is never explicitly part of the list of dialogue responses.

Arrival Context is the set of actions that occur in response to the selection of a choice. I use different language than Mawhorter et al (2014) mostly for the sake of consistency and to account for the **Relevance** of a choice, drawing directly from Tosca's (2000) theory. **Relevance** of the selection feeds directly from choice to the arrival context; it describes the expectations that can be formed about the arrival context based on the content of the selection. Action usually follows choice, and the first action that occurs in the arrival context is often the **Character Action**— the action taken by a character prompted by the selection. Following that is the **World Action**, the way the world state changes based on, and in response to, the character action. There can be effects other than action that follow from a choice, but this framework is limited in that it does not account for other effects.

Relevance could be interpreted to be either part of a choice or part of the arrival context, as such expectations are formed based on the content of options in a choice. However, like links there can be a suspended meaning of options which is only resolved once the arrival context is revealed (Tosca 2000). The importance of relevance in this framework is due to the double implicature that occurs in traversal, or the two phases of interpretation that occur during the suspension of meaning and after that suspension is resolved. The first implicature that occurs is in how a choice and its options are interpreted. This implicature is formed based on the departure

20

context and choice, but the arrival context has no bearing on this, as it has yet to be read. The second implicature occurs in seeing how the selection relates to the arrival context. The second implicature, however, is affected by how the relevance of the selection aligns with the rest of the arrival context. Choice outcomes are usually written to have conjunctive function, so the relevance aligns closely to the character's action, but there is space for the choice to serve a disjunctive function, where there is a dissonance between the relevance of an option and its resulting character action.

Expanding on this, I argue that there is a third implicature that occurs upon rereading when the player has been exposed to multiple paths, generally before they have reached closure (Mitchell and McGee 2012). This third implicature results from the multilinear structure of storygames (Aarseth 1997), understood by the **gestalt structure** of arrival contexts. Arrival contexts following from a choice represent a possibility space, so every event within that space represents some aspect of a character. If a choice reflects what a character will do, the results of choices also reflect that character.

3.3 Choice Idioms

Aside from choice structure, the most significant overlap between this theory and Mawhorter's (2014) poetics is the coverage of choice idioms. Expanding on his model of choice structure highlights some nuance in the patterns of choice idioms he describes, which are less significant from a poetics perspective.

- Unchoices are choices that have only one option. In terms of this expanded framework, these choices are characterized by their choice list. Their significance lies in the lack of explicitly included options— which calls attention to the implicit exclusion of other possible options—so the readings of these choices is grounded in the negative space of what the character can't or won't do.

- Dead-ends are options which result in the end of the story, usually in a way that is considered unsatisfying. It is correct to say that dead-ends are a pattern of outcome, but more specifically they describe a pattern in world action. Character action isn't necessarily related, as dead-ends can often occur in ways that are seemingly unrelated to character action. Traversals of dead-end options that are considered unsatisfying occur due to a dissonance between relevance and world action.

- False choices are choices in which all options lead to the same outcome. Similar to dead-ends, false choices describe a pattern in world action where each option in a choice list leads—usually through different character actions—to the same world action. This pattern calls attention to the relationship between relevance and world action, since character action might not be significant in the reading of a false choice. The gestalt structure often only consists a single part (and if not, that parts are very similar)

which, among other things, communicates an inevitability of factors outside the character's control.

- Blind choices offer little context for the player to form distinct expectations of various options. This pattern primarily deals with the relationship between a choice and its departure context. There may be numerous sub-categories of blind choices. Blind choices are defined in a way that describes initial context failing to inform a choice, but they can be presented in a way that either the overall or immediate context conceals information.

The structural patterns these idioms describe can be used for specific effects in how choices add meaning to their surrounding context. Looking at idioms helps us understand how the gestalt structure of a choice adds meaning in its third implicature.

3.4 Analysis Case Study

I use Sonder as a case study to demonstrate the choice hermeneutics framework presented in this chapter, analyzing how reflective choice is used to show aspects of Chris's character.

3.4.1 Non-Dialogue Choices

Of the choices in the piece, the ones that occur outside of dialogue are the most straightforward for analysis. When Chris notices Cornell being verbally abused, he

makes a decision whether or not to sit down with Cornell. The two explicitly included options are to sit with Cornell or continue walking, ignoring Cornell. Before Chris has taken any actions we are shown an insight into his decision-making process. His first instinct is to sit beside Cornell, however he doesn't feel so strongly about that instinct that he wouldn't ignore it. The order of options is meaningful, as this moment would read differently if the first option was for Chris to walk past Cornell

The suited man stops yelling and continues on his way. Chris watches him leave and **sits by the homeless man**.

→

The suited man stops yelling and continues on his way. Chris watches him leave and **continues walking**.

→

Figure 4: Chris decides whether or not to sit with Cornell. The text defaults to sitting with Cornell (top). When the highlighted text is clicked it changes to show a different option (bottom) and cycles between the two on subsequent clicks.

Following this interaction with Cornell, Chris walks into class tardy. We see an obvious reason for him to be late if he stops to talk with Cornell, but not so if he simply continues past. While not a false choice, it follows a similar pattern where

the same world action occurs, albeit one option has a delayed effect. This convergence on a single world action indicates a predisposition on Chris's part to arriving late to class, maybe that it's a recurring problem for him. Upon arrival we are presented with an unchoice for Chris to sit in the first available seat, which highlights the implicit exclusion of an option to select another seat. There are any number of assumptions we might make about Chris at this point—that he is anxious about walking in after the lecture has begun, that he is too apathetic to select another seat, or simply that he prefers sitting toward the outside of the room—but it clearly indicates that he isn't the type of person to find a seat in the middle of a lecture hall after the lecture has begun.

Later in the story, when Chris receives a phone call from his mother, we are immediately presented with the explicitly excluded option not to answer the phone. Like before, during his interaction with Cornell, the ordering of this option indicates that he has a desire not to speak with his mother. However the only included option is to answer the phone, which shows his ultimate unwillingness to not answer.

3.4.2 Dialogue Choices

Options usually communicate proceeding character action, for example when the text of a dialogue option mirrors the line spoken upon its selection. This approach leaves no room for disjunctive function, since there's such a high overlap between relevance and character action. Dialogue options in Sonder are vague, showing the words that prompt response and the character's thoughts about their responses. By

writing these choices with such a degree of ambiguity, the player is left guessing at what possible character actions will result from a selection.

In Chris's conversation with his friends, the information given about choices align closely with his responding character action, the only information Chris doesn't share, that the player knows, is his reasoning for not going out drinking with them. This is in stark contrast with his conversation with his mother, where we see Chris consistently hiding information from her, especially regarding his sexuality. The disjunctive function that appears here is telling of their relationship, since the player might expect the same open dialogue seen earlier where Chris responds without filtering the thoughts shown to the player, instead we see Chris responding in a way that is opposite what a player might expect given the information surrounding each option.

Mom: "Well, It wouldn't kill you to call once in awhile, just to let your father and me know that you're **still alive**."

just barely

Figure 5: Chris's conversation with his mother.

Additionally, during the same conversation, there's a reversal of resulting action following a selection. Up to this point Chris's character action has immediately

followed every choice, followed by world action. In his conversation with his mother most choices are followed by world action—his mother continuing to speak—character action, and more world action. This adds another layer to show how his mother dominates the conversation, Chris not being able to respond as he would in other conversations.

During his conversation with Dave, the conversation has more significant branching than Chris's other conversations. The gestalt structure of conversational directions all reveal differing aspects of Chris's motivation. It could be argued that all of these motivations are present in each branch, but the conversational direction depends on which of these motivations surface. In every version of this conversation, Chris in some way arrives at expressing his reservations about joining the church because of his sexuality. This indicates that it might be his prime motivation during this conversation. In some branches Chris expresses his history with how he has been hurt by the church, and he discusses this in one branch with more depth than the others. As a minor motivation, in one branch he expresses his concern about about the group avoiding weighty topics, and instead uncritically performing religious rituals.

Dave: "You make it sound like the word of God is a **trap** that we're trying to **bait** with pizza."

sure felt like it growing up

Figure 6: Chris's conversation with Dave about Christianity. The highlighted words 'trap' and 'bait' connote the flow of conversation that follows their selection.

The text of dialogue options in this conversation—in contrast with the previous conversation with his mother—suggest the proceeding flow of conversation. When Dave says "You make it sound like the word of God is a trap that we're trying to bait with pizza." the words highlighted as options are "trap" and "bait." The arrival context from selecting "trap" is the conversation branch where Chris speaks most to having been hurt by the Church. Whereas selecting "bait" leads to conversations where Chris is more comfortable about the conversation overall.

3.5 Conclusion

This chapter has outlined a framework of choice hermeneutics, building from existing work in choice poetics and hypertext. This framework breaks down the choice structure outlined by Mawhorter et al (2014) into more detail to look at more elements of choices which can be accounted for in analysis, how choices are contextualized by the events they connect, how choices add meaning by connecting events, and how they connect the structure of possible outcomes. Choice idioms,

drawing from choice poetics, are reframed in terms of how they add meaning to

choices by structural patterns.

CHAPTER 4

AESTHETIC DISTANCE

4.1 Character Agency

There is a fundamental tension that exists between the player's agency and the point of view character's agency. Interactive drama positions the player as an actor in the narrative, which means that the avatar through which the player acts in the world has little agency compared to the player. Compare this to games in which the point of view character is reasonably well-written without the player's narrative input; in these cases the character has more agency to push back against ways the player might want to influence the narrative.

Because the player takes such an active role in ergodic literature (Aarseth 1997), it isn't sufficient to approach a work solely absent of the player. The framework presented in the previous chapter is aimed at filling in gaps of existing theory in aspects that can be separated from player interaction, however the way in which a piece positions the player in relation to the narrative ultimately needs to be considered in analysis. Short (2011), discussed in the literature review, taxonomizes some of these positions looking at how player interaction is positioned in a narrative context, how much influence the player has over the world, and what the player's relationship is to characters in the narrative. The elements accounted for in this taxonomy play into the way tension between agencies is managed in a given narrative.

The approach to writing and design in Sonder is to stress the separation between player and character by heightening the characters' agency instead of the player's. Rudine Sims Bishop (1990), writing on diversity in children's literature, claims that

> Books are sometimes windows, offering views of worlds that may be real or imagined, familiar or strange. These windows are also sliding glass doors, and readers have only to walk through in imagination to become part of whatever world has been created or recreated by the author. When lighting conditions are just right, however, a window can also be a mirror.

Following this metaphor, Sonder is thematically positioned as a window, without crossing the threshold into being a sliding glass door. Because of this, the interactions of this piece are aimed at offering the player insight into a character without positioning the player as becoming any of the characters. We see Chris's interactions and some of his thoughts, but will never fully understand the experience of being Chris.

4.2 Aesthetic Distance

The difficulty of establishing separation between player and character in interactive narratives lies in choice design. When choices are framed as the player making a decision on the part of a character, it can be difficult to distinguish where the boundary lies between player and character. As discussed in the literature review, Nay and Zagal (2017) argue that from a perspective of virtue ethics the character is defined by the player, as actions taken are decided by the player. Their primary question is regarding how a player's choice reflects moral insight on that character. However, that approach assumes the character asserts little agency and that actions are primarily decided by the player. If a character has sufficient agency in a

31

narrative the presence, and absence, of specific choices reflects on a character, regardless of player action. They acknowledge this conclusion, saying that choices with trivial effects on story outcome are meaningful because they reflect a limited space of character intentions, which implies that character agency is an element to be accounted for in such a reading.

Narrative immersion is often thought of as positioning the player within the story world. But, as Mason (2013) points out, not only is immersion not necessarily interlinked with the player's ability to affect narrative outcomes, narrative immersion is not necessarily even related to the player's position within the story world. By framing the choices in Sonder less as steering plot and more as exploring a character, there is a heightened separation between player and character. This distance between player and character is an aspect of aesthetic distance which is underexplored in games.

The language we use to talk about game characters reinforces the lack of exploration in this design direction, which in turn reinforces the language used to talk about characters. Most of the vocabulary used to talk about character—in the context of player interaction—frames the character with little distance from the player. "Player character", "enactment", "embodying a character", even "to play as" a character all ground the character in their relationship to the player. "Protagonist" fails to capture the nature of interaction between player and character, and "avatar" isn't a useful term for talking about character. Not to say that this

language is problematic, but it is limited in a way that fails to describe characters through which the player gives input but aren't defined by the player. This is the reason I have used "point of view character" in this thesis when the distinction has needed to be made, but it is similarly limited in the same way as protagonist.

4.3 Dialogue With the Player

Choices in storygames are in a sense a dialogue between the player and the character. This is in line with Tosca's (2000) assertion that hypertext is a dialogue with the reader due to the reader's active role in the text. Various scholars have presented contrasting views on what the affordances of a system mean for the relationship between player and character. Wardrip-Fruin et al (2009) argue that agency occurs when the player's desires are supported by affordances of the system, yet Vella (2016) argues that these affordances are where characterization is expressed. I argue that these positions are not as conflicting as they may appear, and that affordances are where the dialogue between player and character is negotiated.

A player's intent is often deeply entangled with a character's intent, and this perspective of affordances as dialogue offers useful insight to disentangle the two. The questions at play in this disentanglement are: how affordances communicate character, what can be read from the contextualization of those affordances, how that contextualization communicates a model of affordances, and how the player uses those affordances to explore a story space. Or, more simply, how the

affordances are used to communicate to the player and how the player can use them to communicate back into the narrative.

This dialogue can also be understood as a process of resolving the tension between player and character agency to settle on a narrative direction. It can often take the form of a player asserting agency over a character, when a higher range of action is afforded to the player than what is suggested by the character. It can, however, look more like collaboration between player and character when a higher degree of agency is afforded to the character. The form this dialogue takes is one of the more distinguishable ways aesthetic distance of player and character can be communicated.

An example of how this dialogue can be used for a character to assert agency can be seen in disjunctive function (Morgan 2002), which is often regarded as a mistake in narrative design. Disjunctive function occurs when there is a dissonance in a linking structure, so in the case of choices the relevance of an option is in some way dissonant with its outcome. When the dissonance is caused by character action it calls attention to the character asserting their agency against the player, which can take the form of changing their mind, hiding information from the player, or demonstrate an internal conflict.

Understanding agency in this way also changes the question of responsibility (Mason 2013), or the player's role in undesirable narrative choices. Rather than the

player shouldering responsibility for a choice, agency is used to communicate emotional affect. This is still different than passive observation, as interaction is used to convey meaning, but it is not the same as the player directly causing an outcome. In the examples Mason cites, the option not to take a regrettable choice is not afforded to the player, so the player cannot diegetically make a different decision. Just as the audience is not complicit in observing a character making poor decisions, the player is not complicit when they are only afforded choices they might want to avoid.

Sonder manages this dialogue between player and character by designing choices from the perspective of exploring a character space. Mason (2013) talks about how the concept of a story space is changed in interactive narrative and how the experience of digital narratives is impacted by agency and affect. One of the ways this manifests is the player's exploration of a story space, of which character space is a subset. Story space, in the context of branching narrative, is characterized by the range of possibilities in a story. Character space, then, is the space of possible character choices and actions within a narrative.

4.4 Narrative Entitlement Sims

Popular wisdom in narrative design often includes heightening a player's sense of identity with a protagonist or avatar. This often takes the form of positioning the player as a character through an avatar, but can also take the form of letting the player write the protagonist, or writing the protagonist to make any decision the

player may want them to make. This advice ultimately amounts to methods of breaking down aesthetic distance, but what effects can be gained from taking an opposite approach, building up this distance?

In a GDC talk Meg Jayanth (2016) critiques the approach to games writing that centers characters, and narrative overall, around the player and their desires. She argues that affording non-player characters more agency to push back against decisions made by the protagonist can create more developed characters. I argue that the same reasoning can be applied from dialogue between protagonist and NPC to the dialogue between player and protagonist, outlined in the previous section. In the same way NPCs become more developed by asserting more agency, point of view characters can have more depth and complexity when they are distanced from the player.

Citing a previous talk given by Matt Boch (2015), Jayanth (2016) goes on to critique entitlement sims, a term which describes games designed to uncritically cater to player desires. She emphasizes the importance of pushing back against these entitlement simulation games as a way of subverting imperialist power fantasies. Building on her approach to writing NPCs that don't cater to the player, writing characters in a way that distances them from the player can be another useful method in pushing back against problematic design practices.

4.5 Conclusion

This chapter explores the tension that exists between player agency and character agency, where that tension comes from, and how it can be managed. Both agencies are expressed through the affordances of the system, so reading those affordances as a dialogue between player and character is useful for disentangling player and character intent. Surfacing character intent to the player is more effective when it can be disentangled from player intent, and provides a greater depth to characters. Reading affordances as this dialogue between agencies also allows us to use agency to convey subtext, rather than being an end in itself.

CHAPTER 5

CONCLUSION

5.1 Choice Hermeneutics

Expanding on previous research in the area of Choice poetics, chapter three has presented a hermeneutic framework for analyzing discrete choices in storygames. This framework breaks down previous models of choice structure into more detailed elements, adds elements useful to a hermeneutics approach, and synthesises how these elements are interrelated and add meaning to one another.

Choice poetics offers an approach to understanding player experience that arises from interacting with a choice, this hermeneutic framework offers a complementary approach of interpreting how choices add meaning in a storygame. A complete understanding of choice would incorporate both of these approaches, looking at interpreting a media artifact formally, on its own terms, and the experience of interacting with it.

This framework is demonstrated by applying it to a reading of one of the stories in Sonder, discussing how aspects of Chris's character are shown through his choices and how those choices are contextualized to the player. This reading takes into account the elements outlined in this structural framework to demonstrate both how the choices are meaningful in themselves and how they add meaning to their surrounding context.

5.2 Aesthetic Distance

The reading of Sonder from the previous chapter is situated with design goals of the game in chapter four. There is a tension that exists between player agency and character agency, and Sonder manages that tension to show an underexplored approach to narrative point of view.

Previous research has indicated that player agency is characterized by the affordances of a system, and that character agency is expressed through the same affordances. While it may seem contradictory, I show that these interpretations complement one another and that these system affordances can be understood as a dialogue between player and character. Understanding this dialogue can help to disentangle player intent from character intent, which allows for more aesthetic distance between player and character. Creating this distance can be used as a way of developing characters or giving them depth.

5.3 Future Work

The choice hermeneutics framework outlined in chapter three applies specifically to choices which are discrete and explicit. More work needs to be done to develop a theory which is applicable to continuous and implicit choices. Continuous choices may require a different mode of analysis; elements like choice points fail to apply and choice lists become less discernible. By nature, implicit choices link contexts implicitly, as opposed to the way explicit choices create explicit links between

contexts. While there may be significant overlap, a new framework must be developed to account for these differences.

Distance between player and character is only one of many elements that determines narrative point of view. Many other elements have been outlined, but some elements are missing from a more complete taxonomy of narrative points of view in story games. Such a taxonomy needs to describe more details of the player's relationship to characters, their relationship to the story world, and the range of interactions afforded to them.

REFERENCES

Aarseth, Espen J. *Cybertext: perspectives on ergodic literature*. JHU Press, 1997.

Bernstein, Jeremy. "Creating Strong Video Game Characters" GDC 2014. Retrieved from https://www.youtube.com/watch?v=4mgK2hL33Vw. Accessed Nov. 13, 2018.

Boch, Matt. "Microtalks 2015: One Hour, Ten Speakers, Games and Play and Us" GDC 2015. Retrieved from https://www.gdcvault.com/play/1022011/GDC-Microtalks-2015-One-Hour. Accessed Nov. 13, 2018.

Cardboard Computer. *Kentucky Route Zero.* Cardboard Computer, 2013.

Caelyn Sandel. *Bloom.* Self-Published, 2015.

Dontnod Entertainment. *Life is Strange*. Square Enix, 2015.

Fendt, Matthew William, Brent Harrison, Stephen G. Ware, Rogelio E. Cardona-Rivera, and David L. Roberts. "Achieving the illusion of agency." In *International Conference on Interactive Digital Storytelling*, pp. 114-125. Springer, Berlin, Heidelberg, 2012.

Heather Flowers. *EXTREME MEATPUNKS FOREVER.* Self-Published, 2018.

Infinite Fall. *Night in the Woods.* Finji, 2017.

Jayanth, Meg. "Forget Protagonists: Writing NPCs with Agency for 80 Days and Beyond" GDC 2016. Retrieved from https://www.youtube.com/watch?v=FLtATD6CF0E. Accessed Nov. 13, 2018.

Jørgensen, Kristine. "Game characters as narrative devices. A comparative analysis of dragon age: Origins and Mass Effect 2." *Eludamos. Journal for Computer Game Culture* 4, no. 2, pp. 315-331. 2010.

Kway, Liting, and Alex Mitchell. "Perceived Agency as Meaningful Expression of Playable Character Personality Traits in Storygames." In *International Conference on Interactive Digital Storytelling*, pp. 230-239. Springer, Cham, 2018.

41

Laurel, Brenda. "Towards the design of a computer-based interactive fantasy system." PHD diss., Ohio State University, 1986.

Maloney, Molly. "Out on a Limb: Practical Approaches to Branching Story." Konsoll 2017. Retrieved from https://www.youtube.com/watch?v=4-MGT6SZWWo. Accessed Nov. 13, 2018.

Manning, Cat. "Reflective choices in narrative.", June 19, 2018. Retrieved from https://catacalypto.wordpress.com/2018/06/19/successful-reflective-choices-in-interactive-narrative/. Accessed April 15, 2019.

Mason, Stacey. "On games and links: Extending the vocabulary of agency and immersion in interactive narratives." In *International Conference on Interactive Digital Storytelling*, pp. 25-34. Springer, Cham, 2013.

Mateas, Michael. "A preliminary poetics for interactive drama and games." In *Digital Creativity*, vol. 12, no. 3, pp. 140-152. 2001.

Mawhorter, Peter, Michael Mateas, Noah Wardrip-Fruin, and Arnav Jhala. "Towards a theory of choice poetics." In Proceedings of the 9th *International Conference on the Foundations of Digital Games,* 2014.

Mawhorter, Peter. "Artificial intelligence as a tool for understanding narrative choices." PhD diss., UC Santa Cruz, 2016.

Mitchell, Alex, and Kevin McGee. "Reading again for the first time: a model of rereading in interactive stories." In *International Conference on Interactive Digital Storytelling*, pp. 202-213. Springer, Berlin, Heidelberg, 2012.

Morgan, Wendy. "Heterotropes: Learning the rhetoric of hyperlinks." In *Education, Communication & Information 2*, no. 2-3, pp. 215-233. 2002.

Murray, Janet. *Hamlet on the Holodeck*. Free Press, 1997.

Nay, Jeff L., and José P. Zagal. "Meaning without consequence: virtue ethics and inconsequential choices in games." In *Proceedings of the 12th International Conference on the Foundations of Digital Games*, p. 14. ACM, 2017.

Short, Emily. "An Alternative Taxonomy for Interactive Stories," Emily Short's
     Interactive Storytelling, May 3, 2011. Retrieved from
     https://emshort.blog/2011/05/03/an-alternative-taxonomy-for-interactive-
     stories/. Accessed Oct. 16, 2018.

Short, Emily. "Choice Poetics (Peter Mawhorter)," Emily Short's Interactive
     Storytelling, April 9, 2019. Retrieved from
     https://emshort.blog/2019/04/09/choice-poetics-peter-mawhorter/.
     Accessed April 15, 2019.

Tosca, Susana. "The lyrical quality of links." In *Proceedings of the tenth ACM
     Conference on Hypertext and hypermedia: returning to our diverse roots*,
     pp. 217-218. ACM, 1999.

Tosca, Susana. "A pragmatics of links." In *Proceedings of the eleventh ACM on
     Hypertext and hypermedia*, pp. 77-84. ACM, 2000.

Wardrip-Fruin, Noah, Michael Mateas, Steven Dow, and Serdar Sali. "Agency
     Reconsidered." In *DiGRA Conference*. 2009.

Vella, Daniel. "A Structural Model for Player-Characters as Semiotic Constructs."
     Transactions of the Digital Games Research Association 2, no. 2. 2016.