Personality And Play Styles: A Unified Model

By Bart Stewart

[*In this comprehensive analysis, multiple psychological systems of gameplay are surveyed, to try and arrive at a unified model in which player behavior can be understood and, crucially for game developers, catered to*.]

Numerous models of gamer psychology have been proposed and debated over the past couple of decades. One of the earliest and simplest has proven to be one of the most referenced and most enduring: the Bartle Types. I believe this is because the Bartle Types are a functional model of human personality in a game playing context. In other words, the Bartle typology works because it's a subset of a more general personality model that works.

In fact, several of the best-known play style and game design models share many conceptual elements. So I'm also proposing here that the Bartle typology, the play style models of Caillois, Lazzaro, and Bateman, and the game design models of Edwards and Hunicke/LeBlanc/Zubek are all variations on a single Unified Model of play styles.

(*Please note that any and all references I make in this article to the works of Richard Bartle, David Keirsey, Christopher Bateman and others that aren't clearly sourced as quotations are my own interpretations. As such, they should not be considered official descriptions of these authors' ideas*.)

The Four Bartle Types

The official description of the original four Bartle Types (which have been expanded to eight types in Richard Bartle's book Designing Virtual Worlds) is preserved in the paper "Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDs" by Multi-User Dungeon (MUD) co-creator Richard Bartle.

This model, which was based on observing and analyzing the behaviors people playing together in a multi-user game, holds that there are four different kinds of play style interests, each of which is given a descriptive name: Killers, Achievers, Explorers, and Socializers.

- **Killers**: interfere with the functioning of the game world or the play experience of other players
- **Achievers**: accumulate status tokens by beating the rules-based challenges of the game world
- **Explorers**: discover the systems governing the operation of the game world
- **Socializers**: form relationships with other players by telling stories within the game world

These four styles emerged from the combination of two primary gameplay interests, which I've called Content and Control, each of which has two mutually exclusive forms. Content is defined to mean either **acting** simply and directly on objects in the game world, or **interacting** more deeply with world-systems. Control refers to how players want to experience the game world -- either through the dynamic behaviors of other players, or with the relatively static world of the game itself.

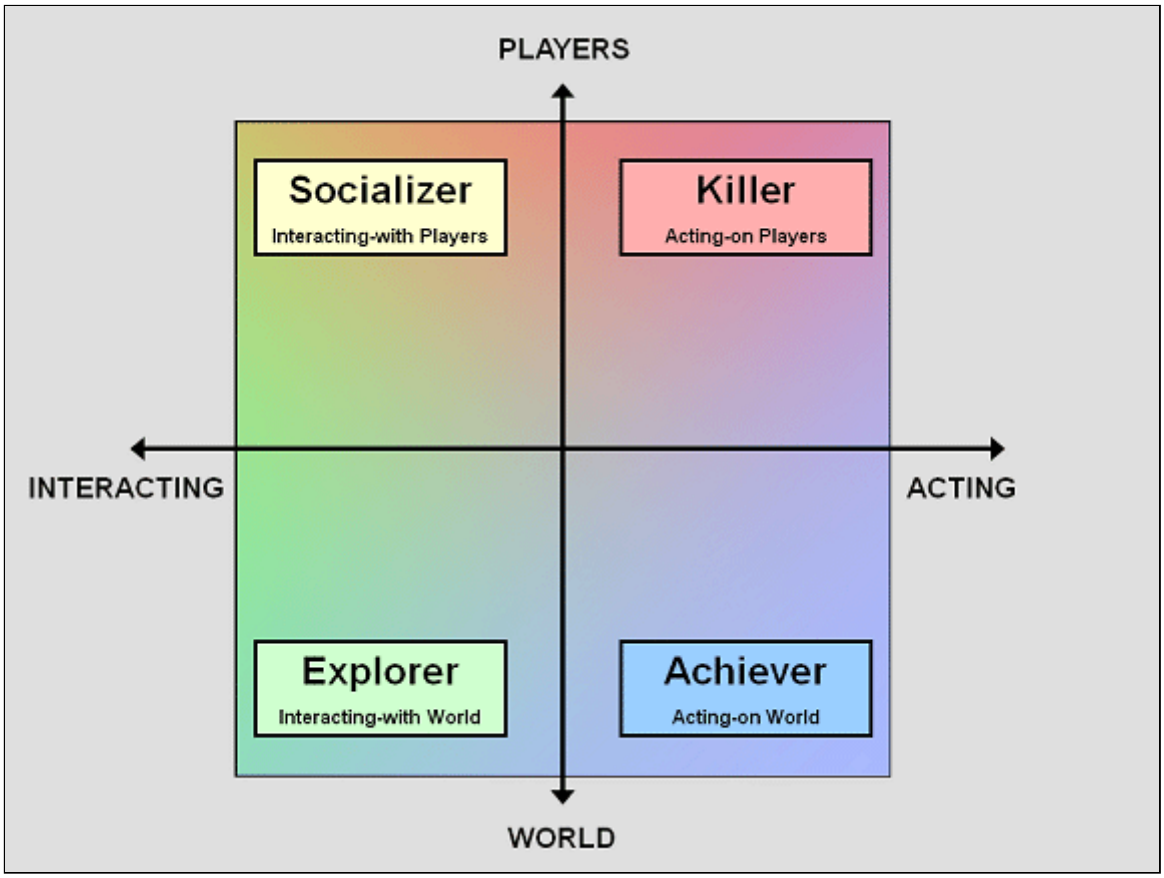
Killers and Achievers both turned out to be mostly interested in acting on things or people, treating things and people as external objects. At the same time, Explorers and Socializers both seemed to prefer a deeper level of interacting with things or other people, focusing on internal qualities.

Similarly, Killers and Socializers both seemed eager to have the opportunity to control how they are able to play dynamically with others in the game world, while Achievers and Explorers seemed most interested in controlling their relationships with the developer-defined objects in and properties of the game world itself.

The bases of the Bartle Types are thus two pairs of complementary player goals: Acting or Interacting (content), and Players or World (control). Bartle represented these interests as two lines at right angles to each other to create a grid with four quadrants, each quadrant corresponding to one of the four observed play style preferences. By determining his preference for Acting vs. Interacting and for Players vs. World, then looking up the play style in the quadrant

corresponding to that combination, any gamer could easily identify his naturally preferred play style. A gamer who prefers acting over interacting and is focused more on the world of the game than other players, for example, would most likely demonstrate Achiever behaviors when playing a game.

Here's a diagram showing how the four Bartle Types emerge from the conjunction of the two major gamer concerns with content and control. (Note: This table is rotated 90 degrees clockwise from the version presented in "Players Who Suit MUDs" for reasons that will become apparent later in this article.)



The Bartle Types

The Four Keirsey Temperaments

In the 1970s, psychologist David Keirsey identified four general patterns from the sixteen types of the Myers-Briggs personality model. In his book (co-written with Marilyn Bates) Please Understand Me, Keirsey described these four "temperaments," giving them descriptive names much as Richard Bartle named his player types:

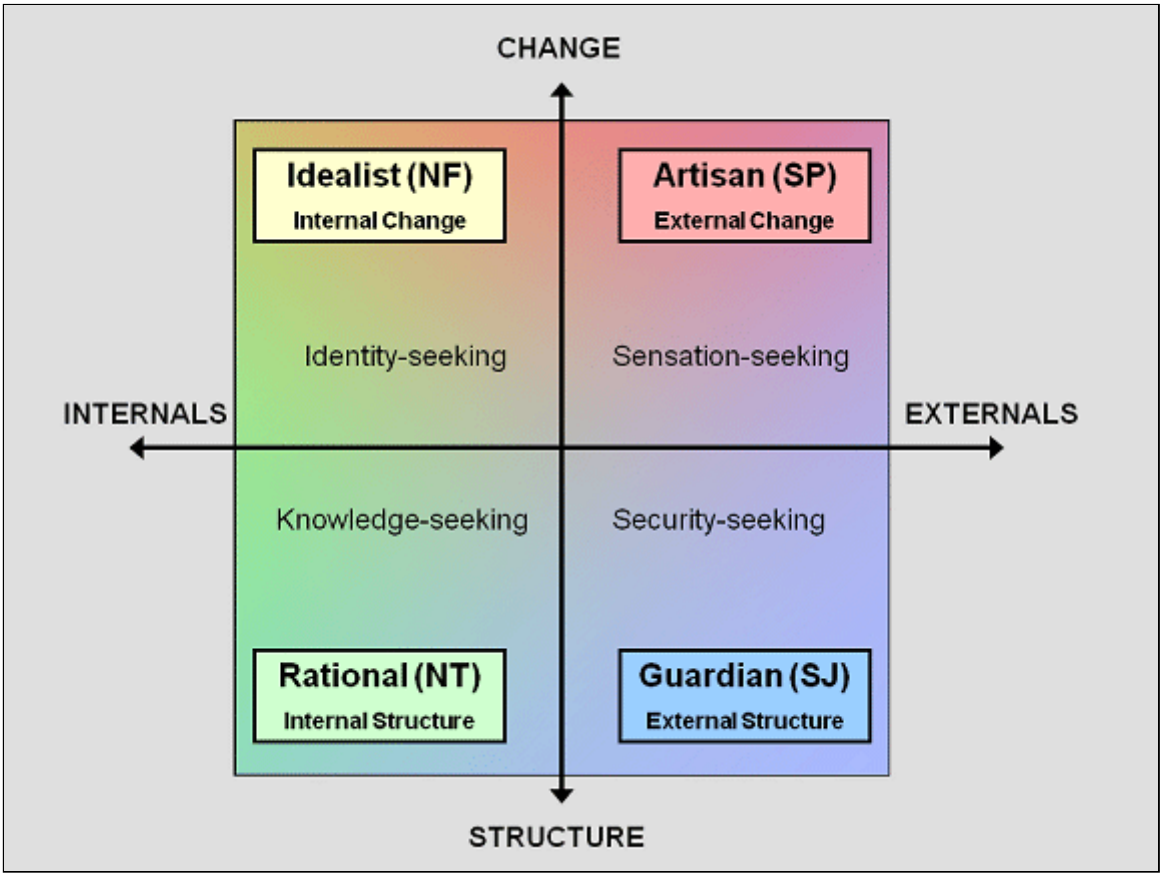
- **Artisan** (Sensing + Perceiving): realistic, tactical, manipulative (of things or people), pragmatic, impulsive, action-focused, sensation-seeking
- **Guardian** (Sensing + Judging): practical, logistical, hierarchical, organized, detail-oriented, possessive, process-focused, security-seeking
- **Rational** (iNtuition + Thinking): innovative, strategic, logical, scientific/technological, future-oriented, result-focused, knowledge-seeking
- **Idealist** (iNtuition + Feeling): imaginative, diplomatic, emotional, relationship-oriented, dramatic, person-focused, identity-seeking

In the second edition of Keirsey's book, Please Understand Me II, Keirsey grouped his four temperaments as four quadrants across two axes to show how they were related according to an internal structure, very much as Richard Bartle had. However, by the time he proposed his grouping model in the second edition of his book, I had already worked out a somewhat different arrangement.

Rather than the two dimensions that Keirsey used in his model, I believe the two most fundamentally distinctive dimensions of human behavior are Internals (a preference for seeing possibilities and the abstract) vs. Externals (seeing the concrete and realistic), and Change (which can be thought of as freedom or opportunity) vs. Structure (which can be understood as rules or organization). Each of the four temperaments is thus a combination of External/Internal and Change/Structure:

Artisan	External Change	wants the power to be free to act at will on people and things
Guardian	External Structure	wants the security of possessions obtained by following the rules
Rational	Internal Structure	wants the satisfaction of understanding how things work
Idealist	Internal Change	wants people to cooperate toward happiness (self-actualization)

Here's how these four styles are represented (using my two axes, not Keirsey's) with the same kind of four-quadrant format that Richard Bartle used for the four Bartle Types:



The Keirsey Temperaments (Stewart Format)

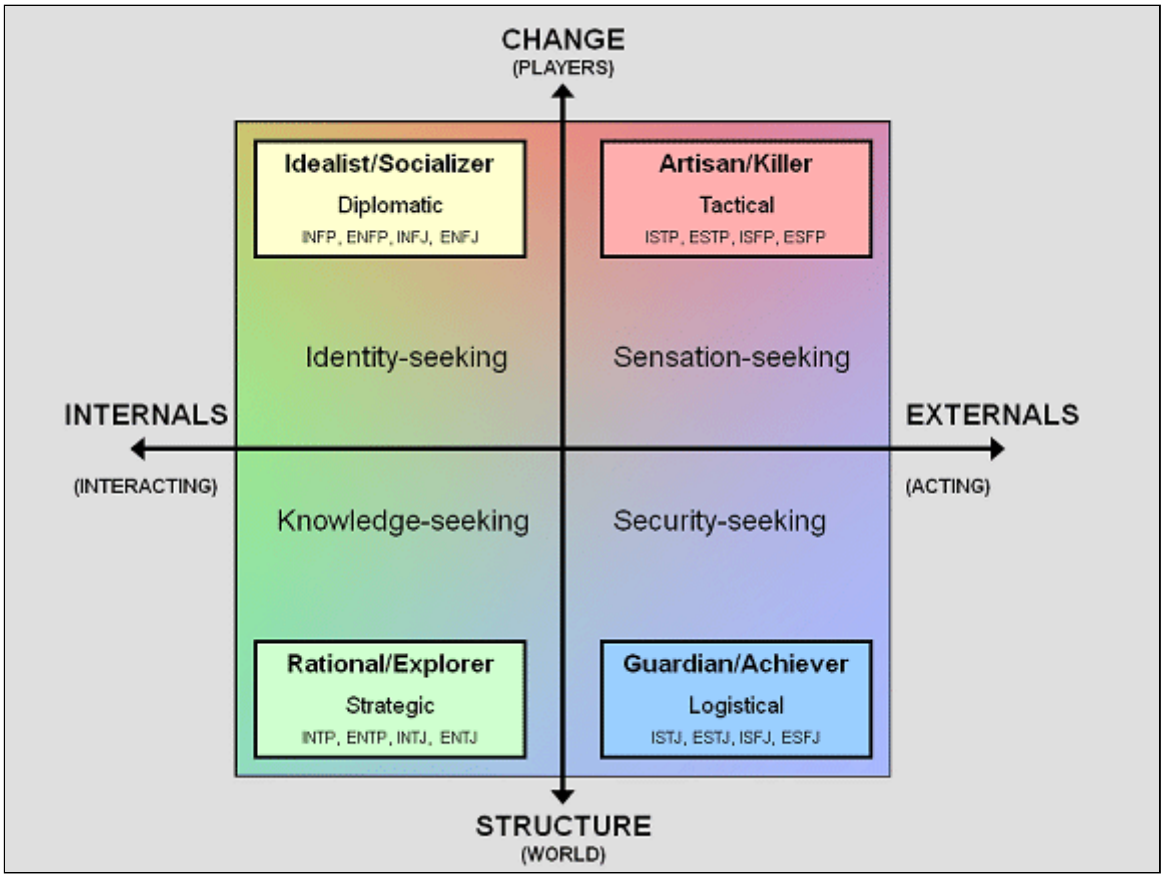
Keirsey and Bartle

The first of the two major assertions I make in this article is that the four temperaments described by David Keirsey -- Artisan, Guardian, Rational, and Idealist -- are supersets of the original four player types -- Killer, Achiever, Explorer, and Socializer, respectively -- as described by Richard Bartle.

BARTLE		**KEIRSEY**
Killer	Acting (on) Players = External Change	**Artisan**
Achiever	Acting (on) World = External Structure	**Guardian**
Explorer	Interacting (with) World = Internal Structure	**Rational**
Socializer	Interacting (with) Players = Internal Change	**Idealist**

Where Bartle sees a preference for interacting with or acting on players in a game context, temperament theory sees a more general preference for internal or external change. And where Bartle focuses in a gameplay context on a preference for dynamic players or the static world, my version of Keirsey's four-quadrant model has people generally preferring change or structure. I believe that because the basic two-valued motivations are analogous between the Bartle Types and the Keirsey temperaments, the types and temperaments that are generated by these motivations are also analogous.

The following diagram shows the alignment between the four Keirsey temperaments and the four Bartle Types:



Unified Model, Keirsey-Bartle Diagram

Here are some brief descriptions of each combination, showing how Keirsey and Bartle ascribe the same basic motivations to each temperament/type.

Idealist/Socializer: Socializers are described by Bartle as "... interested in people, and what they have to say. ... Inter-player relationships are important ... seeing [people] grow as individuals, maturing over time. ... The only ultimately fulfilling thing is ... getting to *know* people, to understand them, and to form beautiful, lasting relationships."

This is closely related to the Keirseian description of Idealists, who are very aware of other people as part of their lifelong journey of self-discovery (Internal Change). In a way, the highly imaginative Idealists are always roleplaying; they are constantly creating images of themselves (or others) that they feel they should model through their own actions in order to produce the emotions in themselves that they want to feel.

Guardian/Achiever: For the Guardian, the world is an insecure place, so it's necessary to protect oneself by accumulating material possessions... just in case. Thus, Guardians focus on earning money, on competing with others for resources perceived as scarce, on buying nice things and maintaining them, on forming stable and hierarchical group relationships, and generally on working hard to make their place in the world secure by locking down their connections to the world as possessions (External Structure).

Compare that to Bartle's description of Achievers: "Achievers regard points-gathering and rising in levels as their main goal" and "Achievers are proud of their formal status in the game's built-in level hierarchy, and of how short a time they took to reach it." Leveling up, leaderboards, and the accumulation of vast quantities of looted items are all behaviors that are driven more by a security-seeking motivation than by other motivations such as powerful sensations, understanding or self-growth.

This explains why the Guardian/Achiever is willing to persist in long stretches of "grind" that other kinds of gamers don't perceive as fun at all. To this gamer, rewards should be proportional to the amount of effort invested. When a game is designed around simple, well-defined tasks that enable the competitive accumulation of status tokens, that game is virtually guaranteed to attract security-seeking Guardian/Achievers.

Rational/Explorer: Rationals play in the same way that they do everything else -- they find pleasure in discovering the organized structural patterns behind raw data (Internal Structure). These can be patterns in space (as in geography) or patterns in time (as in morphology). Or they can be cause-and-effect patterns (entailment) or relationship patterns (connections). Ultimately, it's all about achieving a strategic understanding of the system as a whole thing.

As Bartle describes Explorers: "The real fun comes only from discovery, and making the most complete set of maps in existence." Of the core motivations -- sensation-seeking, security-seeking, knowledge-seeking, and identity-seeking -- exploration as "discovery" is most closely aligned with the Rational's knowledge-seeking preference. For the Rational/Explorer, once the principle behind the data is revealed, that's enough -- understanding is its own reward. These gamers can enjoy imparting knowledge to others, but no extrinsic reward for doing so is needed or expected.

Artisan/Killer: Finally, there are the Killers (or, as I prefer to call them, Manipulators). These can be difficult to understand in a gameplay context because most virtual worlds have encoded rules that marginalize their play style as "griefing" (i.e., upsetting other players) and try to prevent it. As Bartle puts it, "Killers get their kicks from imposing themselves on others." He also points out that Killers "wish only to demonstrate their superiority over fellow humans."

This desire for power over everything in their world is most closely echoed in the Keirseian description of Artisans, who (as their temperament name suggests) delight in the skillfully artistic manipulation of their environment. The Artisan/Killers are the tool-users, the adrenaline junkies, the natural politicians, the combat pilots, the high-stakes gamblers, and the negotiators *par excellence*. They instinctively find and exploit advantages in any tactical situation, and they express this need for dominance of their world in order to retain the greatest amount of personal freedom possible (External Change).

I believe a very good example of this can be found in Ryan Creighton's "social engineering" of the coin-collecting game at the Social Game Developers Rant of the 2011 Game Developers Conference. A Guardian/Achiever would have played by the rules and raced around the room begging others for their coins to try to win the game; an Idealist/Socializer would have asked for coins as a way to meet new people or help others win; and a Rational/Explorer would have sat quietly watching the flow of coin exchanges to try to understand the nature of the game. But an Artisan/Killer would instantly see how to short-circuit the designed system, and, as a born negotiator, would find it easy to persuade the person holding one of the bags of coins to hand the whole thing over... which is exactly what happened.

If the attendees needed to hear a rant from anyone, it would be the Manipulator who *is* out there, just waiting to exploit any opportunity to bring a little chaos to the carefully designed order of a social game. (See Ryan's description of the event for a wonderful first-hand account of gameplay from what appears to me to be a classic Artisan/Killer perspective.)

A final note on the Keirsey/Bartle linkage: the Keirsey temperaments and Bartle Types may appear not to line up directly where attitudes toward other people are concerned. This is because the Bartle Types were developed within a multi-player environment, which selects for more extroverted, sociable gamers, while the temperaments include both extroverts and introverts.

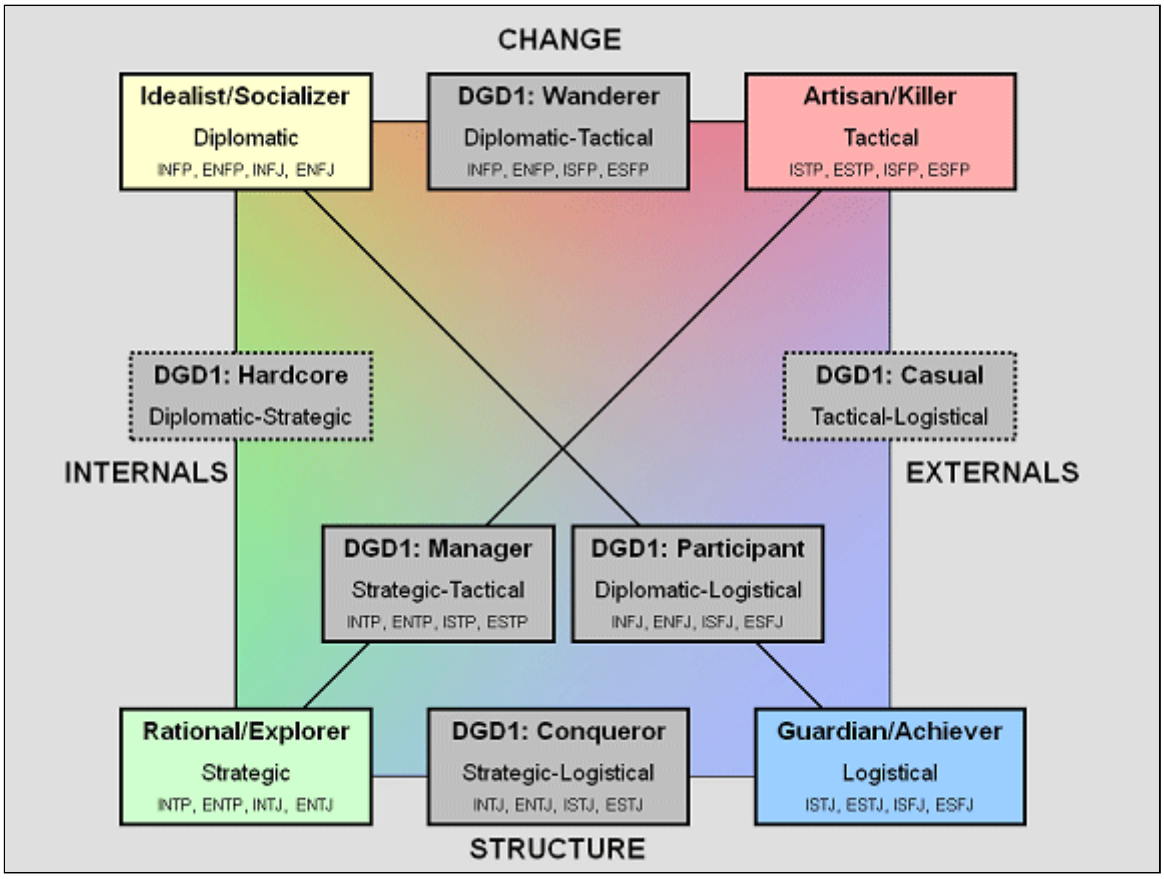
So, for example, the "Socializer" term that makes sense within the Bartle Types for its emphasis on interacting with other people can seem not to apply to an introverted Idealist who prefers to play single-player games. These less-social Socializers are more likely to prefer individualized entertainment or abstract games, making it difficult to distinguish them from Rational/Explorer gamers. Closer study is usually required to see whether their primary reason for playing is to feel good (an Idealist preference) or to exercise their thinking skills (a Rational goal).

Chris Bateman's DGD1 Model

Even taking introversion and extroversion into account, not everyone fits neatly into one of the four fundamental temperaments. This aspect of reality isn't well described by the four-fold Bartle or Keirsey typologies. Some people feel equally drawn to Internals and Externals, or to Change and Structure.

The book 21st-Century Game Design, edited by Christopher Bateman, explores a "demographic game design" model (DGD1) of gameplay preferences that I believe forms a useful counterpoint to the Keirsey/Bartle model of general personality. Rather than matching each of the types and temperaments, the Bateman play styles appear to be secondary styles that fill in the gaps between the primary play styles.

All of the elements that Bateman defined for his four play styles as well as for the Hardcore and Casual modes appear to map not directly onto the Keirsey/Bartle map, but into each of the gaps between the four Keirsey/Bartle styles. The following diagram shows this overlaid relationship:



Unified Model, Keirsey-Bartle Diagram with Bateman DGD1 Model Overlaid

The value of the DGD1 model (beyond the utility it has in and of itself as a model of personality) is that it provides a direct response to one of the most common criticisms of the Bartle Types model, which is that "no one is ever just one 'type' of player." The DGD1 model fills in the gaps between the Bartle Types. A gamer who knows that his preferred style of play is balanced between exploration and achievement, or a combination of Strategic (Rational) and Logistic (Guardian) play, who was told he "didn't fit" the Bartle model, can now understand himself to be representative of the Conqueror play style as described by the interstitial DGD1 model. Rather than invalidating the Bartle Types, the DGD1 model deepens and refines that model of play styles, leading to the merged Keirsey/Bartle/Bateman model whose structure is shown in the diagram above.

Note: Following the publication of 21st-Century Game Design, a questionnaire for a DGD2 model was developed and added to the iHobo site. Drawing from lessons learned with the Myers-Briggs-based DGG1 model, the DGD2 model was built more explicitly around the four temperaments described by Keirsey. Rather than breaking or changing the play style model developed for DGD1, the application of concepts from Keirsey's temperament theory appeared to sharpen the DGD-based Conqueror, Manager, Wanderer and Participant styles as complementary to the four Keirsey temperaments (and thus the four Bartle Types as well). (A subsequent model, BrainHex, follows a six-pattern typology.)

The Unified Model

As I explored the literature on player styles and models of gameplay, I was surprised to see how many of these other models proposed three or four categories. Even more remarkably, in many cases the descriptions given by the various authors for each of their categories sounded very much like the descriptions of the core play styles in the Keirsey/Bartle model.

As a result, the second major assertion I'm making in this article is that not only are the four Bartle Types a play-context subset of the four general Keirsey Temperaments, there are numerous other well-known models of play and game design that are also variations on the exact same set of four fundamental personality styles.

It's important to acknowledge that there are other models of personality and play that do not appear to be variations on the same four essential styles. I understand that; I have no interest in trying to stuff every personality model I see into this one. As an experienced designer of systems, I'm very aware of the danger of seeing every phenomenon as a confirming instance of one's pet theory. I've done my best to avoid that error by identifying as a facet of the Unified Model only those systems for which multiple elements appear to align closely with the other systems in the model.

Keirsey	Bartle	Caillois	Lazzaro	GNS+	MDA+	Handy	Gallup	Covey	Motivation	Problem-Solving	Overall Goal
Artisan (tactical)	Killer [Manipulator]	ilinx	serious fun	[Experientialist]	[Kinetics]	Power	Impacting	Power	Power (manipulative sensation)	Performance	Do
Guardian (logistical)	Achiever	agôn	hard fun ("fiero")	Gamist	Mechanics	Role	Striving	Security	Security (competitive accumulation)	Persistence	Have
Rational (strategic)	Explorer	mimesis	easy fun	Simulationist	Dynamics	Task	Thinking	Wisdom	Knowledge (logical rule-discovery)	Perception	Know
Idealist (diplomatic)	Socializer	alea	people fun	Narrativist	Aesthetics	People	Relating	Guidance	Identity (emotional relationships)	Persuasion	Become

(click for full size)

This chart presents the basic concepts of each play style or personality model using words their creators selected as being generally representative of each worldview. It's intended to be an at-a-glance representation of the associations between styles of play and layered models of game design. It also references three general models of personality in functional group situations (usually the office or workplace), as well as three ways in which I've tried to boil down the four perspectives to their essential meanings.

Caillois and Lazzaro Meet Keirsey and Bartle

The first portion of the Unified Model chart links Keirsey's general theory of human temperament to descriptions of the four primary styles of play given by Richard Bartle, Roger Caillois, and Nicole Lazzaro.

Note: Although Roger Caillois indicated that he did not consider the four styles he described to be a complete taxonomy, I respectfully suggest that he was closer to creating a good one than he knew. Along with his concepts of paidia and ludus, these six foci complete the "gaps" between the four core styles observed by others (as noted in the Unified Model). I therefore consider his observed styles to be part of that model, but the reader is welcome to disagree.

Caillois uses the term *ilinx* to describe the fun of "vertigo," the adrenaline rush from pushing physical boundaries, which aligns to the sensation-seeking motivation that both Bartle and Keirsey describe for the Killer and Artisan styles, respectively.

Lazzaro's "serious" or "visceral" fun (one of the four core emotional styles she identifies in her cluster analysis of emotional responses to gameplay situations) is also described as sensation-seeking -- in particular, as seeking the feelings of excitement and relaxation that are the gut-level rewards for active play. Again, this aligns very closely with the pleasure the Artisan/Killer feels in the skillful manipulation of tools or people (External Change).

Both the *agôn* of Caillois and the "hard fun" of Lazzaro are conceptually very close to the security-seeking motivations of Bartle's Achiever and Keirsey's Guardian. *Agôn* and hard fun are both about trying to obtain tangible, extrinsic rewards within the rules of a competitive game. This is the well-documented pattern of the Achiever/Guardian, who lives life believing that it is necessary and right for the world to be well ordered and that the amount one wins should be directly proportional to the amount of effort one puts into following the rules.

Caillois explicitly links *mimesis* to "simulation," or the active construction of secondary realities. This is the hallmark of the creative Rational/Explorer. To a Rational, the fun of discovering or building new worlds is in mapping their unique characteristics through exploration, thereby enabling the comprehension of the internal structure of that new world. The Rational/Explorer interest in *mimesis* is thus associated with Lazzaro's "easy fun," which describes the distinct gamer preference for immersion in the world of the play experience.

Caillois describes the fourth mode of play, *alea*, as based on randomness and chance, imposing fairness on every player by making every outcome depend on the roll of a die or the turn of a card. This feels right to the Idealist/Socializer player, for whom the rules of the game may be nearly irrelevant and in which chance is acceptable or even necessary to evenly distribute outcomes. Rules are merely artifacts that enable interaction with other people (human or NPC). This aligns neatly with Lazzaro's formulation of "people fun," wherein the game world is treated not as a tool to be used, a challenge to be overcome, or a system to be understood, but as a social setting within which people can enjoy meaningful relationships with each other.

GNS+ and MDA+

In addition to these play style models there are two important models of game design that appear conceptually related to the Keirsey temperaments: the Gamist/Narrativist/Simulationist (GNS) model of game design originally conceived (though later deprecated) by Ron Edwards and the Mechanics, Dynamics, Aesthetics (MDA) framework described by Hunicke, LeBlanc and Zubek [pdf].

The three-style GNS model aligns closely with three of the Keirsey/Bartle styles. The Gamist design style, which focuses on the mechanics or rules of play of a game, clearly matches the rules-oriented, competitive, hard fun-seeking Guardian/Achiever style. Similarly, Rational/Explorers are most likely to be drawn to the Simulationist design style that delights in the building of and immersion in complex and logically consistent worlds. And the human-centric, "people fun" storytelling impulses of Idealist/Socializers will usually be expressed as a focus on Narrativism as the primary means of making a game fun.

This leaves undescribed the preference for raw sensation. A fourth design style, which I've given the ungainly name of Experientialist, would emphasize play features that generate intense experiences -- the definition of the sensation-seeking Artisan/Killer. If this Experientialist style is recognized as a valid game design interest along with Gamist, Narrativist, and Simulationist, then we have what might be called a GNS+ model that aligns completely with the Keirsey/Bartle and related models of play.

Adding this style to the GNS model is not an unsupported stretch on my part just to force GNS into the Keirsey/Bartle model. The Experientialist preference closely resembles the "Butt-Kicker" player type in the play style model suggested by Robin Laws. Enjoying play for its intense experiences is also directly analogous to the enjoyment of "vertigo" described by Caillois as a function of the desire for *ilinx*.

Something like this also applies to the MDA game design model. As with the GNS+ model described above, the MDA model seems to lack only a bottom-level design focus on the direct appreciation of action, which considers the gut-level sensations a game designer wants to elicit from players. I've suggested "Kinetics" as a name for this fourth style in what could be called the MDA+ model, where Kinetics once again aligns with Caillois's *ilinx* preference for finding pleasure in action-oriented play. (It's interesting that the original GNS and MDA models both lack concepts describing play as a means of generating intense sensations.)

As with the original GNS model, the three layers of the MDA model align with play styles and personality types as described in the Unified Model chart. Mechanics, as the rules governing player actions, are the topic of choice for Guardian/Achievers who naturally take a Gamist approach to design. That's where you find the answers for the ever-practical, "Yeah, but what do you actually *do* in the game?" question. Dynamics are of most interest to the Simulationist Rational/Explorer, who can't help but focus on the functional behaviors of the game world that give it a unique life as a secondary reality. And the Idealist/Socializer, always operating according to an ideal vision for people, is most able to quickly grasp whether a particular game satisfies the Aesthetic requirements -- does the game *feel* right?

With the theory explained, we're now ready to look at practical uses for the Unified Model.

The Unified Model Explains Existing Games

An effective model should be able to explain how particular games satisfy particular play style interests. A good place to start is with popular first person shooter (FPS) games such as the *Call of Duty* or *Battlefield* franchises. These games feature high levels of graphical realism, a need for fast-paced tactical action in high-stress scenarios, real-world manual dexterity requirements, "whoa!" moments, clearly marked linear paths, vertigo-inducing set pieces, collectible achievements/trophies, and (in multiplayer mode) intense competition, role-based cooperation, and status markers on public leaderboards. All of these features are associated with externalities, and most are about directly physical experiences as opposed to abstract internal qualities such as thinking or feeling.

In a first person shooter, the high-speed, adrenaline-pumping tactical action for its own sake is aimed squarely at the externals-oriented Artisan/Killer play style preference. The externals-oriented Guardian/Achiever preference is addressed with clearly spelled-out operational rules, and with in-game intel items and achievements to collect as gameplay that gives purpose to the action. To the extent that a game emphasizes both of these elements to a high level of quality, that game will be embraced by Artisan/Killers and Guardian/Achievers. This combination lines up with the Casual mode of play in Chris Bateman's DGD1 model. This might sound odd -- the gameplay in pure FPS games is usually very intense -- but it fits the concept of "casual" play as Bateman describes it, where there's little emotional investment in the game world, players can drop-in/drop-out easily, the subject matter is concrete and easily relatable to well-understood phenomena, and the appeal is to a mass market.

Occupying the exact opposite position on the chart of play styles from real-time action/competition games would be adventure games such as *Myst* and *The Longest Journey* and creative games such as *Minecraft* or turn-based strategy games such as *Civilization*. These games, whose internal-oriented features emphasize both the story and puzzle play style preferences associated with feeling and thinking, are mirror images of external-oriented first-person shooter games that emphasize action and competitive accumulation. It's reasonable to expect that most gamers who strongly prefer FPS games would be bored by adventure games, while most self-described adventure gamers find the typical FPS unsatisfying. This is precisely what the Unified Model would predict based on play style analysis, with Hardcore (story/puzzle) and Casual (action/loot) preferences on opposite sides of the Keirsey/Bartle/Bateman diagram.

If the Unified Model has validity, then it should also be able to explain the appeal of a "surprise" hit game like Minecraft. Still in beta at this writing, *Minecraft* has already earned the equivalent of tens of millions of dollars for its developer by emphasizing two play styles: creative exploration and exciting survival. While mapping cave systems or building structures (both highly discovery-focused activities), the player's character may suddenly be attacked by hostile creatures. This generates the intense fight-or-flight reaction prized by Killers, who also enjoy the tangible (if virtual) sensations of destroying blocks, jumping from heights, and possibly falling (or being pushed!) into deadly lava.

The conjunction of the Rational/Explorer and Artisan/Killer play preferences corresponds to the Strategic/Tactical "Manager" play style of Chris Bateman's DGD1 model. Bateman describes the Manager style as being preferred by "a complexity-seeking player" who "can rack up serious hours on the games they really love," and whose style is "associated with mastery and systems." That neatly sums up Minecraft's intense appeal to a specific subset of gamers who viscerally love opportunities to remake the game world to their own designs.

(It's interesting to note that *Minecraft*'s primary designer has added achievements to the game, with an "adventure update" soon to be released. These new features should make *Minecraft* more appealing to Guardian/Achievers, who currently complain that *Minecraft*'s highly non-directed gameplay is -- from their perspective -- boring and hard to get into. Whether *Minecraft* can retain its Explorer-Killer focus after adding features that attract a host of highly vocal Achievers is a question worth exploring.)

Here's a quick listing of where various game genres fit into the Unified Model:

GENRE	**TYPICAL GAMES**	**CORE Play StyleS**
FPS	*Halo, Call of Duty, Half-Life, Crysis*	Killer, Achiever
CRPG	*Darklands, Fallout 1/2, Baldur's Gate*	Achiever, Explorer
FPS-CRPG	*Deus Ex, BioShock, Mass Effect*	Achiever, Explorer, Killer
Open-world CRPG	*The Elder Scrolls, Fallout 3, Two Worlds*	Achiever, Explorer
MMORPG	*World of Warcraft, EVE Online, Guild Wars*	Achiever, Explorer, Socializer
MMOG	*Unreal Tournament, Team Fortress*, any FPS multiplayer mode	Killer, Achiever
Adventure	*King's Quest, Myst, The Longest Journey*	Socializer, Explorer
Action	*Tomb Raider, Uncharted, Angry Birds*	Killer, Achiever
Survival-Horror	*Resident Evil, Dead Space, Amnesia*	Killer, Achiever
Turn-based Strategy	*Civilization, Master of Orion, Galactic Civilizations*	Explorer
Physics Puzzler	*Half-Life 2, Portal, World of Goo*	Killer, Explorer
Real-time Strategy	*Age of Empires, StarCraft, Supreme Commander*	Achiever, Killer
Flight Simulator	*Falcon 4.0, Microsoft Flight Simulator X*	Killer, Explorer
Space Shooter	*Wing Commander, Freelancer*	Achiever, Killer
Music	*Rock Band, Guitar Hero, Audiosurf*	Killer, Socializer
Simulation	*SimCity, Balance of Power, Railroad Tycoon*	Explorer
Social	*FarmVille, Mafia Wars*	Socializer, Achiever
Online Gambling	Blackjack, Texas Hold-Em Poker	Killer, Achiever

One other possibility afforded by the Unified Model is to identify an individual's natural play style through the games they report playing. This can work to the degree that individuals are invested in the "gamer" culture. The more they actively make playing new games a part of their lifestyle, the more accurately the play-focused Unified Model will predict their general personality style.

On the other hand, predictive accuracy can be extremely poor when trying to assess the personality style of someone who plays only a few light and generally popular games such as Solitaire. In this case, no model will be of much help since there's just not enough information to work from. The emphasis of the Bartle Types on social players of multi-user games can also make those styles difficult to apply to someone who prefers single-player games.

Another possibility is that the individual's choice of games to play may not fit neatly into one of the four major groupings. In this case, consider that they may play as one of the four types described by Christopher Bateman's DGD1 model, where each type is a combination of two of the primary styles from the basic Keirsey/Bartle model.

In all these cases, the more games someone plays -- they more they are immersed in the gamer culture -- the more accurate the Unified Model can be in identifying their preferred personality style from the games they play. And the opposite is true as well: the fewer games someone plays, the less effective the Unified Model can be in identifying their natural personality style. This is not a deficiency in the Unified Model; it's simply a lack of categorical information for the model to work with.

The Unified Model Helps Design New Games

The Unified Model by itself doesn't talk about particular gameplay features. But it is possible to link gameplay features to specific play style preferences -- different activities distinctively satisfy different needs. This allows designers to judge the fitness of various feature possibilities for a particular design goal.

Here's a short list of representative gameplay features organized by play style:

UNIFIED Play Style	ASSOCIATED GAMEPLAY FEATURES
Artisan/Killer/Experientialist	action, vertigo, tool-use, vehicle use, horror, gambling, speedruns, exploits
Guardian/Achiever/Gamist	competition, collections, manufacturing, high scores, levels, clear objectives, guild membership, min-maxing
Rational/Explorer/Simulationist	puzzles, creative building, world-lore, systems analysis, theorizing, surprise
Idealist/Socializer/Narrativist	chatting, roleplaying, storytelling, cooperation, decorating, pets, social events

Let's say you've been tasked with designing a game that's "exciting" and has "lots of rewards." From the chart above, you can see that "exciting" corresponds to the Artisan/Killer style, and "rewards" clearly describes the Guardian/Achiever preference. What you want, then, are gameplay elements that hit on both of those cylinders if possible, but on at least one or the other of them for sure.

So a satisfying concept for this game might be some form of arcade-style racing. This provides a highly physical environment where the player can directly manipulate a vehicle in a few very specific ways (but to a high degree of virtuosity) in order to be rewarded frequently. Making this the game's core mechanic emphasizes both intense manipulative action and the satisfaction of simple, clear goals with collectible rewards, all of which speak directly to the two play style goals.

Highly physical and object-rich action games that satisfy Artisan/Killer and Guardian/Achiever desires are fairly common, though. So a stronger test of the Unified Model's constructive power might be to consider combinations of play styles that aren't often seen.

What about a game world that merges the Internal Change goal of Idealist/Socializers with the External Change desire of Artisan/Killers? (This would correspond to the "Wanderer" play style from Chris Bateman's DGD1 model.) Such a game, without the Simulationist or Gamist structures preferred by Rational/Explorers and Guardian/Achievers, would likely appear to be a chaotic circus, a highly social environment where crazy things happen without warning. (Actually, this sounds very much like *Second Life*, doesn't it? Could something like this work as a single-player game? What about as a Facebook game?)

Another unusual kind of game to create would merge the generally opposing preferences of Guardian/Achievers and Idealist/Socializers. (The corresponding merged type would be the "Participant" play style from the DGD1 model.) To build fully on its unique qualities, such a game would need to be designed to emphasize gameplay features focusing on the rule-based generation of social relationships and behaviors. This is gameplay that Achievers could appreciate for the interpersonal stability and "social leveling-up," and which Socializers might enjoy as a powerful tool for creating stories about people. (Again, though, perhaps such a game already exists -- isn't this is exactly the play style combination provided almost uniquely by *The Sims*? Is there any way to make a Participant-style game that doesn't seem to be a clone of *The Sims*?)

Conclusion

While no model of human behavior can ever be considered perfect, the practical question is only whether a given model provides sufficient explanatory and predictive power to allow game designers to communicate usefully about what gamers want, why they want it, and how to give it to them. By that measure, I believe the Unified Model I've suggested, with the DGD1 model of Chris Bateman superimposed, produces an overall theory of gamer preferences that does offer good explanatory and predictive power.

Some will naturally object to this or that aspect of the Unified Model, or to the entire concept of any personality model that "puts people in boxes." For others, I don't imagine this model will be considered a surprising revelation. Many of the individual associations have no doubt been observed by others, such as Ethan Kennerly's exploration of the similarities between the Bartle Types and David Keirsey's temperaments (brought to my attention by Richard Bartle from a MUD-Dev post by Kennerly in 2005). Christopher Bateman has also made linkages among many of the play style models detailed here in his DGD typology.

What I think the Unified Model uniquely offers is the insight that not just one or two but many of the most well-known theories of play style and game design are closely related to each other and to a general model of personality.

All of the creators of the various theories included in the Unified Model seem to be referencing the same deep human reality: there is remarkable agreement on the basic ways in which people want to express their playfulness as a function of a general personality style. By pointing out the single pattern shared by these models, my hope is to provide a framework for thinking about gamer motivations that will help developers create better games.

Still, if some other model can be shown to have better explanatory and predictive power, then I'll enthusiastically set this one aside in favor of the new model. What matters is not that I'm personally "right," but that anyone who is interested in making better games (and making games better) has the most powerful tools for accomplishing that task.

If someone can demonstrate a model for explaining and predicting why we play as we do that is easier to understand or more effective when applied than the model presented here, gamers and developers and publishers will all win.

Until then, I hope someone will find this Unified Model useful in designing and discussing games.

Appendix

The table below compiles information about each of the four styles expressed in multiple ways. Not only does this demonstrate the very close conceptual ties between each of the four styles as seen by the different model creators, it can serve as a guide for designing gameplay elements that satisfy specific play style requirements.

Note: With three exceptions, for the rows "Keirsey" through "Covey" the text in the third column is taken directly from books, articles, presentations or other documents written by the authors of each play style or personality model. The words used in the section on Caillois are taken from the translation of Les Jeux et Les Hommes into English by Meyer Barash. The words used for the GNS+ "Experientialism" and MDA+ "Kinetics" entries are mine, since those entries don't exist in the original three-fold models.

Keirsey	Artisan	tactical, fun-loving, realistic, unconventional, spontaneous, seek stimulation, prize freedom
Bartle	Killer	imposition upon others; cause distress; adrenalin-shooting, juicy fun; thrill of the chase; reputation
Caillois	ilinx (vertigo)	movement, dizziness, disorder, physical activities, high speed, visceral
Lazzaro	serious fun	stimulation, excitement, rhythm, body
GNS+	[Experientialism]	[sense of physical skill or dexterity]
MDA+	[Kinetics]	[physical interactions with the game world]
Handy	Power culture	control-oriented, overlapping spheres of influence
Gallup	Impacting	moves others to action
Covey	Power	capacity to act, potency, energy
Motivation	Power	manipulative sensation, excitement
Problem-solving	Performance	gambling, speedruns, wallhacks, and other virtuoso performances
Character class	Thief	"Anything not nailed down is mine. Anything I can pry loose isn't nailed down."
Personification	Hands	dexterity, the sensation of touch, physical artistry
Goal	DO	action, performance, risk-taking, new sensations

Keirsey	Guardian	logistical, hard-working, loyal, responsible, cautious, trust authority, seek security
Bartle	Achiever	accumulating ... treasure; points-gathering and rising in levels; status; hierarchy; competition
Caillois	agôn (contest)	competition, discipline, perseverance, rules applied equally to all
Lazzaro	hard fun ("fiero")	mastery, challenge, goals, progress
GNS+	Gamism	competition, victory and loss conditions, striving, challenge, adversity, husband resources
MDA+	Mechanics	components, data representation, algorithms, actions, control mechanisms
Handy	Role culture	process-oriented, long-term hierarchical control; respect for authority
Gallup	Striving	pushes an individual toward results, routine, structure, order
Covey	Security	sense of worth, self-esteem, basic personal strength
Motivation	Security	competitive accumulation, clarity
Problem-solving	Persistence	grinding is not only effective, it's pleasant

Character class	Warrior	"I have not yet begun to fight!"
Personification	Heart	determination, loyalty, discipline, protection
Goal	HAVE	service, effort, profit, stability through possessions

Keirsey	Rational	strategic, problem-solving, systems analysis, ingenious, independent, trust logic, seek knowledge
Bartle	Explorer	mapping; experimentation; depth; surprise; knowledge; discovery; theoretical
Caillois	mimicry (simulation)	imaginary universe; elaborate, complex and surprising; simulation; invention
Lazzaro	easy fun	imagination, discovery, exploration, creativity, uncertainty
GNS+	Simulationism	sincere shared creativity, internal logic, system, plausibility, imagination
MDA+	Dynamics	run-time behavior, systems, models, feedback systems
Handy	Task culture	goal-oriented, matrixed to multiple tasks
Gallup	Thinking	analyzes the world
Covey	Wisdom	judgment, discernment, comprehension, understanding, parts and principles ... related to each other
Motivation	Knowledge	logical rule-discovery, invention
Problem-solving	Perception	solve puzzles and simulations through insight, not repetition
Character class	Wizard	"Curunír ... was subtle in speech and skilled in all the devices of smith-craft."
Personification	Head	intelligence, knowledge, forethought, craftiness
Goal	KNOW	knowledge-gathering, pattern recognition, planning, competency through analysis

Keirsey	Idealist	diplomatic, seek their true self, meaningful relationships, wisdom, kindhearted, spiritual, human potentials
Bartle	Socializer	role-playing; interested in people; empathising; grow[th] as individuals; relationships; influence
Caillois	alea (randomness)	chance, surrender to destiny, equal footing, complementary to agôn
Lazzaro	people fun	relationships, self-expression, personalization, cooperation
GNS+	Narrativism	addresses [a story] Premise, emotional connection, real-people interactions
MDA+	Aesthetics	desirable emotional responses, goals
Handy	People culture	person-oriented, temporary groups following charismatic leaders
Gallup	Relating	builds connections with others
Covey	Guidance	source of direction, standards, principles
Motivation	Identity	emotional relationships, fairness
Problem-solving	Persuasion	consensus-building through self-awareness
Character class	Cleric	"Every day, in every way, I'm getting better and better."
Personification	Spirit	vision, devotion, passion, certainty
Goal	BECOME	self-expression, personal growth, community, drama

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