Unified Discourse Analysis: Language, Reality, Virtual Worlds, and Video Games.
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James Paul Gee's *Unified Discourse Analysis: Language, Reality, Virtual Worlds, and Video Games* not only offers a comprehensive theoretical framework that can be used to analyze discourse, video games, and action, but also explores the underlying commonalities that unite these seemingly disparate domains. The root of Gee's theory is that "conversations" are not limited to talk, but also include text and action (what he calls "conversations with the world"). In life, humans have conversations with the world by taking on various identities (avatars) and "playing" as themselves through their interactions. Readers, too, interact with text by conversing with it in their minds, gleaning what they see as relevant based on the objectives of their avatars. Gee argues that video games, as a new multimodal communicative form, ought to be granted the same consideration that literary critics have given to texts and discourse analysts have given to discourse. Video games, like other forms of communication, involve interaction and turn-taking: A player performs an action in a game, and the game responds. Throughout this book, Gee weaves together illustrative examples from history and experience, images and analyses of video games, segments of classroom discourse, and even excerpts from literature and poetry to support this expansive framework.

The book is divided into fourteen chapters. In chapters 1 and 2 ("Introduction" and "Conversations"), Gee outlines his purpose: to theorize about how discourse analysis could be used to study games as communicational forms. Three basic terms are introduced: *conversations*, *worlds*, and *avatars*. Gee establishes that conversations are co-constructed, collaborative turn-taking exchanges which convey meaning; he posits that humans have conversations with worlds whenever they act, as actions evoke responses. The video game world and the real world are thus both responsive systems. Avatars are playable characters in games, which have also been referred to as "identities" or "roles" in life. An important distinction is made between the player's story—the outcome of decisions made throughout the game—and the narratives that are often included in a game, written not by the player but by the authors of the game. It is the player's story that mimics the conversations that humans have in life, in which individuals enact decisions and expect reactions.

In Chapter 3, "Avatars and Affordances," Gee's theory begins to take shape as he illustrates a wider range of key terminology: *affordances*, *effective abilities*, and *tool-kits*. Affordances, a term originally coined by Gibson (1979), are the potential uses of an object, whereas effective ability is the potential for these affordances to be carried out. For example, a hammer's affordances include use as a tool for pounding nails or as a weapon, and humans possess the effective ability to utilize it in these ways. Avatars possess distinct sets of effective abilities that are used to mediate interactions with the world. So for instance, some people may have a better effective ability to use a hammer than others. Gee points out that not all games have obvious avatars—for instance, the classic *Tetris*, in which the player acts as a sort of mini-avatar with minimal abilities that are used to problem-solve the best ways to orient and stack blocks. Finally, tool-kits are the set of tools available to avatars that enable them to accomplish their goals.

Chapter 4, "The Things We Can Be," raises questions of human consciousness and identity formation. Gee describes the human capacity to act, reflect, and process—the division of self—as tri-fold: the *acting I* that is responsible for enacting and performing avatars, the *conscious I* that is capable of reflecting upon decisions made, and the *unconscious I* that executes automatic cognitive mechanisms. Some video games are played by enacting a visible avatar, or acting I, while other "God games," such as *Civilization* or *Age of Empires,* require the player to look down on the game without awareness of their avatar's physical identity; the avatar is subsumed by the player. Gee likens this to situations in life where roles are enacted which require humans to lead, direct, and cause change on the basis of a broad view over which control is given. *X-ray vision* is also defined here as the way in which people are able to determine what aspects of life or games are relevant to their goals and to see past unimportant variables. In life, this is the ability to identify leverage points and to use them advantageously.

The capacity to be *mindfully meta* is Gee's way of describing the process through which the conscious I is able to understand a system, use language to articulate the details of the system, and collaborate and share this knowledge. He refers to Paul's (2011) notion of "theorycrafting" in the context of *World of Warcraft* (*WoW*), a highly complex massive multi-player online game containing thousands of variables and potential outcomes. Theorycrafting occurs when players analyze and reflect upon these variables and distribute their findings online; the excerpts from these communities provided by Gee reveal an exceptional level of abstract thought. In addition, many players create and share modifications (or "mods") for *WoW* which enhance player performance. These impressive catalogues of fan-created add-ons and texts are housed in a collaborative online space in which individuals of all ages are welcome to participate, regardless of expertise. Interestingly, Gee raises a common criticism of gamers here, leaving the reader to wonder: "Should we bemoan that these skills are being applied to a 'play' system and not a 'real world' one?" (p. 33).

"Syntax and Semantics," Chapter 5, crucially addresses the role of language. Prior to this chapter, the book primarily focuses on the way in which games and life mimic each other, without much discussion of language. By arguing that the two systems are similar, Gee is able to set up the notion that discourse analysis could be used to study games. To do this, he again draws parallels between life and games, arguing that both possess a syntax and semantics. In life, syntax allows people to identify the basic structural units comprising systems, and semantics affords humans the capacity to assign meaning to these units. In games, the syntax comprises the rules, as well as the objects and spaces directed by these rules, whereas the semantics is defined as the ways in which these objects and spaces may be used via a player's effective abilities. For instance, while syntax might dictate that a box is on the table, semantics affords the player the ability to see the box as a crate that might contain something else. Gee also introduces Goldfarb's (2003) notion of "universes of discourse," which refers to language that is specific to different areas of life, consisting of the things which exist within that domain. Each video game possesses a distinct universe of discourse, determined by the game's designers, which allows players of the game to assign meaning to the objects within it.

In Chapter 6, "Situated Meaning," Gee addresses how situated meaning (or utterance token meaning in discourse analysis) can be found in games. While semantics accounts for literal meanings, situated meanings are crucial as they offer and explain the contexts that allow for

interpretation. Gee provides an extended example from the minimalistic 2D video game *Thomas Was Alone*. In this game, the avatars are 2D blocks of various sizes that must work together to "escape" from the computer. The player learns to emotionally identify with these avatars through the narration in the game, in which the feelings of the blocks are depicted. In hearing the narration, the player begins to create a situated meaning for the avatars, one which requires understanding these avatars in relation to others in the game. This is mediated not only by the game design, but also by the choices that players make, which determine how they play and thereby construct meaning; it is context-dependent.

Finally, Gee concludes this chapter by noting that the part of the brain that interprets language is the same as the part of the brain that understands and interprets the world (Gee, 2004; Stanovich, 2000), and thus "reading the world" and "reading the word" (Freire, 1995) share more in common than one might think. Rather than viewing discourse analysis as purely a mechanism for analyzing information, one ought to consider it as a means for understanding actions.

Following the interim summary of the book thus far in Chapter 7, Gee presents the elements of his framework in Chapter 8, "A Unified Theory of Discourse Analysis." This framework is divided into nine sections that address various aspects of the material to be interpreted, whether it is discourse, action, or video games. The framework asks questions about the following topics: conversational partners, syntax, semantics, universes of discourse, avatars, affordances and effective abilities, X-ray vision, situated meaning, ideology and belief, and the player's story. Gee gives two examples of how this framework might apply to situations in the classroom. In the first example, he applies the theory to a snippet of classroom discourse; in the second, he uses personal observation to describe a spelling lesson and includes a list of spelling words written by a student during that lesson. The second example is used to discuss the level of control exerted by the teacher in the "rules" of her classroom, which had the effect of de-motivating a student whose avatar (her identity as a student) was affected by a misinterpretation of the affordances of a class activity.

Chapters 9 and 10 are applications of the framework to the video games *Chibi Robo* and *Metal Gear Solid 4* (*MGS*). In discussing *MGS*, a Japanese action-adventure video game, Gee makes several points about how the game enables the player to "go meta" through the awareness that he or she is playing the game—what one might call "breaking the fourth wall" in film or theater. This effectively draws attention to the medium itself, and to the fact that the player is partaking in a video game, despite the fact that *MGS* is highly realistic in terms of its graphics. Gee also highlights the role of the main avatar and hero of the game, Solid Snake. In this game, there is a clear distinction between Snake's goals, the player's goals, and a combination of the two. There is a sense of accomplishment that comes along with the ability to expertly align these goals.

In Chapter 11, "Projective Identity," Gee argues that good video games encourage projective identity, in which "real life" identities are projected onto avatars. Projective identities not only allow players to instantiate the goals of their avatars when playing games, but also to instantiate their own personal goals in playing as the avatar. In this way, virtual and "real life" identities fuse together, giving rise to a new type of space in which humans can enact their

desires. Gee gives the example of the character Garrett from *Thief: The Deadly Shadows.* At one point in the game, Garrett needs to steal an object from a museum. The in-game identity of Garrett is a thief and thus from a game perspective, the player needs to accomplish this goal in order to succeed. But on the other hand, it is up to the player to decide *how* this will take place: Will the player attack all of the guards? Or conversely, attack no one and sneak into the museum? Similarly, in life, individuals project their true identities onto social roles in a variety of ways: as a teacher, artist, friend, or husband, for instance. In order to be successful at these roles, people need to balance the demands imposed upon them by the nature of the roles with their own individual desires, in the same way that players do with their avatars in games. Gee concludes by noting that while humans may be constrained by our projective identities, we do have the option to "mod" real life by working proactively for change.

Chapter 12, "Avatars and Big 'D' Discourses," offers a means of understanding how avatars are constructed through conversations. Importantly, Gee distinguishes between discourse (with a lower-case "d") and Discourse (with a capital "D"), a distinction he has also made in earlier works (Gee, 2011, 2014a, 2014b). While discourse refers to specific stretches of talk, instances of language in use, Discourse goes beyond to refer to ways in which people think, act, and exist in the world, and the communities in which these roles are enacted. In this framework, however, the avatar is essentially equated with Discourse; it offers a vessel for individual expression, whether in games or in the social roles individuals take on in life.

Chapter 13, "Reading: Non-responsive Media," addresses several questions that a critical reader may have at this point in the book: What about writing? Or art? Or film? How can one have a conversation with a text or a work of art? Gee argues that all language is a matter of recipient design, which means that it is intended to evoke some sort of response. Texts and artwork, though seemingly one-sided, enable readers and viewers to imagine responses in their minds, a conversation with the self through which they enact their identities. Gee offers an excerpt of the poem "Parting" by Emily Dickson and describes how reading it incited in him a kind of internal monologue, one influenced by his own personal identity as a former devout Catholic and a person old enough to have begun to worry about death. In seemingly non-responsive forms of communication, people interact by conversing with themselves. This non-responsiveness does not make these mediums less significant, but rather endows them with the potential to uniquely shape the ideas and beliefs of every individual who converses with them.

The final chapter, "Alignment and Development," addresses the necessary interplay between affordances and effective abilities, concepts introduced at the start of the book. In order for one's avatar to succeed, whether in life or in games, affordances and effective abilities must be aligned. Here, Gee draws on Experience Producing Drive (EPD) Theory, which posits that humans, as complex organisms with unique genes, have evolved through natural selection to maximize experiences through environments that are the most optimal and allow them to flourish (Bouchard, Lykken, Tellegen, & McGue, 1996; Kaufman, 2013). Under Gee's framework, this maximization of experience happens only through alignment. Alignment often requires scaffolding, in order to achieve an optimal fit for learners. Gee gives the example of a game called *State of Decay*, in which players first work through a tutorial to understand the game and slowly learn to act, experience, and experiment with different strategies and decisions over the course of the game, until finally they understand how to succeed within it.

In many ways, Gee's book challenges common notions of what may or may not be considered a text. But his expansive definition also relies on the assumption that the world *is* in fact a meaningful system, like language and games, and all actions can be interpreted as such. Gee argues: "Humans do not just move in the world. They seek to understand it" (p. 59). While this may be true in a game, which has been overtly designed in a way that provides the player with some sense of purpose, is this always true of life as well? The idea that all action and language are actually instances of recipient design and are thus interpretable as conversational forms presupposes that all language and action are purposive in nature and not random, automatic, or even absurd at times. In video games, random, automatic, or absurd events are created by algorithms, which are intentionally constructed by their designers, so they are not really random at all. While these sorts of questions will have to be answered by individual readers, the fact that this book is able to raise them points to its deeply philosophical nature.

Gee's book is a must-read for anyone interested in using discourse analysis to analyze games. As multimodal mediums become increasingly prevalent, it is crucial to understand how they operate. Gee's framework allows this to happen by expanding the notion of discourse to encompass not only language, but also games and actions. Ultimately, Gee has constructed a powerful, eloquent, and thoughtful work that has the potential to unite academics across multiple fields in the analysis of video games as a new form of text.

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