Bartle, Richard A.: *Alice and Dorothy Play Together*.
In Harrigan, Pat and Wardrip-Fruin, Noah (eds): *Third Person: Authoring and Exploring Vast Narratives*. MIT Press: 2009.

Alice and Dorothy Play Together

Richard A. Bartle
Dept. Computing and Electronic Systems
University of Essex
UK

"Curiouser and curiouser!"
– Alice, *Alice's Adventures in Wonderland* (Carroll 1865).

"We will go to the Emerald City and ask the Great Oz how to get back to Kansas again."
– Dorothy, *The Wonderful Wizard of Oz* (Baum 1900).

According to the conventions of fiction, it would seem that when a young girl finds herself unexpectedly in a strange and wonderful place, she has two ways to proceed. She can, as Dorothy did, set out to follow a predetermined path; or she can, as Alice did, go where fortune takes her.

The same two options are available to players of virtual worlds[1]. When they begin, they can either follow the yellow brick road laid out before them, or simply wander as they will. The advantage of the former is that they know where they're going; the advantage of the latter is that they'll see things that can't be seen from the well-trodden trail.

The journeys of Alice and Dorothy both occur at two different conceptual levels: literally, in the imaginary worlds of Wonderland and Oz; figuratively, in the self-understanding of the protagonists. The former are metaphors for the latter – they're *hero's journeys* (Campbell 1949). Thus, when Dorothy sets out along the yellow brick road, she is travelling not so much to find the Great Oz as to find herself. Alice's outing in Wonderland is far less directed, but it nevertheless holds that same promise of personal growth[2].

Virtual world designers, through their creations, necessarily affect their players[3]. Rather than merely *suggesting* a hero's journey, however, virtual worlds are unique among fictional constructs in that they enable players actually to *undertake* their own, personal hero's journey directly. Designers, in the shaping of their virtual worlds, have immense influence on how players do this. Should they foster an environment in which the path to self-understanding is set out from the beginning (a Dorothy world), or should they encourage players to find their own way (an Alice world)? And why is the distinction an issue anyway?

To answer these questions, it's instructive to take a brief look at how they came to be in competition.

Designers of early virtual worlds[4] took the Alice approach, at least at the level of giving players goals: their aim was to provide what might today be called a *sandbox* – an open-ended world in which players can explore both their environment and themselves. Although there was a given overall objective (to acquire, through action, sufficient points to reach some "you have won" total), quite how this was to be achieved, well, that was up to the individual. The fun was in the journey, not in the arrival.

A decade or so later, in 1989, there was a sudden shift in attitudes. A fresh kind of virtual world came along: the *social* world. Previously, almost all virtual worlds had been couched in terms of their being *games*; with *TinyMUD*, the game aspect was explicitly and entirely removed. Not only did the players have no set paths to follow, but the virtual world *itself* offered none: it was a playground, rather than a game. Because there was therefore never any pretence that such worlds might be anything other than adjuncts to reality[5], their players had much the same view as Wendy in *Peter Pan* (Barrie 1911), for whom Neverland was an extension of her own imagination; thus, we might call these newcomers Wendy worlds[6].

In reaction to this anti-game swing, further virtual worlds were developed (primarily in Scandinavia[7]) that were even *more* game-like than their predecessors. They structured and formalised playing styles, chiefly by using ideas imported from table-top role-playing games such as *Advanced Dungeons and Dragons*. In *MUD1*, if you wanted to be a mage, or a thief, or a warrior, you merely had to act like one (use a lot of magic, sneak around stealing things, hit things with swords); in *DikuMUD*, if you wanted to be a mage, or a thief, or a warrior, you chose the character class Mage, Thief or Warrior. You couldn't even *occasionally* sneak around and steal things as a mage or warrior, because only predefined thieves could do that. You no longer had to find your own way: you chose which track to run on, then set out to follow it. Newbies[8] in particular liked this Dorothy way of doing things, and, because the socially-oriented players who had always railed against it had by now left for the *TinyMUD*[9] derivatives, it rapidly established itself as the dominant form[10].

In the original, Alice worlds, designers provided a fixed overall goal but player roles were left undetermined. The 1989 schism led to game-like Dorothy worlds, in which player roles were also preordained, and to the social Wendy worlds, in which player roles *and* the overall reason for playing were both left unstated. Alice worlds were no longer created: new worlds were either Dorothy worlds or Wendy worlds, depending on players' preferences.

This partitioning gave designers new energy and focus. They were able to add more of what their particular player base wanted, because each was no longer constrained by the needs of the other. Thus, the gap between them widened[11], until it became the gulf it is today.

Yes, we do still have this divide. The vast majority of virtual worlds, whether commercial or hobbyist, are game-like (Dorothy) worlds, the leading title at the moment being *World of Warcraft* with close to 8,500,000 players. However, there are also social (Wendy) worlds of some significance, the most important of which is *Second Life* with its 450,000 or so users[12]. The players of those few balanced (Alice) worlds that remain usually consider them to be game-related, while nevertheless recognising that they're somehow *different* to Dorothy worlds; the closest that we have to one in terms of the large-scale graphical worlds of today is probably *Ultima Online*, which still has over 100,000 players even as it enters its second decade[13].

Now it's easy to look at this history and suppose that Dorothy and Wendy worlds are the future, with Alice worlds mere relics of the past. It's easy, but it's unwise. Here's why: Dorothy and Wendy worlds were each deliberately established to reject the tenets of the other, but some of those tenets are actually relevant to *both*. Yet because of their opposing views, they can't simply expropriate the ideas they need – the contextual differences are too great. Dorothy and Wendy can't play together.

Both, however, *can* play with Alice.

As its title suggests, this chapter is concerned with just one of the two options available: how concepts from (balanced) Alice worlds can help (game-like) Dorothy worlds. This isn't because they can't help (social) Wendy worlds, but rather because Dorothy worlds' needs are currently the more pressing. In particular, a big problem that Dorothy worlds have right now is that the kind of content they need is very expensive to create. Alice worlds, which also have game-like content, are significantly less costly[14]. We'll see why shortly.

Furthermore, although the Dorothy style been dominant for over 15 years, there remains among game-world designers a lingering suspicion that by dropping the Alice perspective they were somehow losing something important. Dorothy emphasises *game* over Alice's *world*; Dorothy *sets* a narrative, whereas Alice's narrative *emerges*; Dorothy's certainty appeals to *newbies*; Alice's freedom appeals to *oldbies*. Surely there's some room for manoeuvre here?

As a result, there is an ongoing dialectic among designers as to which way is, ultimately, the better. Although in the past this has been merely an academic exercise (people play Dorothy worlds in their droves, so why change anything?), of late, as the expense of competing with *World of Warcraft* on its own terms has become apparent, the issue has begun to assume some urgency. Yet how can prospective players be persuaded to risk engaging in an Alice world when some competing game will always be happy to offer them the assurances of Dorothy?

The answer, I propose, is that it really doesn't matter. A virtual world can cater to the needs of both Alice and Dorothy *at the same time*.

On Story

What is a story?

Well, it's anything running the gamut of narrative, with individual events (real or imaginary) at one end and full-blown novels at the other. Games have story[15], even abstract ones like *Tetris*: tell someone about how you were close to filling up the box, how only one tile shape and colour would do, and how wow, it came, and you only *just* slotted it in, whereupon it triggered off a chain reaction that collapsed the whole pile into practically nothing – that's a story. Yes, it's the story of how you played the game, and it may not be all that compelling, but it's still a story,

Although this broad range of narrative is almost a continuum, it's not quite: there are some step changes within it. Interaction is one of the key ones. All stories are interactive, in that they're written for an audience (even if it's an audience of one – the writer), but some are more interactive than others. If you watch a movie, your behaviour in the audience does not affect what you see, although it may affect the experience of others in the audience; if you watch a play, the actors can pick up on audience reactions and make subtle adjustments to their performance. Similarly, if you play a game with more than one player, you're interacting not only with the designer but also (and more immediately) with the other players; furthermore, you're doing this as audience both to the designer's story and to one another's emerging personal histories (which are themselves a form of story). Virtual worlds, with many, many players, are highly interactive – so much so that tracking all the overlapping stories going on within them is next to impossible.

Nevertheless, it is possible to describe the *kind* of stories that virtual worlds exhibit. Essentially, they come in three forms:

- Backstory, describing the initial set-up[16].

- Story, describing the plot actively being followed.
- History, describing events that have happened since the backstory ended.

These stories can involve any number of players, from one to all of them. To simplify, let's say that they'll concern either:

- Individuals, *e.g.* your personal struggle to reconcile your desire to help others with the dark magicks you must practice to deliver this help.
- Groups, *e.g.* the orcs' attempts to gain self-esteem through honest industry in response to the shame they feel following their defeat in a major war.
- World, *e.g.* the comet will strike the planet unless the players can deflect it.

This gives us a handy 9x9 grid:

	Backstory	Story	History
Individual	Your character's family was slaughtered by lizard people.	You must defeat the ogres to gain the respect of the villagers.	That time you were accused of robbery when it was an accident.
Group	Mages cannot wear mail because iron interferes with their spells.	It will take our combined effort to stand up to the powerful dragon.	Raising the money for a guildhall took weeks, but brought us together.
World	Following the Gold War, the world settled into an uneasy peace.	A conspiracy to resurrect the Golden Gods in more terrible form.	This drought came because players burst a dam to destroy Goldfort.

Backstory serves two purposes: to add context; to provide fictional cover for otherwise troubling decisions. As an example of the latter, a designer may decide that if healing-oriented characters were to be allowed to wield swords, that would make them too powerful. The designer therefore decrees that healers can't use swords. However, although this makes sense in terms of gameplay, it makes no sense within the game fiction. Why *shouldn't* a healer use a sword? The designer therefore adds some backstory to explain that healers are sponsored by the god of life, for whom blood is the symbol of his divinity. If healers shed the blood of others, the god of life will not grant them healing powers. Therefore, healers must use blunt weapons such as maces and warhammers, or offend their deity and lose their healing powers. This post-justification becomes part of the world's lore, and may then be used as a springboard to generate new story ideas independently (perhaps the elimination of a cult of vampire-worshippers who are affecting the ability of healers to function in some part of the world).

History, although often confused with backstory, is apart from it. It begins when backstory ends, being the retelling of causally-related events such that they form a narrative. It emerges from action and interaction, rather than being fixed as flavour text. Best of all, it comes almost for free: so long as players have interesting things to do in virtual worlds, they have interesting things to relate to other players. They collate these into anecdotes (*i.e.* story form) and so build on the backstory to provide an ongoing, living history.

Story (in this context) means a predetermined plot which is being followed by the players, groups or world. In general, world-level stories take so much effort to

implement that they pretty well have to be linear in nature, which leads to all kinds of problems to do with players' feelings of impotence in the face of unavoidable impending doom (Bartle 2003). Group-level stories, again, tend to be linear, but are less epic; there are usually several different ways to thread a way through them, and failure is a viable ending. Individual-level stories are multiple and overlapping, as with soap operas, such that by the time you're done with one quest you're already engaged with another.

In all virtual worlds (Alice, Dorothy and Wendy), history invariably arises from player action, whether as individuals, groups, or as an agglomeration. Also in all such worlds, individual backstories will be written by the players concerned (when written at all[17]). Beyond that, though, backstory and story can be created either by players or by the virtual world's designers, and it's here that the difference between traditions is laid bare:

- Dorothy worlds have their backstories and stories created by their designers.
- Alice worlds have their backstories created by their designers but their stories created by their players.
- Wendy worlds have their backstories and stories created entirely by their players.

Creating story is expensive, because so much of it is needed and so much of it can't be reused from other stories[18]. As a general rule, the greater the number of players that are affected by a story, the more expensive it becomes to create. Virtual worlds wouldn't need instances[19] if there were enough story experiences – what designers call *content* – to go around, but there aren't enough therefore instances have to substitute.

Alice worlds don't provide story; what they provide is the mechanism for story to arise within a framework that is explained by the backstory and realised as the game world. Dorothy worlds do provide story, but at the cost of employing designers to create it. Wendy worlds provide neither story nor backstory; as with Alice worlds, they do supply the mechanism for story to arise, but they place the entire burden of narrative context on the players. In other words, if you want a story in a Wendy world, you have to write it yourself[20].

Wendy worlds have no formal game content and do little to promote any personal hero's journey. Because of this, they take no further part in this chapter's analysis. Alice and Dorothy worlds do both strive to give their players the chance to *be* or *become* who they really *are*, but differ in their philosophies as to how best to promote this. Alice worlds give players freedom to find their own way, but suffer because newbies can't easily inform their choices; Dorothy worlds explain what the main choices are and offer direction, but prevent players from finding what might be their ideal were it to lie somewhere in between the prescribed paths.

So, we have Dorothy worlds and Alice worlds, both of which want to give the players a narrative experience that equates to their participation in a hero's journey, but disagreeing on how best to do this. Their designers share the opinion that while they own backstory, history is emergent from player activity; however they diverge when it comes to plot. Because, on the grand scale, an overall narrative is extremely difficult to keep on track (let alone sufficiently compelling to engage the majority of players), the main unit of story for virtual worlds is the quest. The two conventions handle these somewhat differently.

On Quests

In both Dorothy and Alice worlds, players have things they want to do, which they express in terms of goals. In practice, there's the overall "game" goal that is ostensibly driving their play, and then there are the smaller (personal and group) goals that are steps along the way. These intermediate goals lead to self-contained mini-narratives that players call *quests*. Their opposite – playing without aiming to solve any specific goal (simply killing monsters for points, say) – is *grinding*. Players like quests, but they don't like grinding. Quests that involve much repeated action with little narrative connection to a goal are often regarded as a form of grinding, too, as in a "prove your ability by killing 10 lesser *X*s and 5 *X* mages" template (which, when achieved, inevitably leads to "prove your further ability by killing 15 greater *X*s and 10 *X* arch-mages").

So, where do quests come from?

There are three main sources:

- Hand-crafted quests, created by game designers.
- Automatic quests, created by program code that has been specified by the virtual world's designers.
- Emergent quests, created by the players.

Dorothy worlds always have the first one, frequently have the second one, and only have the third one by accident. Alice worlds only have the third one.

In terms of players' shared experience, hand-crafted quests are usually the best, so long as the designers know what they're doing in terms of story-telling (Sheldon 2004). Automatic quest-generation (in which the designers try to generate story content procedurally, typically because they don't have enough resources to hand-craft it all) is universally dismal[21]. Emergent quests, wherein players give themselves or each other things to do, are, at least in Dorothy worlds, often tantamount to grinding (*e.g.* killing 362 voidcallers over the course of 6 hours to obtain the pattern required to make Robes of Arcana[22]).

It doesn't have to be this way, though!

Let's look closer at what's going on.

In Dorothy worlds, quests are molecules of preconstructed narrative. The designers determine how these are put together, and their constituents – the "atoms" – are not directly accessible to players. For example, a quest may involve the killing of a wizard to obtain a potion required by a witch; although there is some freedom in how they go about killing the wizard, there is no possibility that the potion can be acquired any other way (*e.g.* made by a player, bought from the wizard) and no way of addressing the witch's stated need except by performing the quest (e.g. there is never anything other than that *one potion* which will do). That said, the way they *are* put together is sufficient to sustain anything from fifteen minutes to 6 hours of usually entertaining gameplay for one or more players, albeit they're expensive to create.

Alice worlds don't have formal quests. Their granularity of story is much finer – they deal only with the atoms, leaving the players themselves to build the molecules. Players have goals not because the *game* gives them those goals, but because the *world* does[23]. In an Alice world, the witch mourns her lost youth; the potion may restore her looks, but so might an apple that has been dunked in the fountain of eternal youth; and the attentions of a toyboy satyr may make her decide she's fine as she is anyway. Solutions to dramatic tensions are resolved through the

combination by the players of small narrative units, rather than by tackling a hand-crafted but larger unit provided by the designers.

While Alice worlds don't have formal quests, they do have narrative possibilities. To create these, designers anticipate what players will want to do, and add obstacles; this creates a narrative tension. The designers also provide the means for players to circumvent those obstacles; these narrative fragments offer plot, the following through of which by player action leads to history (in its retelling). The crucial thing to note about story in Alice worlds is that, over time, these atoms of narrative accrue until eventually they reach a critical mass such that when the designer adds a new obstacle, the means to avoid or evade it may well be *already in place*.

For example, the designer may decide to add a complex of rooms far underground, accessible only through a deep shaft. The first solution players will think of is to use magic to float down, so the designer adds a series of jagged rocks sticking out that will impale players even if they are in some kind of slow fall. In a barn nearby, however, the designer places a length of rope: now the players can construct the narrative molecule, "go to the barn, obtain the rope, come back to the shaft and use the rope to get down". So far so good. Now suppose that some players have teleport stones: you leave one in a location and you can teleport to it if you carry its mate. This system may originally have been introduced as a mechanism for allowing players to get back to town quickly after a long session out in the wilderness, but now it offers a solution to the shaft puzzle: drop a teleport stone down the shaft, then teleport to the bottom once it lands. Thus, although the designer added a solution (the rope), another solution already existed.

Virtual worlds which have this critical mass of narrative atoms are said to be *rich*. All Alice worlds are rich to some degree; Dorothy worlds tend not to be, on account of how their story is put together at the molecular (quest) level, so there are fewer possibilities for quest/quest interaction; also, richness leaves them more open to exploits[24]. They do have potential for richness, though, primarily in crafting. For example, you may know how to make a number of potions, some of which are directly useful to you and others of which you can sell for profit. Off you go to collect the plants and salves and other things you need to make them. There's no formal quest to "make 20 potions of healing"; it's something you decided to do to satisfy a goal that you yourself created from nowhere. There may be several different ways to obtain the ingredients you wanted, although probably not enough to qualify as being rich (could you grow your own bloodweed, or do you have to pick it from the wild?). The point is, though, that it's not a molecular quest, it's a quest you made yourself which is achievable using only the atomic actions you can perform – it's *emergent*.

The question arises: is this grinding? If it is, players won't be too happy about doing it. It would certainly be grinding if you had to make 100 expensive but useless potions in order to gain the expertise you needed to make that one potion you *really* wanted, but assuming that there's a reasonable return for the investment of your time, you probably wouldn't have this point of view. After all, if it was likely to feel like grinding, you wouldn't have begun it in the first place.

In Alice worlds, the richer the world, the less the grind. You don't do a quest because some quest-giver adds it to your quest list, you do it because its *your* goal you want to satisfy. Non-player characters become obstacles to be overcome or circumvented, not mere dispensers of mini-narratives. Players make their *own* stories, they don't follow those of the designers.

Is that a good thing or a bad thing?

On Structure

Needless to say, Alice worlds regard this as a good thing. Their philosophy is one of freedom: the world is structured, but the game is unstructured. Players do whatever they find the most fun; they determine their own path to self-understanding.

Dorothy worlds, on the other hand, consider it a bad thing. Their philosophy is one of structured play. Too few players know, or are prepared to discover, what they find the most fun; they prefer to be given direction appropriate to their basic preferences.

Each of these philosophies is apt, but only for some of the time. Dorothy's philosophy means choosing the narrative path you wish to take before you take it, which sounds attractive at first but suffers because people change as they play (Bartle 2003, 2005); what's right now may – indeed, probably *will* – be wrong later. Alice's philosophy means changing the narrative path as you follow it, which sounds unattractive at first but comes into its own when people take the wrong direction at the start or find that the path doesn't go where they thought it went.

Put this way, it can be seen that these philosophies are not irreconcilable. You ought to be able to start to play by following Dorothy's example, but have the option of switching to Alice's when it seems right. So why don't we have virtual worlds which allow you to do this?

The main reason is that game at the literal level has become detached as a metaphor from the journey that gives it its meaning. Although most designers have a solid understanding of *what* they're designing, too few have a grasp of *why* they're designing it. It's as if they're creating a cookery book filled with ever more difficult-to-make dishes, neglecting to consider whether the results might actually be edible or not. Yes, you do learn to cook, but it would be better if you'd learned to cook things you could eat.

How do Dorothy worlds provide players a narrative path? Through quests delivered at appropriate points, so players feel as if they're achieving things as they're lead inexorably towards the final level? Well yes, but a series of quests to add experience points to a character doesn't say a great deal about the advancement of the player as a *person*. There's a disconnection between the narrative and the *purpose* of the narrative. The purpose of the narrative is, in fact, defined by an entirely different system – the available character classes (and, to some extent, races). These prime players with the atomic actions they can use to overcome the obstacles that the quests put before them. You don't progress on your hero's journey because you completed a quest; you progress because you completed it as a heat-of-battle sword-swinger, or as a long-range missile-thrower, or as a sneaky backstabber or whatever; you completed it according to your *role* – these are, after all, role-playing games.

It's within the narrow band of their role that players' personal journeys take place. The quest-determined game narrative is supposed to be reflective of this journey, but this is too infrequently the case. Quests are there to give players something to do; they should be there as waypoints.

There is some flexibility here. If there are enough quests, players can pick and choose those which suit them best, carving out their own narrative in a way that mirrors their further understanding of their character. Quests, as I keep saying, are expensive to create, though. There may also be some discretion in the rigidity to which players are held to their character classes; adjustment might be possible as

specialisations kick in at higher character levels. However, on the whole in Dorothy worlds, it's still the case that if you play as a fighter you're not going to be able to cast druid spells, and if you play as a druid you won't be as good in a toe-to-toe tussle as a fighter. This means they're fine if you pick a role for which you are well matched, but a pain if you choose a wrong one.

Alice worlds have a much closer bond between character activity and players' self-exploration. Eschewing formal quests, players can only do things that they themselves want to do, in a manner of their own choosing. However, this lack of structure is alarming for many players: they just want to play a *game*, not undergo some mystical transformation of the soul[25]; dumping them in a world and telling them to get on with it requires too much effort on their part. They sense the difference between a game world (Dorothy) and a world that's a place to game (Alice). When they start, they want the former, not the latter.

The hero's journey demands a connection between the advancement of a protagonist (*i.e.* the character) and advancement of reader (*i.e.* player). Dorothy worlds have accessible advancement of the character (through quests), accessible advancement of the player (through character classes[26]), but they have a poor connection between the two (the quests don't promote players' self-exploration). Alice worlds have inaccessible advancement of the character (make-your-own quests), inaccessible advancement of the player (be your own person), but a strong connection between the two (you do what you most need to do right now).

Dorothy's structure gives it accessibility, but it drives a wedge between player and character. Alice's lack of structure keeps player and character in step, but is hard to get into. If Dorothy worlds could have more flexible classes, that would allow players to adjust their playing styles in response to the quests presented to them; if Alice worlds could have quests that looked like quests, that would allow players to engage with the world while finding the solutions that worked best for them.

Actually, Alice worlds *could* have quests; they don't have quests, but they could. Why don't they have them?

Actually, Dorothy worlds *could* have flexible classes; they don't have flexible classes, but they could. Why don't they have them?

The answer is partly doctrinal and partly practical.

Alice worlds are *about* freedom. If you offer any restrictions, you're cutting back on freedom. Character classes are restrictions, therefore they have no place in Alice worlds. Also, from a practical point of view, as soon as you have classes you have issues of balance. Some classes will inevitably have an easier time of it than others, so players will either gravitate towards the same few classes or they'll quit in frustration.

Dorothy worlds are *about* structure. A game with no rules is no game at all[27]; if you remove too much structure, you remove the game. Classes are structure, and removing them takes away an interesting decision (*i.e.* a piece of gameplay[28]) and diminishes them as a game. Also, from a practical point of view, if you don't have classes then players will max their characters out in every direction so they become invincible machines that can fight, heal and lob fireballs with impunity[29].

Looking first at the practical issues, the concern of both games is that players will wind up being clones of each other. However, the reasons for such anxiety are largely historical and no longer apply. Alice games came from an era when not only was player *versus* player combat the norm, but so was permadeath[30]. In other words, if one class had *any* tangible advantage over another, you *had* to play it or you'd be attacked and lose your character permanently. Today's virtual worlds are tame by

these standards, and there is no longer such great pressure to play one class rather than another[31].

Dorothy worlds' worries about maxed-out characters are also less justified than they were, because the table-top role-playing games they drew the ideas from in the first place have advanced since the 1980s. Whereas before it was a case of "if we let mages wear armour, they'll be unstoppable!", nowadays even *Advanced Dungeons & Dragons* has arcane spell failure[32] for armour types worn by multi-class characters. The backstory has been adapted not to prevent mages from ever wearing armour, but rather to allow players to choose whether their character should spend the next few encounters as a mage or a fighter. In table-top role-playing games, players can play maxed-out characters without causing imbalance, because although they're multi-class as a general concept they can only be effectively one class at any one time while playing[33]. This could easily be done in Dorothy worlds, too.

Turning now to the philosophical objections that Alice and Dorothy have for each other's methodologies, all it takes to reconcile the two is a little more open-mindedness. They're currently set up as if the opposing point of view were so bad that it must not be allowed to taint the purity of the True Vision, yet this hardly reflects the actual relationship between the two: unlike the case with Dorothy and Wendy worlds, players can happily play both an Alice or Dorothy world without any feelings of Betraying the Cause…

Alice worlds' conviction that freedom of expression through play is all, and therefore constraint on such expression is heinous, has a certain charming contrariness about it: to be true to itself, surely it should allow players the freedom to play in a constrained fashion, just so long as they can always stray back into less structured territory if they wish?

Likewise, Dorothy worlds' belief that players should be educated rather than self-taught in the ways of self-fulfilment – even when much of the education involves what amounts to private study – is also overly dogmatic. For any path to become well-trodden, someone has to find the path in the first place. Where is the harm in allowing players to wander if they can always come back safely to the highway?

All it would take to do this is a class system built from smaller bricks that players can customise as they see fit – skill-based or gear-based[34], say. Players who want to be a generic mage begin by choosing the generic mage template, and there they are, ready to play; players who want to be a mage specialising in necromancy or demonology or conjuration or whatever can take the basic template and tinker with the starting parameters a bit; players who want to be a mage who can pick locks and backstab enemies can build their own combination mage/rogue class from scratch (or download one someone else has put on the Internet). As characters advance, players can either choose their own advances (Alice style) or go with the ones the game recommends (Dorothy style). The result: both camps are happy.

So, Alice and Dorothy can play together. Now, at last, we can examine why they'd want to do that.

On Emergence

Alice worlds are unstructured. This makes them relatively cheap to implement, but acquiring newbies is relatively expensive.

Dorothy worlds are structured. This makes them relatively expensive to implement, but acquiring newbies is relatively cheap.

If we can get the lack of structure of Alice worlds to provide the structure of Dorothy worlds, we end up with a hybrid that is relatively cheap to implement and for which acquiring newbies is *also* relatively cheap. We get the best of both – *if* it can be done.

It can be.

Alice gives the world, but needs the game; Dorothy gives the game, but needs the world. In theory, then, if we construct an Alice experience so that it can generate what a Dorothy experience needs, the Dorothy experience can in turn generate what the Alice experience needs. We can achieve this by designing for the Alice world concept of *richness*. Having sufficient interactions between objects, player characters, non-player characters, monsters and locations will lead to a critical mass situation, in which these interactions themselves give rise to the goals that players tackle as quests. Furthermore, they'll add tension and conflict, making for narrative in their resolution. In a rich world, goals come as a side-effect of that richness – just as they do in the real world, which manages to be pleasingly interesting for individuals without the clumsy attention of any designer[35].

Here's an example of how an emergent goal can appear.

When I start to play, all I know is that if I kill things I'll get better at it. So, when I appear in the world surrounded by low-level wildlife, I set about obliterating them. At this point, I have no quest, I'm just grinding. The creatures behave differently, depending on their type, which holds my interest awhile. After a few minutes, I'm killing bears basically because there are bears here and I get points for killing them. I notice at this point that bears are so big that even an inexperienced character like mine can skin them, OK, I'll take those bearskins. The meat looks a bit tough though, so I'll leave that. After a while longer, I have a stack of bear skins and I decide to sell them. Except, no-one wants bear skins. What use are bear skins? What people want are coats to keep out the cold. So I take a bear skin and try make a coat, and I mess up, but I take another, and clean it up better and sew it better, and after a few more attempts I wind up with a coat. Now I have something other people want. I get some coins in exchange for the coat. I make some more coats, I get some more coins, and then I decide that really I'd rather be killing bears so I hire some non-player characters to make the coats and I go off back into the woods. After some more of this, though, I get bored of killing bears and it starts to feel like work rather than play. I therefore put up a notice offering money to people who bring bear pelts to my workshop. The next newbie who comes along no longer has to grind: they can see there's coin to be made from killing bears, so that's what they do. Their quest to kill bears has arisen entirely from my actions. It's an emergent consequence of the richness of the virtual world.

That's an example which shows how goals can arise through economics. This kind of quest can feel rather grindy after a while, though, and the interaction between competing enterprises can affect how worthwhile their quests are. If everyone sets up a bearskin coat cottage industry, the result will be either too few bears or too many coats. All is not lost, however, as changes in circumstances can lead to tension between rival producers, which ultimately leads to politics. Your low-cost coats are putting the coat-makers of my village out of business, so if you want to sell them here you'll have to pay a tariff.

Political quests are far more interesting, far less grindful, and altogether more compelling than other quests. They vary, too; that blow-up-the-bridge-to-ruin-your-trade quest is a one-off. The situation won't be as it is in some worlds, where you rest

after having just killed a major figure then stand up and see someone else killing him again right before your eyes while his recently-dead form is still lying there[36].

It's not just the quests that change, but the way you solve them. That harpoon launcher you built to shoot down dragons might be just the thing to take a rope across a ravine; the bowl you use to teleport objects to your vault may be able to do the same thing to incoming fireballs[37]; the metal balls you fling with your sling could be scattered around you before you sleep, to alert you if anyone tries to sneak up and slit your throat. Also, it's not just objects that interact, but their uses; when things have multiple applications, there are multiple interactions, and therefore multiple (potentially conflicting) goals will arise from them.

Traditionally, this kind of world was the exclusive preserve of the Alice approach. Predetermined quests were seen as over-constraining, straitjacketing players into doing things they didn't want to do. Designers wanted their players to have the freedom to *live* the world, not just to *play* it. Unfortunately, while this is fine for players who have grown into their character, it's not much good for newbies, who, as far as they are concerned, *do* just want to play it.

Why should it be Alice-only, though? There's no reason why the Dorothy worlds couldn't employ this system. Players of such games may crave direction, but that doesn't mean the direction has to be set out by the game designer through quests; it could be set out through opportunities for players to create their own quests. Also, just because this produces a good many quests, high in context and strongly related to each other, that doesn't mean there's *no* room for hand-made quests. Designers can, if they wish, prebuild quest chains of their own, to keep the narrative pace and to hint at backstory so as to make world feel more alive. The thing is, they don't have to create anywhere near as many of these quests as they would have done without the Alice quests in support, and although making a world rich enough for critical mass is not free, it's a lot less expensive than one in which all the quests are lovingly crafted by storytellers who can't code, or coders who can't storytell[38].

In this suggested approach, the designer constructs a world with no storyline, but with a lush capacity for interaction. This results in a framework for the creation of story by the players themselves. The designer doesn't determine what particular stories become manifest, but does determine what kind of stories *can* become manifest – what quests can emerge.

Is this possible? Can a world really be complex enough that players give themselves their goals, rather than relying on the designer to do it for them? Well, yes it can: we're seeing the beginnings of it now, with the impressive *EVE Online* at the forefront. *EVE* manages to sustain a player-driven, emergent quest system while still feeling as if it were a game. OK, so it's not exactly newbie-friendly, but it nevertheless shows that what once was the sole preserve of Alice can now be shared with Dorothy to the benefit of both. It may seem like a paradox, but the result of adding more content aimed at players who don't want directed play really *can* help those that do.

Conclusion

Historically, there have been three philosophies for designing virtual worlds: Alice worlds, Dorothy worlds and Wendy worlds. Alice worlds offer freedom to play in a game context; Dorothy worlds offer structured play in a game context; Wendy worlds offer freedom to play in a non-game context[39]. Although the underlying

philosophy of Alice worlds is compatible with both Wendy (freedom) and Dorothy (game) worlds, the relationship between Alice and Dorothy worlds is of particular interest because players regard them as close in a way they don't regard Alice and Wendy worlds. In other words, the strength of the game conceit is stronger than that of the freedom conceit.

Alice and Dorothy worlds each have a problem not shared by the other: Alice worlds can't attract newbies; Dorothy worlds are expensive to create. The roots of these difficulties lie in the way they construct narrative: Alice does so at the atomic level, which gives players rich possibilities for creating new story, albeit too rich for most newbie tastes; Dorothy does so at the molecular level, providing narrative in bite-sized chunks that newbies find tasty, albeit too chunky to suit an educated palate. By combining the two, the result is a world with a range of granularities of narrative, laid out before the players in such a way that it's natural that they'll choose whichever possibility best suits their mood at the time.

Most players would start off in Dorothy mode, then switch to Alice mode as they progressed. It doesn't have to be like that, though: some could play the whole time in one mode and never change to the other – and it *wouldn't matter*. The important thing is that you finish a journey you made on your own terms, whatever those terms may be. By combining the merits of Alice and Dorothy, more people will be able to do so than ever before.

Alice and Dorothy *can* play together, and their games will be better as a result.

References

Barrie, James Matthew (1911). *Peter and Wendy*. London: Hodder and Stoughton. <http://www.gutenberg.org/dirs/etext91/peter16.txt>

Bartle, Richard A. (1996). *Hearts, Clubs, Diamonds, Spades: Players who Suit MUDs*. Journal of MUD Research 1(1). <http://www.brandeis.edu/pubs/jove/HTML/v1/bartle.html>

Bartle, Richard A. (2002). *Mobile AI*. Online: Skotos. <http://www.skotos.net/articles/>

Bartle, Richard A. (2003). *Designing Virtual Worlds*. Indianapolis: New Riders.

Bartle, Richard A. (2004). *Newbie Induction: How Poor Design Triumphs in Virtual Worlds*. ITU Copenhagen: *Other Players* conference proceedings. < http://www.itu.dk/op/papers/bartle.pdf>

Bartle, Richard A. (2005). *Virtual Worlds: Why People Play*. In Alexander, Thor (ed.) *Massively Multiplayer Game Development 2*, pp 3-18. Hingham, MA: Charles River Media.

Baum, L. Frank (1900). *The Wonderful Wizard of Oz*. Chicago: George M. Hill. <http://www.gutenberg.org/dirs/etext93/wizoz10h.htm>

Campbell, Joseph (1949).*The Hero with a Thousand Faces*. Princeton: Princeton University Press (Bollingen Series 17).

Carroll, Lewis (1865). *Alice's Adventures in Wonderland*. London: Macmillan. <http://www.gutenberg.org/dirs/etext97/alice30h.htm>

Frasca, Gonzalo (2003). Ludologists Love Stories Too: Notes from a Debate that Never Took Place. University of Utrecht: *Level Up* conference proceedings. <http://ludology.org/articles/Frasca_LevelUp2003.pdf>

Huizinga, Johan (1938). *Homo Ludens*. Haarlem: H D Tjeenk Willink & Zoon.

Sheldon, Lee (2004). *Character Development and Storytelling for Games*. Boston: Thomson Course Technology.

Suber, Peter (1990). *The Paradox of Self-Amendment: A Study of Law, Logic, Omnipotence, and Change*. New York: Peter Lang Publishing.
See also: <http://www.earlham.edu/~peters/nomic.htm>

Woodcock, Bruce (2003-). *MMOGchart*.
<http://www.mmogchart.com/>

Advanced Dungeons & Dragons, v3.5. Monte Cook, Skip Williams and Jonathan Tweet; Wizards of the Coast. 2003.

DikuMUD. Katja Nyboe, Tom Madsen, Hans Henrik Staerfeldt, Michael Seifert and Sebastian Hammer; University of Copenhagen. 1990.

EVE Online. Kjartan Pierre Emilsson; CCP Games. 2003.

EverQuest. Steve Clover, Brad McQuaid and Bill Trost; 989 Studios. 1999.

Federation II. Alan Lenton. 1985.

Gods. Ben Laurie. 1985.

LambdaMOO. Pavel Curtis. 1990.

LPMUD. Lars Pensjö; University of Gothenburg. 1989.

MirrorWorld. Pip Cordrey, Nat Billington, Lorenzo Wood, Patrick Bossert, Tim Rogers and Piers de Lavison. 1986.

MUD1. Roy Trubshaw and Richard Bartle; University of Essex. 1978.

Second Life. Linden Lab. 2003.

Shades. Neil Newell. 1985.

Tetris. Alexey Pazhitnov; Spectrum Holobyte. 1985.

TinyMUD. Jim Aspnes; Carnegie Mellon University. 1989.

Tringo. Nathan Keir. 2004.

Ultima Online. Raph Koster *et al*; Origin Systems. 1997.

World of Warcraft. Rob Pardo; Blizzard Entertainment. 2004.

---

[1] What I'm calling "virtual worlds" here are also known as MMORPGs, MMOGs, MUDs and several dozen other terms, none of which has really stuck and all of which mean different things to different people. What *I* mean by "virtual worlds" is exemplified by *World of Warcraft*, *Second Life*, *EverQuest*, *Ultima Online*, *DikuMUD*, *LambdaMOO* and *MUD1*. For a slightly more formal definition, see (Bartle 2003).

[2] Quite literally, after she downs the contents of the bottle marked "drink me".

[3] For example, the player of a paladin may feel genuine outrage that the population of a helpful, peaceful village has been slaughtered by legions of undead. It's a real-world emotional effect that has resulted from game-world actions.

[4] *MUD1*, *Shades*, *Gods*, *Federation II*, *MirrorWorld* and their ilk.

[5] In game-like worlds, there is a conceit that they are somehow separate from reality, which corresponds to the *magic circle* (Huizinga 1938) maintained by players of regular games: spaces in which the normal rules of the real world don't, by consensus of the players, apply.

[6] Her first words in Neverland are satisfyingly consistent with the aims of many players in social virtual worlds:

"I wish I had a pretty house,
The littlest ever seen,
With funny little red walls
And roof of mossy green."

– Wendy, *Peter and Wendy* [later renamed *Peter Pan*] (Barrie 1911)

[7] In particular Sweden's *LPMUD* and Denmark's *DikuMUD*.

[8] Newbies always get their way (Bartle 2004).

[9] *TinyMUD* itself gave rise to three major codebase families: MOOs, MUSHes and MUCKs. MOOs primarily remain non-game in their outlook; MUSHes and MUCKs are mostly focused on strong role-playing, valuing the emotional development of player characters based on their interaction.

[10] Because the form of role-playing used in these games came from face-to-face games developed in the USA (particularly *Advanced Dungeons and Dragons*), for a while it was known as "American role-playing", whereas the type pioneered in virtual worlds up until then was "British role-playing". Rather than get dangerously stereotypical about it, however, I shall refer to them as "Dorothy" and "Alice" role-playing instead. That said, social psychologists might like to note that Alice was British and Dorothy was American, and that one very early British virtual world, *Shades*, actually featured Alice as a major NPC.

[11] Prior to the split, virtual worlds were generically referred to as MUDs (after *MUD1*). After it, there were sporadic attempts by players of social worlds to distance these from the *MUD1* tradition, using new terms to assert their new-found independence. The only one of these that gained much currency was MU*, but there was never any grand consensus as to whether it referred to all virtual worlds or just the social ones. The *, by the way, is there because it's the wildcard symbol in Unix: MU* reads pretty much as "multi-user whatever".

[12] Although this figure might seem small alongside that of *World of Warcraft*, it's very respectable when compared to the game-like worlds in the chasing pack: any with over 100,000 players is, traditionally, regarded as a success. For a highly approximate idea of the relative sizes of user bases, see *MMOGchart* (Woodcock 2003-).

[13] It has been known for some time why this dichotomy exists (Bartle 1996). In a nutshell: people play virtual worlds for different reasons; players with different reasons for playing interact with each other in predictable ways; some of these interactions feed back on each other to favour one style of play over another; once the inter-player dynamics pan out, there are four basically stable configurations that can result. The stable configurations are:

1. Achiever-heavy. These tend to be the game-like, Dorothy worlds, such as *World of Warcraft*.
2. Socialiser-heavy. These tend to be the social, Wendy worlds, such as *Second Life*.
3. Balanced. These tend to be the sandbox, Alice worlds, such as *Ultima Online*.
4. Empty. The player base remains stable, but pretty well zero.

The strongest of these configurations is #3, as it requires a relatively small stream of newbies to sustain it. It is difficult to set up, however: most attempts will collapse to either #1 or #2 instead.

[14] For Wendy worlds, it's even less as it's done freely by the players, but this is at the expense of the game element that developers of Dorothy worlds specifically want.

[15] It's an ongoing debate as to whether they *are* story, though (Frasca 2003).

[16] This is often called the *fiction* when applied to virtual worlds.

[17] Virtual worlds with a strong role-playing element may enforce consistency with the fiction, though, *e.g.* you can't claim you're an elf from another dimension in a Science Fiction space opera game.

[18] Art and animation assets are even more expensive to create, but they do have the benefit of being reusable. Occasionally, quests *will* have a unique requirement, for example they may give a special axe as a reward that can't be obtained elsewhere, but most of the time they can use what already exists. Voice assets lie somewhere in between: generic grunts and groans come from the central pool, but if you want the final boss to taunt the players verbally, well, someone actually has to voice-act those lines.

[19] Self-contained sub-worlds for a limited number of player characters to enter as a group, which are created on the fly every time a group enters them.

[20] The same applies to games, for example *Tringo*, which began in *Second Life*. Creating a non-Wendy virtual world within a Wendy virtual world – while possible – is, however, a rather more daunting exercise.

[21] There are Artificial Intelligence techniques to make the content narratively and emotionally meaningful (Bartle 2002), but the effort involved in implementing them is on a par with that of hand-crafting the quests in the first place.

[22] This is required to make something that warlocks need in *World of Warcraft*. It provides a steady income once you have it, and therefore the obtaining of such a pattern is the kind of goal a player may devise independently of the game's quest system. Just for you, I decided to obtain one as an exercise. I was *so* disappointed when it was finally dropped – I was hoping to get to 400 to impress you even more with my dedication to duty.

[23] Indeed, the grains are so fine that it's debatable whether they can indeed be called particles of narrative at all – it may be that only at the "molecular" level do they become serviceable as story components. I tend towards this view myself, on the grounds that if any action or event whatsoever can be considered a narrative particle then it dilutes the concept so much as to render it vacuous. Lee Sheldon, however, argues that it's foolish to talk about things that comprise elements of narrative without accepting that they themselves must be units of narrative. Don't worry, we haven't come to blows over this…

[24] An *exploit* is an unforeseen action of which the designers disapprove. For example, to encourage newbies to learn the combat system, the designers may have a town council pay a bounty for rat pelts; they would consequently be alarmed were players to set up rat farms to breed the little critters so they could hand in pelts by the cartload. If, on the other hand, the designers approve of some unforeseen action, this makes it a *feature* rather than an exploit…

[25] Actually, they do want to undergo such a transformation, it's just they don't know they do…

[26] To be clear on what I mean here: I'm saying that character classes make player advancement *comprehensible* to a player, not that they are the *mechanism* for advancement. If you pick a character class of Mage, then you have in your head some stereotypical notion of what a mage is, thereby giving you a target to work towards; you have a much clearer understanding of what you will become through play than if there were no character classes.

[27] Yes, I'm aware of *Nomic* (Suber 1990).

[28] "Gameplay is a series of interesting choices" – Sid Meier. I'm not sure if he actually said that or if he responded to an interview question, "What makes a good game?", with the answer, "Interesting choices". The quote is stuck to his name now, though, so whether he said it or not, he said it…

[29] These used to be called *tanks* or *tank mages*. Nowadays, both terms have become rather more specific in use (the actual details vary from virtual world to virtual world).

[30] Permadeath – permanent death – is the regime in which when your character is killed in the virtual world, it's obliterated. You have to start from scratch; there's no resurrection. Although real life seems to work this way (religious arguments aside), this attention to detail is not universally popular among players, and most early (Alice) virtual worlds watered it down it in some way. Even so, their solutions would be seen as barbaric by today's standards (*e.g.* if you're killed in a fight you didn't start, you only lose *half* your experience points).

[31] Even if that class has been designed to be easy, *e.g.* paladins in *World of Warcraft*.

[32] In version 3.5, this is 35% for pull plate plus 50% for a tower shield.

[33] Although the *d20* system (the one used by *Advanced Dungeons and Dragons*, 3rd edition onwards) has classes as its main mechanism for determining character roles, most other modern role-playing systems use a skill-based approach instead. This allows for a much finer character customisation than does *d20*, which many role-players find superior. That said, the historical momentum propelling *d20* is so great that its dominance is roughly the same as that enjoyed by Microsoft in the PC world.

[34] In a skill-based system, the ability to perform certain actions is conditional on the character having the requisite "skill". For example, unless you have the skill "wield sword", you can't use a sword in combat. Skills can usually be improved either through use or by payment for "training", and there's usually a maximum number of skills you can have at any one time. A gear-based system uses equipment to determine what you can do: you can wield a sword merely by having it with you, but you can only carry a certain amount of equipment so if you take the sword then you may have to leave your magely staff or your armour behind. Gear-based systems sometimes link the gear to character level, and sometimes have crude incompatibilities (*e.g.* you can't carry your holy symbol and a longbow at the same time).

[35] People who religiously believe that there is a deity (or are deities) giving them quests, Ancient Greece style, may wish to differ here.

[36] Yes, Hogger, bane of my *World of Warcraft* life at level 9: this is *you* I'm talking about…

[37] Of course, you wouldn't want anything *in* your vault at the time, but that may be a price worth paying. Such are the decisions that richness of the environment creates.

[38] Multi-class storyteller/coders are rare, but make excellent designers.

[39] The fourth combination – structured play in a non-game context – sounds to me like a hellish prison, but I'm prepared to be persuaded otherwise.