The Question No One Asks Shigeru Miyamoto

GoodBlood - 2024.09.25

Shigeru Miyamoto has been asked a lot of questions. And after forty years of interviews, you'd think he'd been asked them all. But one question still remains and its a question that, for decades, has floated on the fringes of all of these interviews as Miyamoto responds to questions regarding his design philosophies behind each Zelda game.

If the Zelda series is famous for being anything other than large-scale adventures set inside creative fantastical worlds, it's its reputation for being a playground for innovation for Miyamoto and his development team as each new instalment never fails to present audiences with fresh new ways to engage with said fantasy world. And so it makes sense then that the question interviewees prepare for Miyamoto would revolve around his design philosophies.

But ironically, as Miyamoto responds to thousands of questions regarding innovation and evolution, his answer, ever since the very first Zelda game in 1986, has stayed exactly the same:

"I'm trying to create a miniature garden."

This popped up in a 1998 interview with CNN in relation to the design of Ocarina Of Time, stating that "Throughout the Zelda series I've always tried to make players feel like they are in a kind of miniature garden". This was brought up again in '99 on Nintendo Online Magazine: "Rather than making a game, I feel like I'm making a miniature garden called Hyrule." And again in 2004: "Since I started working on the very first Legend of Zelda, I have been making much of the ambience that players feel, as if they had actually visited and explored a miniature garden called Hyrule that can be placed in your desk drawer." And again in 2005: "Miniature landscape garden."

And again in 2006, and again in 2007 all the way to 2016... where Miyamoto responds to a rumour that the next Zelda game, Breath Of The Wild, was supposedly just a remake of the very first Zelda from '86. "We are not really trying to recreate the first Zelda. At the time, the (original) had been created with the idea of great freedom of action and a miniature garden in mind. So we decided to go back to the roots of the saga and we started to develop the game that we are showing today."

Needless to say, this miniature garden thing is vital to understanding the heart and soul of the Zelda series, and yet after all this time, the phrase still remains somewhat of a cryptic mystery, and it's only because that despite its repetition across almost 40 years of interviews, not a single English-speaking interviewer has ever stopped to ask Miyamoto what might be the most important follow up question: "What do you mean?".

In a 2011 interview where Miyamoto brings out the miniature garden phrase again in response to yet another question regarding his design philosophies, if you listen closely you can hear the japanese term used when he mentions the miniature garden phrase.

There it is: Hakoniwa. Where "hako" means "box" and "niwa" means "garden". Box garden or garden-in-a-box, or as its more commonly translated into English: "miniature garden". This term "hakoniwa" is the term that Miyamoto, and the wider Nintendo development team have been using since the beginning but what English speaking audiences miss out on is the nuance of the phrase as the term "hakoniwa" comes with it, an entire cultural history and design philosophy that hasn't fully been explored yet in the west.

In short, the art of the hakoniwa is a celebration of the art of miniaturizing landscapes and traces its roots back to the early 1600s during a time when Japan was attempting to capture the beauty of big brother China by recreating famous mythological Chinese locations inside their own Japanese gardens. As Terumi Toyama writes in their paper for University Of London called 'The Significance of Copying', "This act of bringing an imaginary location into a real place also led to the inclusion of a natural landscape into a garden by creating a miniature version of it". Toyama goes on to give an example of when one Japanese landscape artist in 1620, recreated in miniature, a famous Chinese lake inside a garden in Hiroshima. "The garden copied this scenery through miniaturising its scale."

Throughout the centuries, this art of miniaturizing gardens would evolve to see many different branches develop, one branch being landscapes designed inside boxed-in spaces like courtyards or even living rooms called "hakoniwa": the box garden. As Greenwise describes in their description of hakoniwa gardens: "Outdoors, kids can enjoy playing in the Hakoniwa Garden. And in its smallest size, a Hakoniwa can also fit on tables or shelves. Even a little corner of green will add joy and comfort to your home, bringing it new life."

Now in modern day Japan, a hakoniwa can be just this: a toy diorama that, although designed inside set parameters, contains a world that captures the essence of either a real or fictional location, and through its reduced format, activates viewer imagination, transforming the passive relationship between viewer and garden to something truly active.

So to sum up the spirit of the Hakoniwa, while being a celebration of the art of miniature, it is a world that through precise arrangement, activates the mind and invites the viewer to engage with a fantastical realm.

So with all of this in mind, here's the big question:

HOW DOES THIS RELATE TO THE LEGEND OF ZELDA?

As we've seen through those interviews, Miyamoto, alongside each successor to the director throne, approach the design of each Zelda game with these hakoniwa design philosophies in mind, which are all big world experiences designed inside limited virtual spaces. But all paths point back to the very first Zelda in 1986, originally titled "The Hyrule Fantasy" in Japan.

When examining staff interviews, The Hyrule Fantasy is widely considered to be the perfect execution of the hakoniwa concept, as many of the team over time, as they attempt to adapt the philosophies in response to technological growth, continually reference this first game. But what's interesting is that Miyamoto and many of the team, despite the critical success each next installment had, appear to look back on their Zelda games as unsuccessful when it comes to executing on this hakoniwa concept. To understand why, we need to examine the game they consider to be a success.

When holding up The Hyrule Fantasy in the light of hakoniwa philosophies, two key components stand out that have clear cross-sections with not only Zelda and game design, but good design practice in general and the first one is the most obvious one:

REDUCTION & SUGGESTION

"So the garden I'm making today is a hakoniwa. Hako is the box and niwa is a garden. Garden in a box." That's Hitoshi Matsuda, a veteran Japanese landscape artist who does a wonderful job explaining the philosophies behind Japanese garden design in his presentations.

One common thread between all types of Japanese gardens is the importance placed on the designer's responsibility to successfully suggest a living breathing world through the precise placement of elements. "In the Zen concept, what we're trying to do is to tell a story, create something that is suggestive of something greater with a minimal amount of objects."

Miyamoto himself expands on this art of reduction and suggestion during a 1993 interview: "It's similar to how a writer doesn't use pictures, but is nonetheless able to create the image of a character in a reader's mind; likewise, in computer games a player sees a symbolized or abstract representation of something, and their imagination does the rest. You could say that drawing out the richness of a person's imagination is the very work of a graphics artist."

We can see Miyamoto's approach to reduction and suggestion be applied to The Hyrule Fantasy. The original world of Hyrule is almost as far as you could get from realism, being made up of only a few simple shapes and a total of 56 colours. But thanks to this limitation, players are invited to fill in the blanks and imagine what this world could look like and there are no right or wrong answers when doing so. Just like how miniature gardens are suggestive of real full-sized gardens or worlds, the original Zelda games, in their low-bit art, successfully suggest a larger world populated with plant-life and fauna and natural land formations. In the end, players are creating the world as much as the developers are.

But the true unsung hero of The Hyrule Fantasy's visual reduction is its abundance of empty space.

"In the Japanese garden approach, we try to minimize the amount of stuff we put in. There's kind of a zen saying that says, 'how many things can you take away from the garden and still make a statement?' In the western garden, we're given space and we cram it full of plants and when there's no more space, then we call it 'done'. Im trying to do this more or less the Japanese style with bare minimum."

A good example of charging empty space with 'suggestion' are zen gardens, or dry landscapes, other forms of japanese miniature gardens fashioned from only rocks and sand. For Zen gardens, one of the more important design concepts is empty space – pristine and uncluttered – a reflection of how the mind should be when meditating.

But this isn't to say that empty space can't be utilized as well. By raking the sand into different patterns, the zen garden transforms into different illusions as the protruding rocks take on different meanings. Depending on the pattern in the sand, the rocks could be mountains peaking through clouds or islands surrounded by ocean. This is an invitation for the viewers of the garden to assign their own meaning to the symbols through imagination.

As Korean professor of literature, O-Young Lee, in his chapter The Culture Of Reductionism as Manifested in Nature, "Though there are no trees, one sees a densely wooded mountain. Though there is no water, one sees a turbulent cascade. And in the narrow lines left by the rake in the sand appears the sea, frozen in time, The boundless world of nature is here in compact, condensed form. There is neither growth nor decay in this spatially expressed moment."

A good example of suggestion is the pattern of the river that flows through Hyrule. Rivers in real life don't look like this. But by using a flat blue colour with a precise placement of lighter pixels representing wave ripples or reflections, the player's imagination is activated, transforming a simple arrangement of pixels into a running river.

Same goes for the pattern of pixels for the desert or the unused stone texture hidden in the game's storage, which both employ the same technique of using a flat solid color and a different arrangement of lighter pixels. While the rearrangement of pixels and colours might be subtle, the impact is enormous. Conjuring a cool flowing river in the mind is vastly different from conjuring a hot windy desert, and yet a simple rearrangement achieves this result.

Hitoshi: "So what we're trying to do is capture this little vignette of what you'd see in a Japanese garden. And to suggest the rest of it and let your mind do the work."

So, what we have here through Miyamoto's application of reduction & suggestion in the first Zelda is a desire to activate the player's ability for creative expression through imagination. "In wanting to create an adventure game, the first I thought was 'well, how can I create the graphics in a way that anyone could understand?' And the first thing I did was I went back to my own experiences of exploring the mountains and coming across lakes and I thought, well, maybe if what I can do is draw simplified representations of things that I've experienced myself. Then perhaps people playing can see those simplified representations and they can connect through their own experiences."

And so its a little bit of using the limited graphics coupled with your own imagination to help you, the player, paint the full picture of the world.

The second hakoniwa design component has to do with the gameplay itself:

PLAY & SURPRISE

There's a great interview with a young Miyamoto from all the way back in '89, where he likens his work in video games to "designing miniature entertainment movies and living toys."

—If you were to compare your work to another art medium, what would it be? Miyamoto: Miniature entertainment movies, maybe? Also, living toys. Later, he goes on to expand on this saying: "I don't want to make games where the player is just a puppet in the hands of the creator, playing exactly as scripted. For me, I want to present games to players that are more like pure toys: something you can use, explore, and play with freely."

Now, over the last few decades, there have been research papers upon research papers exploring the similarities and differences between toys and video games. But back in '89, the examination into the play and learning potential of video games was in its infancy, which shows that Miyamoto, with his background in toy design, was clued into something important in regards to the relationship between the player, the toy, and play world, or in other words, the player and the box-garden.

(Chattering in German) "During the 1950's, this fascinating relationship between player and box-garden became the subject of examination in the world of psychotherapy. This study would eventually result in an entire new branch of psychotherapy be developed called Hakoniwa therapy, or as it's known mostly in the west: sandplay therapy."

For hakoniwa therapy, the patient, whether child or adult, are asked to create a world inside the empty garden using any objects they choose. The purpose of this is to allow the patient, through non-verbal means, express themselves through a hands-on approach in an attempt to bring into the external world, internal feelings that words fail to suggest.

In a brilliant paper titled Hakoniwa: Japanese Sandplay Therapy, the authors write: "Through Hakoniwa, clients create three-dimensional, concrete sand pictures that allow them to express their imagination and depict symbols that hold significant personal meaning. By using this "hands on" method, body and psyche as well as matter and spirit can be integrated."

The key component to this type of therapy is that although loose spacial parameters are given, there are no rules to how the patient chooses to play inside those parameters and the user can assign any symbolic meaning to any one of the objects. "Through Sandplay, the client is able to bring unconscious and archetypal themes to a conscious level. This new conscious awareness facilitates client growth and spurrs clients' creativity and wholeness."

Now, all of this is exactly what Miyamoto has been trying to achieve in his game designs. In other words, Miyamoto is driven by providing similar play spaces for the player to inject their own story and meaning to the world. As Miyamoto himself says in In the 1991 Mario Mania player's guide, "I think great video games are like favourite playgrounds. Places you become attached to and want to visit again and again. Wouldn't it be great to have a whole drawer of playgrounds right at your fingertips?". And again in 1998 Miyamoto says: "Whether its Mario or Zelda, these are, so to speak, our developed "play spaces" we want people to enjoy."

We can see this type of playground mindset at work in the original Super Mario Bros and Zelda games. While severely limited by hardware capabilities, each game successfully encourages a freedom of choice and surprises players when they choose to interact with the world in abstract ways.

In The Hyrule Fantasy, the player is dropped inside the world of Hyrule with no context or guidance, as they begin to move through the game, players learn more about the world and its functionality. There are some parameters to Hyrule's design in that there are dungeons to complete and bosses to destroy but players can approach the dungeon order 672 different ways and are rewarded with coins and prizes when they experiment with playing with the acquired tools. For instance, burning a bush might reveal a hidden staircase and bombing a specific wall might reveal a cave.

Here we can see that it's not just freedom itself that Miyamoto values, but an interaction and relationship with the environment, and over time we see a lot of his ideas are born from a desire to create interactions within the game worlds.

Miyamoto states in a 2002 interview: "In both games (Mario & Zelda) you're playing with the environment. Both of them have aspects of a hakoniwa (diorama), and both involve the player looking for solutions."

But perhaps the most important element to the Hyrule Fantasy's design is that options are available to not approach the dungeons first at all. One player's playthrough might involve wider exploration first, while others might be to seek upgrades. There is room here for choice and The Hyrule Fantasy accommodates for each player's play preference.

In 1998, the designer of Parappa The Rapper, Gabin Ito, sums up Miyamoto's hakoniwa philosophy stating: "There are rules and you're free within them. That's the mechanism that makes up the bare minimum "box garden"."

And so going back to Miyamoto's initial quote about toys, we begin to see Miyamoto's formula here in plain sight: "For me, I want to present games to players that are more like pure toys: something you can use, explore, and play with freely."

These 4 elements of use + explore + play + freedom, are Miyamoto's secret formula for encouraging player expression.

So summing all of this up, Miyamoto's hakoniwa concept is really all about one thing: player creative expression. Each garden must provide not only the tools for play but also the playground. Worlds won't invoke realism, giving players the opportunity to assign their own symbolic meaning to objects and landscapes. This is hakoniwa theory.

"Both Mario and Zelda are based on the same concept of making a miniature garden which the players can explore rather freely. They have to become creative and independent. They need to think about what they should do next."

But, there's a problem here. And you might have already picked up on it. And it's the natural tension that exists between offering players complete freedom in the garden while also implementing challenges and pre-written events, game components that many consider to be important to the Zelda formula. There's a fascinating interview from '97 in Japanese where the interviewer is really working hard to understand Miyamoto's miniature garden concept, and he's only having trouble with it because he stumbles onto this obvious problem with Miyamoto's philosophy in that you can't truly create a free garden if you fill it with pre-planned events and attractions.

At the start of the interview, Miyamoto begins by likening his Mario & Zelda games to Disneyland: "a complete play space but where people can have fun even though things are planned out." The interviewer thinks he gets it but then Miyamoto goes on to say: "I want players to enjoy the fun of creating, feeling, and visualizing in the world of the N64."

The interviewer gets confused and comes back with: "But doesn't that contradict what you mentioned earlier about a complete play space? In other words, to bring out a player's creativity, you'd need to provide a game world with blank areas that have open possibilities. Instead of a full box garden, it'd be more like an empty box, or an open field instead of an attraction-filled Disneyland."

This is the dilemma that plagued Zelda teams for decades, as they sought to strike that perfect balance between providing a free play space, as well as providing the player with pre-planned theme park attractions that, from a play standpoint, sit as opposing forces on either end of Miyamoto's philosophy seesaw.

To Miyamoto, these theme park events, taking the form of specific gameplay challenges and in later years, story moments, were necessary in giving players an objective. Even The Hyrule Fantasy, in all of its freedom of exploration, still had a few of these moments where players were required to find items and discover specific secrets in order to access previously barred areas or destroy enemies. The Hyrule Fantasy balanced both of these components well.

But the problem here, according to Miyamoto himself, is that as the Zelda series progressed, the balance tipped further towards these linear theme-park events and away from player creative expression. In 2017 he says: "When the series started to evolve, we went to make more and more games with only one path to follow, which pushed us to create larger and more complex dungeons, to imagine enigmas requiring specific items which ended up giving very sequential games."

Even the follow-up games to The Hyrule Fantasy already included a lot more bottlenecking in terms of player choice and expression. In A Link To The Past, the possible number of dungeon orders shrinks down from 672 to only 33, and this was even less in Ocarina Of Time and Majora's Mask. This growing dissonance between theme-park events and freedom of choice was also called out by Gabin Ito, saying: "I really don't agree that Zelda is a box garden. The constant pressure of "you have to do it" makes me feel like I'm going to collapse. It's hard, almost like a job." Continuing with: "In my opinion, the "box garden" world, the degree of freedom, and the relationship between the constraints and obligations that advance the game are a bad framework."

On the heels of the next game in line, The Wind Waker, the team acknowledged the difficulties of implementing the elements of discovery and exploration as they respond to a question about the importance of sailing across the ocean, with the interviewer stating: "Continuing through the open sea, and seeing the faint silhouette of an island in the distance... that's something I've never been able to do before, so even if it's just that, "The Wind Waker" is amazing."

To which script writer Mitsuhiro Takano replies: Takano: If not for that, we probably wouldn't have been able to create the "miniature garden"-like feel of Zelda. When referencing against the hakoniwa concept of 'reduction and suggestion', Wind Waker was as close to the The Hyrule Fantasy as you could get. While the peripheral video game scene in 2002 was experimenting with the next gen's capacity for realism, Wind Waker went the opposite direction, reducing graphics down to simple solid colours and minimal abstract elements, allowing plenty of room for imaginative interpretation. But the same can't be said for the game's ability to encourage expression through play.

Even with the scattered islands acting as different gardens that Link must sail to and explore, each island has only room for one type of play. Whether it was a puzzle being solved or a game of golf being played, the islands acted more like the aforementioned theme park attractions instead of sandboxes for expression.

2005's Twilight Princess suffered from a lot of the same ailments in terms of play. Items like the Spinner only had a single use and required pre-placed tracks in order for exploration to work. At this point in 2005, story had also become an enormous component to the series and because of this, whole areas were being barred off until story beats were complete.

But even so, the hakoniwa philosophy was still a priority among the teams, even if it was becoming difficult to pull off. Twilight Princess art director Satoru Takizawa comments that:

"Our goal is to create a miniature landscape garden - a natural aesthetic that's a big part of Japanese culture - in which players can get in touch with their surroundings. Easier said than done, however." And this all lead up to 2011 with the release of their next major title, Skyward Sword, which was, according to Miyamoto himself back then, a course correction for the series. Stating.

"In my opinion, the recent works of The Legend of Zelda lacked that kind of expanded freedom. With Skyward Sword one of the things I wanted to realize is going back to the basics, so that players would be given a lot of freedom."

Going on to say in another famitsu interview: "I think Zelda's core lies in playing around in the same world over a period time, gradually learning more about it and building experience as you discover new secrets. The NES Zelda had a small map so that worked, but as hardware progressed, the scale got large enough that often you'd see places that you only visited once in the game. I wasn't entirely sure that made for a real Zelda-like experience.

That thought drove us to structure this game so you play in the same places many times through the game and the story is built on top of that. Maybe it sounds complex, but as you play, it'll basically feel like you have the sky, and then three different areas to play in."

But all of this talk about the desire to bring back freedom in Skyward Sword is only now ironic as the game is widely considered to be the title with the least freedom as the game infamously overcompensates with tutorials and heavily bottlenecks progression with story beats.

Miyamoto talks about designing the game with access to different playgrounds, but in order to fully unlock the entire world for exploration, the player must first wade through roughly 30 hours of linear gameplay, alongside cutscenes connecting one moment to the next.

While visually, the team stayed true to the hakoniwa formula and harnessed abstract watercolour as their art style, Skyward Sword's capacity for expression through play however, could be considered the antithesis to The Hyrule Fantasy's formula. Exploration in Skyward Sword is more or less a single path from A to B and many tools in the toolkit have only single uses.

It's clear that a design conflict still existed in the mind of Miyamoto where the desire for both freedom of play and amusement park attractions fought for priority in his mind. In a 2010 interview Miyamoto says: "We put a lot into it, so it turned out really dense. I hope the players feel like they're at the newest attraction at an amusement park." Now it goes without saying that although these games might not have hit the team's hakoniwa targets, they still remain monuments of the industry. Each instalment is a pillar of innovation and creativity even though the dissonance between box garden freedom and theme park attractions towards the end of this era had never been greater.

And this brings us all the way up to 2017 with the release of Breath Of The Wild, the title that sees the Zelda team finally perfect hakoniwa design. Breath Of The Wild was a triumph when it came to successfully balancing the components of hakoniwa design. While considered one of the most detailed in the series in terms of artstyle, Breath was still anything but realism, leaning on a mix of Wind Waker's cel-shaded artstyle, and Skyward Swords watercolor aesthetic. But the most

important change made was the new approach to play and surprise, where the team finally divorced themselves from the classic item collection system in favor of a new physics-based set of tools designed specifically around harnessing player expression.

Now the player could lift things, throw things, freeze things and set things on fire, resulting in a heightened sense of interconnectivity between the player and the objects of the garden. Unlike the classic Zelda system where weapons acquired stayed with the player for life, the weapons in Breath Of The Wild carried a durability limit and would break after too many uses,

offering players more frequent moments of pressure as well as opportunities to think outside of the box when it came to methods of defeating enemies. What's more, Breath Of The Wild also offered players complete freedom when exploring by incorporating for the first time ever in the series, a climbing mechanic which removed any sort of boundary to the game world. What was once seen as a limitation was now reworked to be an opportunity.

But this isn't to say that Breath didn't have theme park attractions. Scattered across the world are characters who need help and shrines and dungeons filled with puzzles and enemies and items to collect but the difference is that everything was completely optional.

These optional tasks, combined with the dense interconnectivity within the garden resulted in almost an infinite amount of possibilities and combinations of play, allowing players to experiment with a whole spectrum of playstyles and preferences. Some players sought out the best upgrades while others sought out story moments. Others ran straight for the final boss, experimented with abstract methods of enemy destruction or simply spent their days catching and naming horses.

This was the game the Zelda team had been trying to create for decades where the joy of playing isn't only locked to the completion of the story or the set linear order of jobs, but in the free time spent in the garden. Breath Of the Wild was a playground that fit inside your drawer that you could return to over and over.

In 2017, during the lead up to Breath Of The Wild's release, Miyamoto says to IGN, "Sandbox games is what they're typically called here. But before anybody called them sandbox games, I always described Nintendo games as being a garden in a box. Zelda is a garden-in-a-box game where the player can freely go around and experience [the world]."

In the two follow up games to Breath Of The Wild, Tears Of The Kingdom and Echoes Of Wisdom, the creative teams called upon even more hakoniwa components and granted the players the opportunity to be creative through the use of object manipulation. Players can now combine objects together to create unique tools, making creative expression the only method to navigate through the challenges offered up by the world.

And so much like a garden, the Zelda series is one that has bloomed over time. Since 1986, communities have had the honour of witnessing a dedicated creative team continue to prune and tweak and experiment with different arrangements, all with the purpose of achieving that perfect hakoniwa balance. By taking a stroll through these details of Miyamoto's Hakoniwa theory, we can see his dream for the Zelda series was never about injecting himself into the experience, or bottlenecking player expression through pre-written stories and events, but inviting the player, through the use of reduction, suggestion, play and surprise, to be a co-creator, using the tools provided to design their own stories.

And so in the end, this is what Miyamoto means when he talks about designing a miniature garden.

The next time you hear him or any of the team mention the term "hakoniwa", "box garden", or "miniature garden", know that at the forefront of this philosophy, is a desire for creative player expression inside a free fantastical world.