The New Game Makers Bible

By Adam Jeremy Capps

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In Book Two:

This book will contain a sort of game making philosophy covering how a good game is made, what makes a game bad, and a ton of ideas for anyone wanting to make their own video game. New ideas are included, too. My approach was to:

1. Make a book that expands the imagination of the game maker.
2. To go through the best things about any given game.
3. To provide a large amount of good ideas.
4. To elaborate on things that have been done before, for better or worse.
5. To provide a useful understanding of how a good game is made and what makes bad games bad.
6. And just anything else that can help the reader make the best game they can.

I made this book where it is easy to reference, almost like a dictionary or thesaurus of ideas. As such you can quickly find information on just about any game making thing you want to work on. This book doesn't at all have to be read from start to finish but it will only help.

My background is that I love video games. I love learning about them, playing them, even just hearing about them and what people think of them. They have been absorbed into my thinking for a long time now. I always loved video games but in the past years I have had the opportunity to learn about them online. I've watched video game videos just about all day for the last few years. Videos such as reviews, criticism, top tens, retrospectives, what people deem hidden gems, news, playthroughs, speedruns,

you name it. As a kid I sent in an idea to Sega. They wrote back and told me that they felt interested but first I had to sign some papers to accept it, with my idea expressed more. Only I'd change the idea completely and was sent back a letter saying they weren't interested. The first idea was called Skull Brothers. A skeleton with two heads and two powers, one of ice and the other of fire. The second was just some crap about "Dragon Slayer." The movie got the best of me. I think I was ten years old at the time.

Like any kid I wanted to make a video game. I'd make levels on paper for a new Mario game so strongly inspired by Super Mario Bros. 3. For a lifetime I wanted to make a video game, from time to time. I had tried Python for a while as far as coding goes. I have at least a general knowledge of it but gave up on it. The one thing that stuck with me was writing. Second, I wrote music which I did for years and years. But the one thing I was always good at was writing. So I decided to write a book that helps game makers make great games. That's my contribution. I hadn't found any such books online.

One excellently done thing in making a game can make every difference. One very bad thing can make it altogether bad. Bad music for example can completely ruin a game. Could make it great, conversely. Frustrating controls are one of the worst things. Some things are so important that if you just focus on them you will make a great game. Maybe not perfect, but a joy to experience nonetheless.

Be aware that what is on paper may not be good in the game in actuality. A ready example is realism implemented into a game. Things such as easily broken swords and the need to eat food periodically. Things such as that may be real world like but frustrating. People aren't playing games as a real world type of experience. In fact games should be a pleasant escape. Things in fact may not make sense at all. Take Mario Bros. for an example. Think cartoons. Not real life movies.

Pulling from inspiration is greatly valuable. How you translate that into a game is important. But every idea can be made into a game to greater or lesser effect. That includes every aspect of a game. Like the music, which may have been inspired from some obscure composition or beat.

Some things must be focused and worked on more than others. They involve the core of the game: the music, graphics, control.

Copy cat games are never a good way to go. They just produce an ugly twin of its former embodiment. It isn't a one to one copy. In other words you can take all ideas of a previous game, doing them all differently, but collectively they come together in an awful way. So in other words all ingredients must go well together in order for it to taste good. Consider a person making a whole different recipe of a stu. Instead of having beef it has chicken. Instead of noodles it has dumplings. Instead of carrots, celery. All of the ingredients are both better and mix together in choice ways.

As for inspiration: if you are going to make a game you love, if you are going to love making it, then it should come from the things you love. Think like this, 'If I did (this) it would be done (this) way instead. Star Wars did the Death Star. Star Trek, later, did the BORG Cube. And a favorite lesser known Sci Fi show (LEXX) used the same concept to create "Mantrid Drones."

Some good ideas are good ideas forever *as are* and cannot be done differently while staying as such. Some things cannot be done differently. In fact they should stay as are and as long as you are not plagiarizing, that's no problem. For example "HP" in an RPG game. Some plot lines too are the best, like the-villian-was-your-father. Or energy bars, in-game money, leveling up, and so on. They are the basis of great games. Feel free to use them. Don't feel like you are copying other games when you do so.

For the formula simply look back on the things you've always loved. Those things that stood out, implement them into your game. As such, paint a beautiful picture. If in the meantime something just doesn't work as you thought it would, then focus on something else for a while. If after returning to it and it just doesn't work well, simply abandon it.

Overall "the proof is in the pudding." What is fun, what is engaging, what is addictive, are the best priorities of a game maker.

The mood you set is important as well. The "impressions" made should come across effectively. Whatever they are: such as strangeness, darkness, or fun, otherworldly or whatever they may be.

Polishing a game may be the best time spent on making a game. To go from what was thought was done yet to make it better and better, that even the finishing of it turned out to just be the beginning. You don't want to "overpaint." I mean what is done well might be well enough. The important thing is that you don't change singular parts so much that it no longer blends in with the rest of it. So keep things well together while you are improving on certain elements. Don't treat them so much as singular. Consider if a jump could be a little better. Consider if the story could be tweaked just a little more. Improve the sound if you feel you should. And if anything just feels hopeless- that you *thought* could be good but just isn't, don't be too steadfast in keeping it.

Avoid (our version of) mentalites because it is much more fun to create what *you* want to instead of adding to the tiers of prior fame.

To go over the most important elements:

The Most Important Elements In A Game:

1- Jumping. If a player can’t control their player well then the game will be impossible to enjoy despite all else. On the other hand if the game lets you practically do dances on screen with little effort then the controls will make all action in the game more natural. There are many different ways that a character can jump. To cross on one platform to another should be doable enough that it is fair- more than fair. Many games had been ruined by requiring precise jumping. Some jumps are heavy- have a lot of weight to them like in Castlevania. Some don’t let you switch directions mid jump- also like in older Castlevania games. Some do, like Mario in Mario Bros. Some just have you soar super high. Then there are weapon uses during jumps to consider. Personally I like how that is done in Ninja Gaiden. Sometimes when you are hit it throws you backward like in Ninja Gaiden and Mega Man. Or at least stops you in your tracks. It is best to match the jumping mechanic with the actual gameplay (the platforming or whatever else.) As for double jumping, it is always a welcome thing in the game and is very anti-unfair.

2- Power Ups- Some weapons in Mega Man have a poor effect. The usual reason is that it is hard to hit a target with that particular weapon. For example, stones that go around in a twirl and if you are to hit your enemy with it you’ll need luck. A good weapon gives you control over where you want it to go. Such as one that goes in a north eastern direction, others above, some all around. Some stop time. Some pull all enemies above and away. I personally love the gain-the-enemies-power idea. Like in a metroidvania game, after you defeat so many enemies you gain their power or the ability to summon them. Some games let you charge a weapon before unleashing a greater blow. Some weapons have a special power when you are at full health. Some weapons themselves can lose some power if you are hit, such as in Castlevania when your whip loses length that was gained.

3- Capabilities- Meaning the power you have over the environment such as being able to fly or climb. I never did like the trope of being unable to jump over a fence. Once

Mario learned to fly, the whole world marveled. He didn’t simply fly, he had to gain speed first. That prevented the gamer from just skipping all of the levels by flying over them at any time. Some nice touches in games have been anti gravity, super jumps, balancing, dashing, sliding, super powering weapons, freezing enemies to create platforms, grappling, and speeding forth, to name a few. If you need any examples or ideas then you don’t need to look any further than Zelda and Metroid. Just bringing them to mind gives you a ton of ideas. There are so many ideas out there that one person alone could never think of them all on their own. For that reason it is fair to go through games to see what is possible. For example the relic system in Final Fantasy 6 or the list of abilities garnered in newer RPG games. It is your task to pick, choose, change, and bring them together as well as you can. Some things that are staples among games, have become mainstays. To be able to travel faster in a large 3D world for example.

4-Resources- Meaning things you can get and use in the game. Some games have incredibly useful resources such as The Legend of Zelda: Breath of the Wild. You can “harvest” certain things like different gems, food from trees including various fruits, the weapons of enemies, branches from trees, all sorts of things. Some games only let you get certain things if it is day, other things during the night, which does well to contrast day and night instead of them being there without meaning. For most part the more difficult a chest is to find the better its contents.. Though I’ve gone out of my way before for a chest that contained crap. A very good element in a game is to allow you to make new things from various things collected whether that be new armor or swords, or whatever else. It helps an RPG to get you things far beyond chests and gil. Some have you digging for it. Others have you whacking bushes or burning them. Some are hidden in the deep blue sea. Others in an entirely different world.

5-Game music- Many great composers just pull inspiration from their favorite obscure music. In other words, they slightly rip it off. I had spent all of my youth and young adulthood composing classical music. The most important things I learned were tonality, repetition without minimalism, quality of a melody is significant, and making music that is comprehensible. As for tonality all you need to do is emphasize the notes of the triad in the scale. The first note of the scale, the major or minor third above it depending on if you are in a major or minor scale, and the third above that to the fifth. Those notes in any octave should be emphasized the most with repetition, duration, and frequency. Thanks to some really good notation software anyone can fully write and orchestrate music without an orchestra, knowing then and there how their music sounds. Every era in music had its own distinct style. Such as medieval music. Whenever people hear it they know just what it is. That music had a lot of dorian and organum. Had a lot of fifth tone use. It placed a lot of importance on counterpoint as well. Music like that is good for certain RPG games. It's valuable to know how each era of compositions were made, from Baroque to Romantic music and into the modern era. Some listening to this music can be helpful.

6-Game Graphics- Early paintings were made to just be as realistically done as could be. That was so for a very long time until the advent of modern art which introduced things like abstract and impressionist art. We are in such a time, only for video game graphics. So many new art styles are introduced. Call them "modern pixel art" or "cell shading." Some programmers go for an animated look, others for clay animation such as "The Legend of Zelda: Wind Waker," and "The Legend of Zelda: Link's Awakening," the switch remake, that is. I'm an old duddy. I prefer realism and nothing more. But I can't discount the newer generation. If it works and they like it, that's what matters. 8 bit and 16 bit graphics haven't been thrown out yet. While early days of 3D focused on 3D as much as possible, it wasn't long after that when the old styles were returned to. It's like comparing a cartoon to a movie. People still like

cartoons, they don’t need them to be realistic either. In fact CGI began to take over animation, never fully able to. It is quite a formula: to mix 2D and 3D. To make the best looking 2D game ever. Or to add subtle 3D touches to it. If you know there is an audience for something then give them a show. Some things are timeless, such as pac man, and we still find people playing games with the simplest of graphics, such as on modern smartphones.

7-Game engagement/ involvement of a player- One way to cause it is simply by rewarding the player. As such the player becomes more powerful, more refined. Always have an option B, an option C, etc., “where there’s a will there’s a way.” Or “there’s more than one way to skin a cat.” Make the game where it isn’t hopeless, there’s always another way to beat that terribly powerful boss or utterly confusing area. Give the game an interesting depth. Spin an amazing story for them. Don’t bore them. Do entertain them.The game should be eased into. The start of the game should not bury the player in texts and objectives. Some games make you think that the programmers really did feel like every last thing should be explained via story dialogue or tutorials. To have multiple endings helps. To offer a different way to do things level by level, to enrich the game with items and secrets, and the depth of a game in general will all aid in making a more involving game. It may be more important to avoid certain things- boredom, taxing the player, having it “an ugly thing to look at,” expecting too much from the player, and confusing elements being among them.

8-Character and enemy design- Take a pre existing thing and change it up. It’s very simple. Take a frog, give it a crown, take a cactus, give it legs and arms. Take that cactus, make some of them metallic. Some enemies just may be pallet swaps like a red hood instead of a blue. People appreciate Sub Zero and Scorpion just the same. Make the most regal knight you can, or the most cowardly, or the most moronic. Give them awesome looking hair. Take a shield and make it a mirror shield. Take a sword and

make it glow red. Make the most monstrous thing you can like an alien or a thing in demonic form. Have a massive enemy that towers high. There are so many different ways that a character jumps. Some raise one of their hands, shooting with the other, some bust up bricks with a fist, others raise their knees when they jump and still others flip- and even flipping jumps differ from game to game. The way the character walks differs from game to game. That is so broad itself ranging from the robotic walk of Robocop to the realistic maneuvers of The Prince of Persia. Some run like Ryu from Ninja Gaiden. Some games naturally need smaller sprites than others, as more of the screen is needed to be seen. A beat em up game however calls for larger sprites. Of course the personality of a character should be developed as well. The developers of Final Fantasy 6 assigned about two characters to different people and then interconnected them afterwards. What a good idea! Some games will require that you build upon their personality and to interconnect everything with the other characters accordingly. Other games require very little explanation or sense, such as pac man. Or even Donkey Kong really, who just wants his bananas back.

9-Game Moods- This matters a lot. It can define a game more than anything else. To list games that illustrate that point: Ghosts and Ghouls, Super Metroid, Final Fantasy 6, Super Mario Bros. 3, Castlevania, Zelda, they have all set a certain mood. For Ghosts and Ghouls it was gothic. For Super Metroid it was an alien hellscape. For Final Fantasy 6 it was a wrecked world that needed to be saved, full of victims that deserved to be fought for. Super Mario 3 was a much happier game. A Link to the Past began in heavy rain and later one wandering through the lost woods with its mystifying music. In that game as well was the ocarina player that disappeared on a trunk of a tree. These are magical moments that the game makers made. They are dark, scary sometimes, strange, and compelling. They can be very brief moments yet have such a strong effect. Like Mario falling from Bowser’ s airship with a wand in Super Mario Bros. 3. Or the skeletons that meet you with food at a table in 8 Eyes. My favorite example is Mortal Kombat,

from the sound of the Gong to the brutal and uncompromising wickedness of it. Make it a wonderful world to behold. Make it feel magical. Set up alien monsters that fill the whole screen. Bring about tense moments. Make relief relief in full. That is perhaps the best thing you can do while making a game.

10-Game fun- The best game makers have it as the utmost thing. "Is the game fun?" If it is then the game has been made right. I will go over that topic later.

11-Extra touches/enhancement- It's like taking a goomba and giving it wings. Extra touches can make a big difference. Some people can tell when things are highly polished. It is a thing some point out in any game, that they feel it has been highly polished. It is present in games that you could see things were placed just right. When a game making team goes through everything and looks for things that could and should be adjusted then it is a polished game. That could be a simple change or a large one. It could mean a more identifiable place or a less confusing corridor overall. Could even be a bit better of a title screen or the expression of a story. They may find that an area is too difficult so they place a needed power up right there. They may determine something *would* be more fun "if only." *Having variety:* The way things change in the game from the weather to the trees. The way the rivers and oceans allude to wonder in the distance. Having things shift sometimes. Differing the character's appearance and seeing weapons in hand according to what you have equipped. In Zelda, Link can bump graveyards to bring up ghosts. It could have been left as a kind of meaningless thing but Nintendo created a kind of secret to it. That is if you raise a bunch of other ghosts then kill the first one (which you have to keep an eye on while they all look the same and move around a lot) you will get a ton of rupees.

12-Weapons- In a video game anything and everything can be a weapon, and probably has been at some point. Like a bouncy ball in super mario land. If you are making an

RPG these days you probably have a lot to include, from crossbows to everything else. I will not go over what *can* be a weapon so much, anything can be. It's more important to consider different versions of the same thing. Like a fire whip, longer whip, chain whip, etc. Let the player feel like they really are learning how to fight with various weapons, from a light sword to a heavy axe, a thrusting spear, etc. Arrows are very direct and powerful, but are balanced out with aim. Heavy swords are powerful but prevent you from carrying a shield. Magicians are magically powerful but inept at weapons.

Before that last boss is defeated the character is granted the best weapon in the game like The Golden Sword. A game maker should first consider what weapons the game has. If an overall theme is come up with first then from there weapons decided on, the more important part of the game will be sacrificed for the theme.

13-Depth of game- More than ever games give you more to do. There are things like side quests, branching stories and branching levels. The game transitions itself from day to night. A great deal more items and weapons are present. There are multiple endings to the game. There is more interactivity in the game between you, other characters, and within the world itself. Maybe the most important thing is that there are no wrong choices. The gamer can play as they like without any real consequences. Some things are harder to accomplish than others but are more rewarding, and doable. Minimalism should be avoided. An abundant amount of game there in as many *good* ways as possible. At the same time having too many of any given thing will cause the gamer to not know where to turn, or what to use and when. There would be too much to learn, there would be indecisiveness because of it. Worst of all things would lose their meaning and the player will never become familiar with any given thing. That is so in some ways more than others, such as having too many weapons and never the means to get them all or learn any given one well. Other things always do well with constant

change such as the environment of the game: warm places, cold places, plains, rain, snow, fair weather, night and day.

14-Options- That is, to not only walk but to ride, to not only ride but sail, to not only sail but to fly. Like job classes and the abilities they bring you. Like having money to buy precisely what you want or need. Maybe more of a focus on big spending in a game. To swim, to climb, to glide, to crawl, to ascend, to descend. Also to be able to upgrade your current items or equipment. To go on a sidequest if you want. To follow different story lines. To do good or to do evil, your choice. To play the same game in 2D or 3D. To fight a wide variety of enemies while you endlessly level up. At increasing levels you can choose among various new abilities to have. Traversing a basic game can either have you on a dinosaur or a skateboard. Some games give you a multitude of animals to ride. Zelda: The Breath of the Wild even let you ride a bear. The benefits have you able to go other places, fly, speed through things quicker, or offer protection. In Golden Axe you can ride a lizard that spits fire. Then, that's the least that Yoshi can do. There may have been only one thing to ride in Mario World but he could do just about anything a multitude of counterparts could do.

If you are making a rudimentary game you may be able to do it all by yourself. You may want to bring together a team. That team should include the best people that you can find. You may like to keep control over the overall design, approving and rejecting ideas for example. It may be difficult to say such things as the composer's music isn't good enough. But for the sake of the game it may be necessary. A decision on what tools you will use must be made. If you are competent at programming code, then all the better. A fun part of the process may be to collect the materials you will need such as pencils, markers, graph paper, perhaps notation software and other various things. A process of study may be to examine old games to collect useful ideas