Gamasutra - Postmortem: Joel McDonald's Prune

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Prune is a tiny mobile game about the simple pleasures of growing and cultivating trees.Of breathing life into barren soil and thriving against all odds in a hostile, indifferent world. It's a delicate dance to remove that which does not matter in favor of that which does.

Prune is my love letter to trees.

The seed of the game (first and last tree pun, I promise!) actually started with a tweet from a friend:

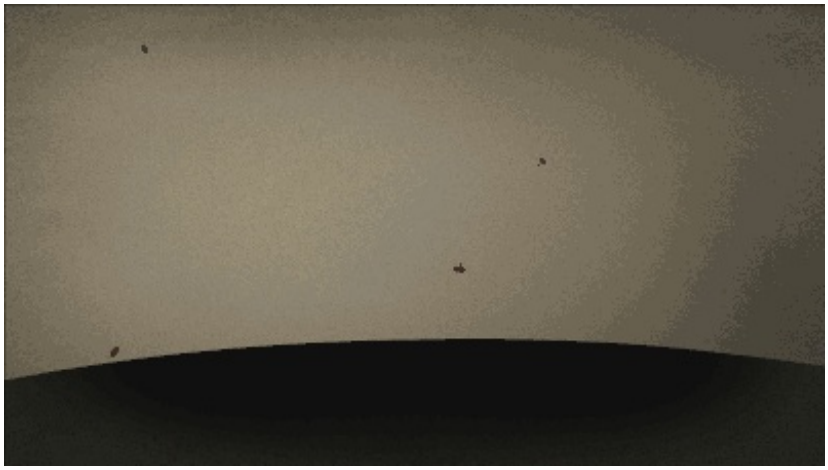
The game was originally supposed to be a short two to three month project to get my feet wet as a solo indie game designer. I had a fair amount of experience as a designer on large AAA teams but had never put anything out on my own so I figured I should start as small as possible. Unfortunately, three months quickly turned into six months, and finally into *a year and three months*.

I, along with the help of Kyle Preston and Simon Ferrari, finally managed to get the game out onto the Apple App Store in July of 2015. For most of the game's development I had zero clue as to how the game would be received since it was this weird procedural, interactive art thing. *Prune* has far exceeded any of the modest expectations I had for it. On release it garnered Apple's Editors' Choice award and more recently has been named TIME Magazine's Game of the Year for 2015 as well as Apple's iPad Game of the Year.

I wanted to write this postmortem for a couple reasons. First, I've been reading postmortems for a while now, starting with classic issues of *Game Developer* magazine, so it feels almost like a rite of passage when you finally get to write your own (as cheesy as that sounds). But more importantly, having read so many, I know it can be tempting to not exactly give the whole truth, to sugar coat things, to TED-ify the long arduous development into Five Easy to Digest Takeaways. And as a reader, especially as a young, thirsty game designer, it can be easy to convince yourself that if you just "do these five things, and avoid these five other things" you'll be well on your way to your very own Notch house.

Just pick the exact right platform (Ouya obviously), iterate-iterate-iterate, and find the "fun", all the while avoiding nasty things like feature creep and you're set!!

So with all of that in mind I'm going to try my best not to candy-coat the development of *Prune*. I want to try and illuminate some of the less talked-about aspects of indie game development, especially as it relates to success. Obviously game development is an incredibly messy and complex process and a single write-up is never going to paint a fully accurate picture, but hopefully it will help paint a slightly more honest one.



What Went Right

1. White Moves First

Privilege is something that's really easy to take for granted and of all the postmortems I've read over the years I don't ever remember seeing it mentioned. Yet, more than an original game idea, more than streamlined design, more than any other thing I feel that privilege was the key contributor to *Prune's* success.

It's impossible for me to fully acknowledge everything that was on my side, but here's a start:

I was born male, middle-class, and white. My dad was a computer programmer and we had a computer in the house from an early age. Since I was a *boy* growing up in the 80s and 90s videogames were this socially accepted thing for me. Being middle-class gave me the free-time to dabble in computers from an early. It gave me the luxury of taking part in the *Quake* mod community and eventually led to me getting my foot in the door in the AAA game industry.

Being fortunate enough to work in the game industry gave me a huge advantage. I may not have known much of anything when I started back in 2006, but seven years later I had an *Education* in game design, in the game production process, in how to make an interactive experience worth having. It also allowed me to make friends

and connections that proved crucial later on. I'm truly not saying any of this to boast, but to simply point out the huge amount of privilege I had on my side when I decided to quit my job and go indie in the fall of 2013.

Even upon going indie I still took so much for granted. I was incredibly lucky to have time and money to burn (more on that below). Oh, and did I mention I live in the US? Turns out being near critical developer events like GDC is a pretty big deal, not to mention that whole speaking English thing. Indie developers in other countries have a *much* tougher time breaking through and we in the US get this free ticket to a ton more coverage and press.

Looking at *Prune's* success in a vacuum is just seeing the palm tree and cute little mound of sand peeking above the water and ignoring the mountain of privilege that built to that island. It's ignoring the years of repeated failure I was allowed to have suspended over a safety net built and subsidized by my starting position in life.

If you're reading this and you are in a minority or marginalized position, then you're well aware of the uphill battle you face. Please, please don't be discouraged by all of this. New organizations are popping up more and more lately to help address the issue. There's Girls Who Code, Dames Making Games, and Different Games to name a few. Plus the IGDA has long advocated for inclusivity and even the ESA is trying to help. I, and I'm sure many other indies, would love to help out, so please don't hesitate to reach out.

2. Have a Lot of Time/Money (Preferably Both)

The hopefully not-so-big secret is that becoming a "successful" indie (usually defined as financially sustainable) takes a whole lot of time. A recent Gamasutra article concludes that it tends to take two to three years to sustainability while I've heard some indies estimate the average to be as much as five years. And all of this is assuming that you're even lucky enough to become sustainable at all.

The main reason it takes so long is because you need plenty of time to fail a lot. For me, first there was the last 15 or so years of stumbling my way through how to even make game experiences, then upon going indie there was six months of prototyping questionable game ideas, and finally with *Prune* I spent another six months lost, prototyping everything I could think of.

Having the luxury of time allowed me to eventually find the soul of the game.

Six months in, I basically had a full game, with over 60 levels (more levels than I eventually shipped with). But I wasn't happy with it. Playtests showed the game was clinical and frustrating. After talking to some friends, I worked up the courage to essentially reboot the game.

I stripped things down to a bare minimum: just a tree, sunlight, and shadow. I also had been thinking for a while about how to make pruning more expressive. Up until now, pruning was a wholly subtractive process. Trees were these static structures that could be cut away but that was it. This was limiting and was one of the reasons I had to rely on a bunch of other mechanics to bolster the game.

Instead, what if I made pruning both a subtractive and additive process? By imbuing the tree with a sense of "conserved growth potential," I could get a much wider, more dynamic range of expression from the tree.

Old vs New

Of course, this wasn't as easy as flipping a switch in code. I had to completely rewrite how the trees grew in the game, and it took me several tries over a couple months' time to get it right. But it finally felt like I had found *Prune*'s soul. If I had had tighter constraints on my time, the game likely would not have found nearly the success that it did.

I'm extremely fortunate to have had all of this time and runway to experiment. Growing up middle-class put me at an advantage from the start. Add to this living in the Midwest, being lucky enough to not have any student loans, and being a generally frugal person. Combine all this with the money from my AAA job and it meant that I had way more time than I deserved to get the necessary failures out of the way and have a chance at success.

3. Don't Listen to Advice (Including Mine)

The indie scene is in no shortage of handing out advice, that's for sure. There's plenty of advice on which platform to bring your game to, how best to market your game, how to monetize it, etc. Of course, there's nothing *necessarily* wrong with advice, as long as you temper it appropriately and realize that it might be tied to a specific time and/or place. Videogames as an art form is moving so fast that the sage advice you hear at the beginning of developing your game may be completely null and void a year or two later when you finish.

The first piece of advice I heard upon going indie back in late 2013 was, whatever you do, don't go mobile! Mobile is an unhealthy marketplace, a hopeless wasteland where your game will go to die. The PC/Steam was where any smart indie should bring their game. Make a good game on PC and you're pretty much guaranteed success, is what they said.

So I actually listened to this advice and probably would have followed through with it were it not for stumbling upon *Prune*. Of course, now it's 2016 and the so-called indiepocalypse is a thing and PC is not at all the safe bet it once was. Here's the funny thing about advice—if you're hearing it then EVERYBODY ELSE is also listening to this advice. Any proclamation that doing X is a guarantee for success is a lie and is going to be this incredibly fragile thing.

Another commandment I failed to follow was if you go mobile then you HAVE to go free-to-play. Premium mobile games are dead! It may be true that going F2P can increase your revenue by 10X or whatever, but F2P certainly wasn't right for me (I can't stand it) and I wasn't necessarily interested in maximizing the game's revenue. It also turns out that there are a lot of mobile players who are thirsty for quality experiences and are willing to pay a fair price for that. My point isn't that F2P sucks and you should definitely go "premium", but that you should listen to your heart. Do what's right for you.

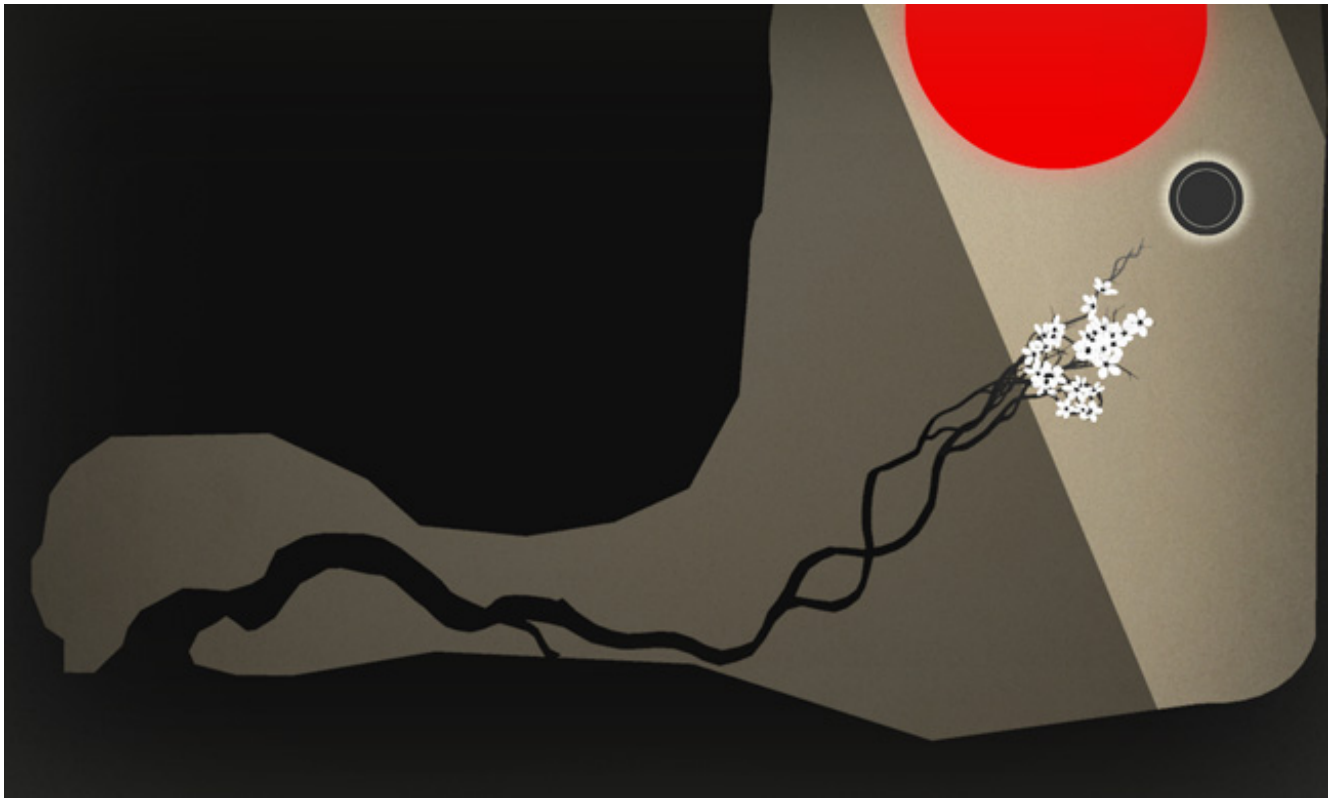
4. Finding a *Creneau*

Now that I've finished telling you to never listen to any advice I'm going to dispense some advice! First, some background: I'm the type of person who always wants new experiences, new and different ways to do things. This can sometimes drive my wife crazy when I refuse to watch a good movie again if I've seen it in the last ten

years or so. But it turns out this is a pretty useful trait to have when you're an indie since you're naturally drawn to want to try things that nobody has done before.

As it also turns out, there have been entire business and marketing books written on the subject. Crazy, huh? I would have never sought one of these out on my own but, upon going indie, a friend suggested I read the book, *Positioning: The Battle for Your Mind*, and it did a great job of explaining what was already deep inside me. It's not a revolutionary concept but it explained how to find a *creneau*. That's fancy French for a hole, or pivot, in which to get a foothold to position yourself with respect to the competition. If that sounds too business-y, think of it more as what makes your game special? What's the one thing you'll focus on that is going to make it stand out against all the others?

This was exactly my approach with *Prune*. The App Store is crowded with cutesy match-3s, zombie tower defense games, and infinite runners so why do anything remotely close to any of these when I could instead go the complete opposite direction? One of the clearest ways to see this is in the art direction for the game. Rather than finding an artist and commissioning elaborate, hand-drawn or 3D modeled assets I chose to embrace my limitations and make something procedural that didn't look quite like anything else I was seeing on mobile.



5. Have a Lot of Luck

This postmortem wouldn't feel complete without mentioning the L word: luck. Luck tends to be a big part of any success and it's not something I want to discount. I've already mentioned a few things but just to drill home the point here is a non-comprehensive list of times when luck was on my side:

- Lucky that I even saw my friend's tweet to begin with
- Lucky that I had time and money to burn, finding the game's soul
- Lucky that I happened to have an iPad to test on (I don't own a smartphone)
- Lucky that I had a family to support me while working from home (to keep me sane)
- Lucky that I met Kyle Preston and that he was able to contribute his amazing talents to score the music in the game
- Lucky that well-respected, successful indies would take the time to help me find the game's soul and build up my confidence

- Lucky, when black smoke started billowing out of my computer, that it was only my spare hard drive
- Lucky that I was introduced to Apple contacts from a friend
- Lucky that Apple happened to love this particular game
- Lucky that I didn't go up against Angry Birds 2 which released the following week
- Et cetera, et cetera

And who knows how much luck I'm not even accounting for! Please don't take this as me saying "hey guys and gals, just be lucky like meee!" Again, it comes from a place of trying to be sincere.

There are, of course, ways to increase your chances of being "lucky." The usual advice is to open yourself up more, to try and make more connections with people. I pushed myself to do this. I went to local events. I shared the game with people. I kept a devlog. One example of how it paid off was that I got to meet Kyle, my eventual composer, through TIGSource where I had posted my devlog.

But luck is also a messy, tangled web of systems that are ultimately out of our control. To me it seems wise to acknowledge that luck exists and do our best to influence it. But at the end of the day, we also need to remember that luck, of the out-of-our-control variety, is still a considerable factor for any success or failure.

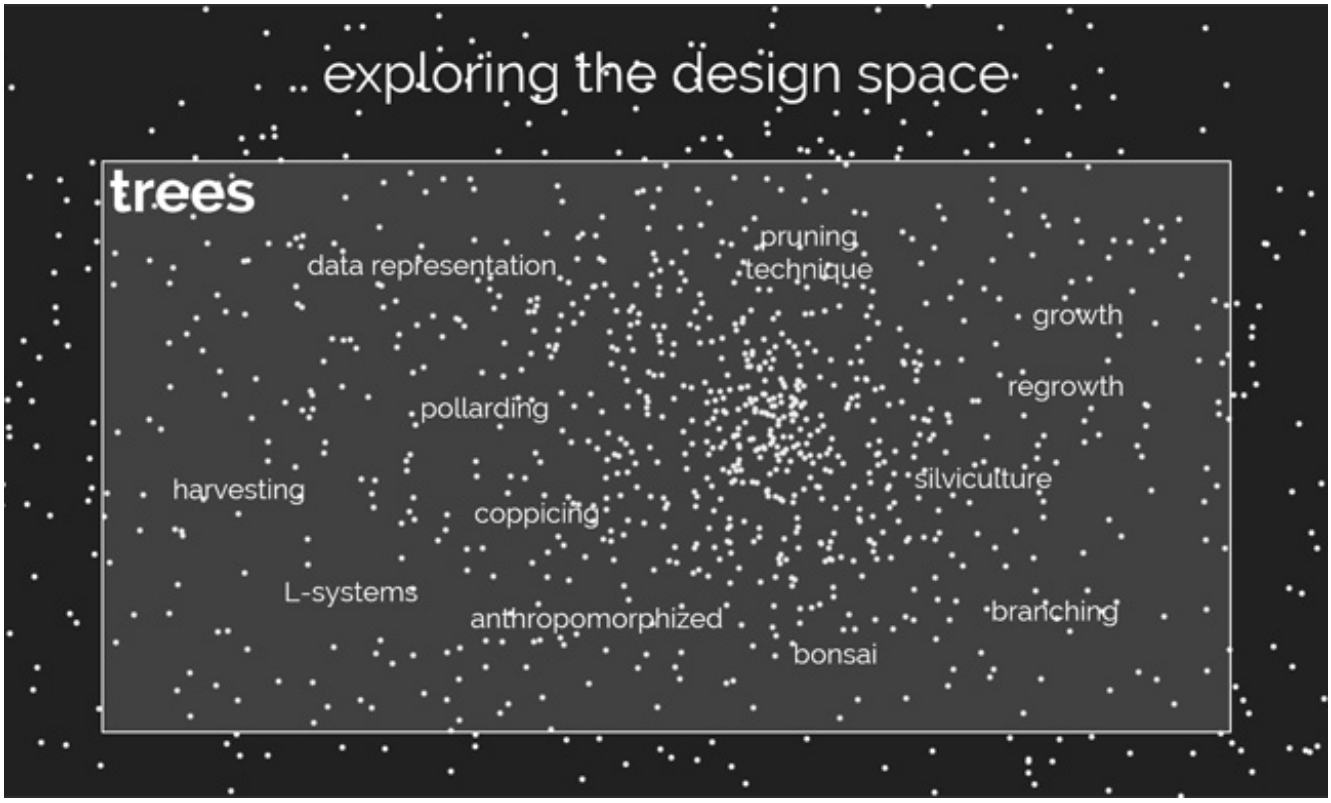
What Went Wrong

1. Getting Lost in the Wilderness

The initial prototype for the game was finished in only a couple evenings. It was clear this would be a game with procedural trees growing in real time and the player's main verb would be cutting branches away. Oh, and remember: it would be finished in a couple months!

My next step was to explore the design space. I had heard repeatedly over the years from wise, successful indies that the key to a great game is to fully explore the design space around your game idea. I'd heard it described as this vast undiscovered wilderness. Some game idea design spaces will prove to be rich and fertile with gold nuggets lying everywhere, while others would be barren wastelands.

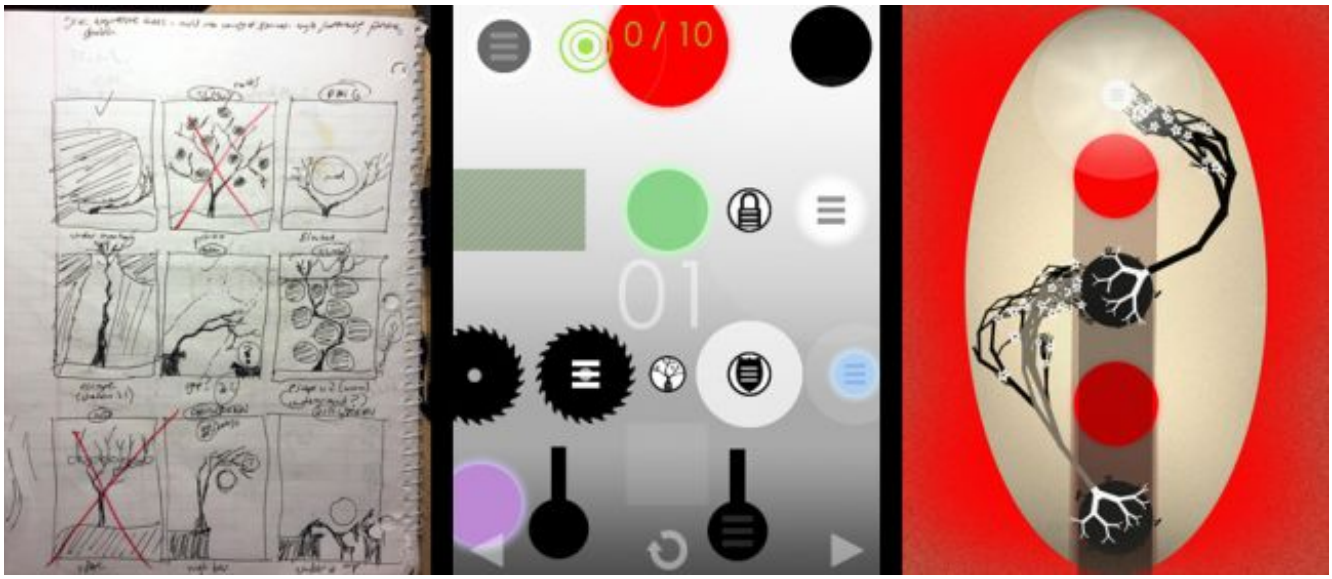
The problem is that I misinterpreted this advice to mean I should just start prototyping anything and everything related to the broad topic of *trees*. I didn't know what my design space really was, I had no focus.



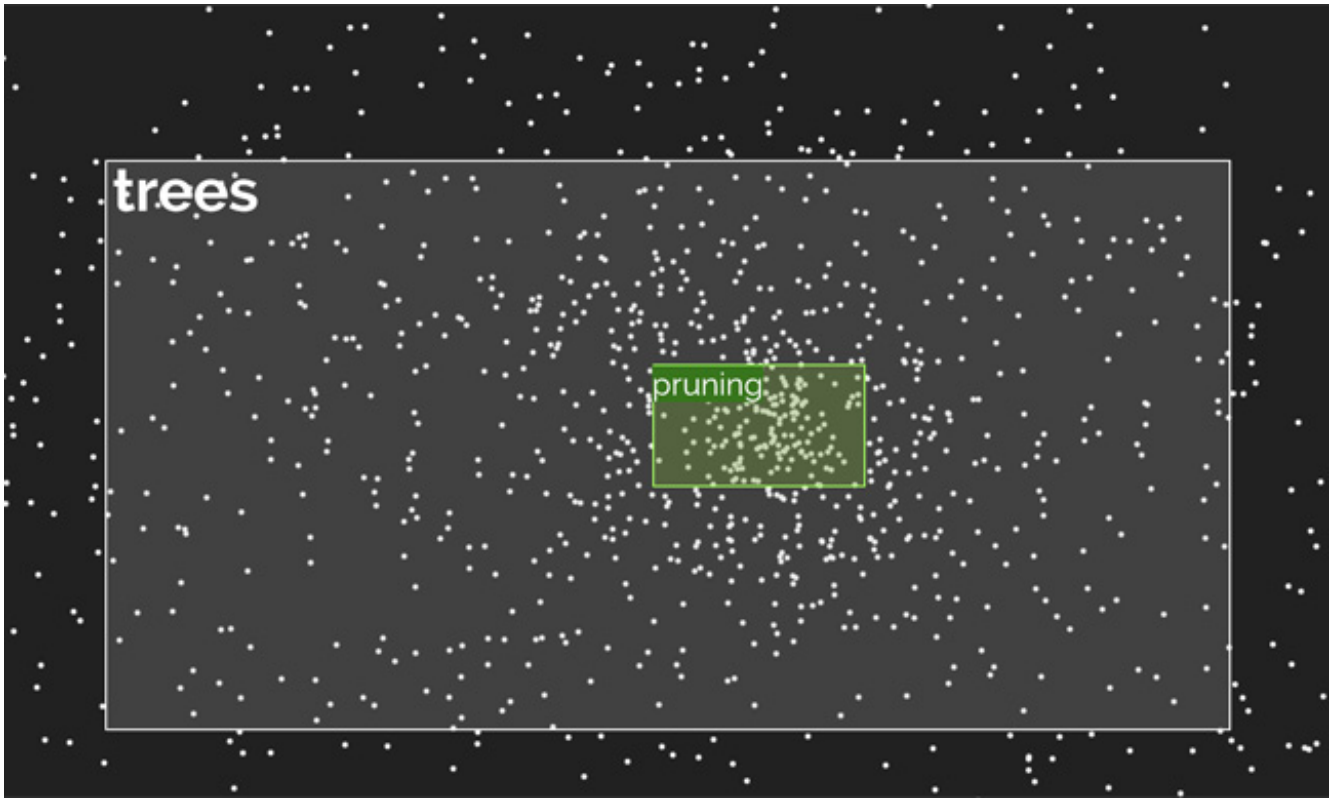
My initial focus (basically everything)

I spent the next six months prototyping all kinds of things--shield power-ups, infinite fractal trees, tree planets, weird inverted trees, and countless game modes like 2-player coop, FRENZY!, and endless modes.

This all had a time cost *and* a



mental cost. I started to become overwhelmed with the possibility space, lost in the wilderness. In retrospect I should have focused in on the heart and soul of the game. Pruning as player expression was the most interesting part of the game and I should have been searching in that much more constrained space from the beginning.



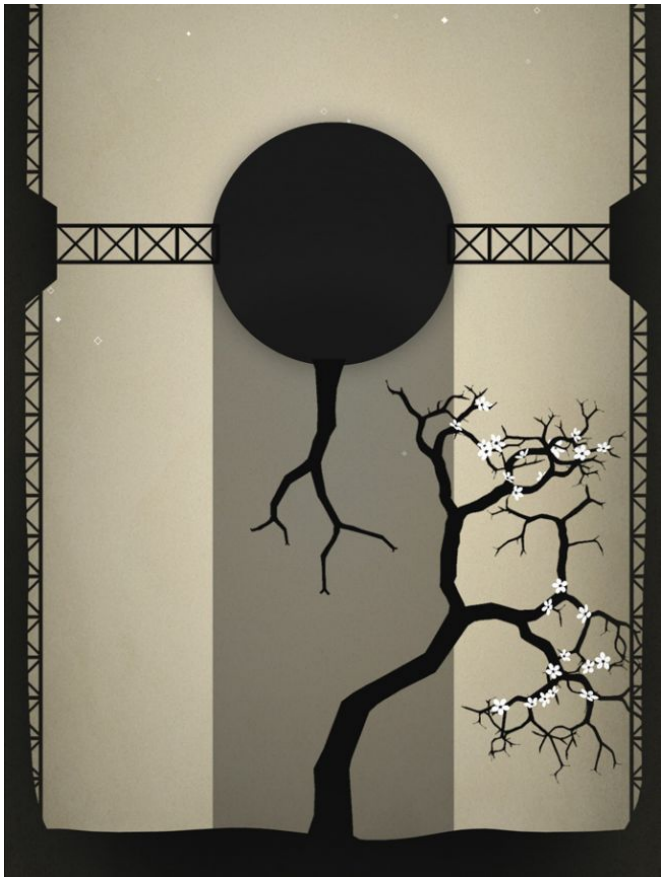
Where I *should* have focused

2. Worry About Every Little Thing

I don't want to belabor this point since others have talked about it at length, but I definitely have a bit of a perfectionist streak running through me. This is a common trait with game developers and can often be good for ensuring things that really matter to the project are *just right.* But when the things you're fretting over don't really matter in the grand scheme of things you just end up wasting a lot of time.

I would waste *hours* of my time tweaking the look of a soon-to-be-cut mechanic, *days* of my time picking the exact right font, and *weeks* or *months* of my time deliberating over decisions such as how to represent the score in game.

Even up until the end of the project I maintained a hotlist of must-do items before shipping the game. These were “super important” things like ensuring certain branches in certain levels didn’t look too thin when curving a particular way, or certain pipes at the end of the game not having proper collision. Well guess what? I shipped the game having never addressed a huge chunk of these “critical” issues and even now, half a year after release and I *still* haven’t managed to get to them and nobody has noticed! The point is, our time as developers is incredibly precious, it’s limited. I should have asked myself more often than I did, *what’s most important and what will nobody ever care about?*



3. Be Really Bad at Scheduling

If there was an award for being the *worst* at scheduling I’m pretty sure it would have my name on it. Remember how I mentioned that my initial goal was to finish and release the entire game in two to three months? That’s a bit of a lie. In actuality I was hoping to “game jam” it and have it out in a month. But I’d heard enough times that you should double or triple your initial estimate so that’s why I picked two to three months. It’s hard to explain just how bad I was at accurately forecasting how long things would take me and actually sticking to a schedule.

Here’s how it would generally go down. I would first make a crude schedule, not based on anything reasonable or sane but based on what I delusionally *wanted* to get done. I would give myself a fraction of the time actually needed to accomplish the remaining tasks. And then I would let this schedule sit in a dark corner of my hard drive for a while and get to working on stuff. Then one day I’d happen to unearth the schedule and look at the calendar and realize it was now 45 days later and I hadn’t even finished half the tasks on my list.

I did this over and over again during the development of *Prune*, partly because I didn’t know what game I was making and partly because I had completely unrealistic expectations. After a while it started to become a boy-who-cried-wolf situation where I felt like I couldn’t even trust myself at all any more. The only thing that saved me was finally realizing that I could use external deadlines, such as awards submissions, to force myself to focus and make hard decisions.

4. Struggling to See the Light

Searching for my game’s soul, spending too much time on dumb things, and constantly being over schedule all led to some really low, discouraging times for me. I constantly questioned whether this was the right project to be working on or whether I was just wasting my time. I considered just cutting my losses and releasing the game as-is several times since I figured the game would probably never make back the little bit of money I put into it. I questioned whether I was even cut out to be “indie,” to work on my own game.

Even though going solo was the right decision and is how I work best, toiling away alone for over a year was hard on my emotional well-being. It may not sound like a lot, especially when some indies endure three or more years of this, but for me it felt like an eternity at times. I’m fortunate that I had my wife and two boys to keep me in balance—I at least had an escape at the end of each day, somebody to talk to.

I went on a lot of walks during dev. Often it would let me distance myself from a problem just enough to let me think clearly about it. But at the lowest points I walked to distance myself from the game, to distance myself from *my self*.

Of

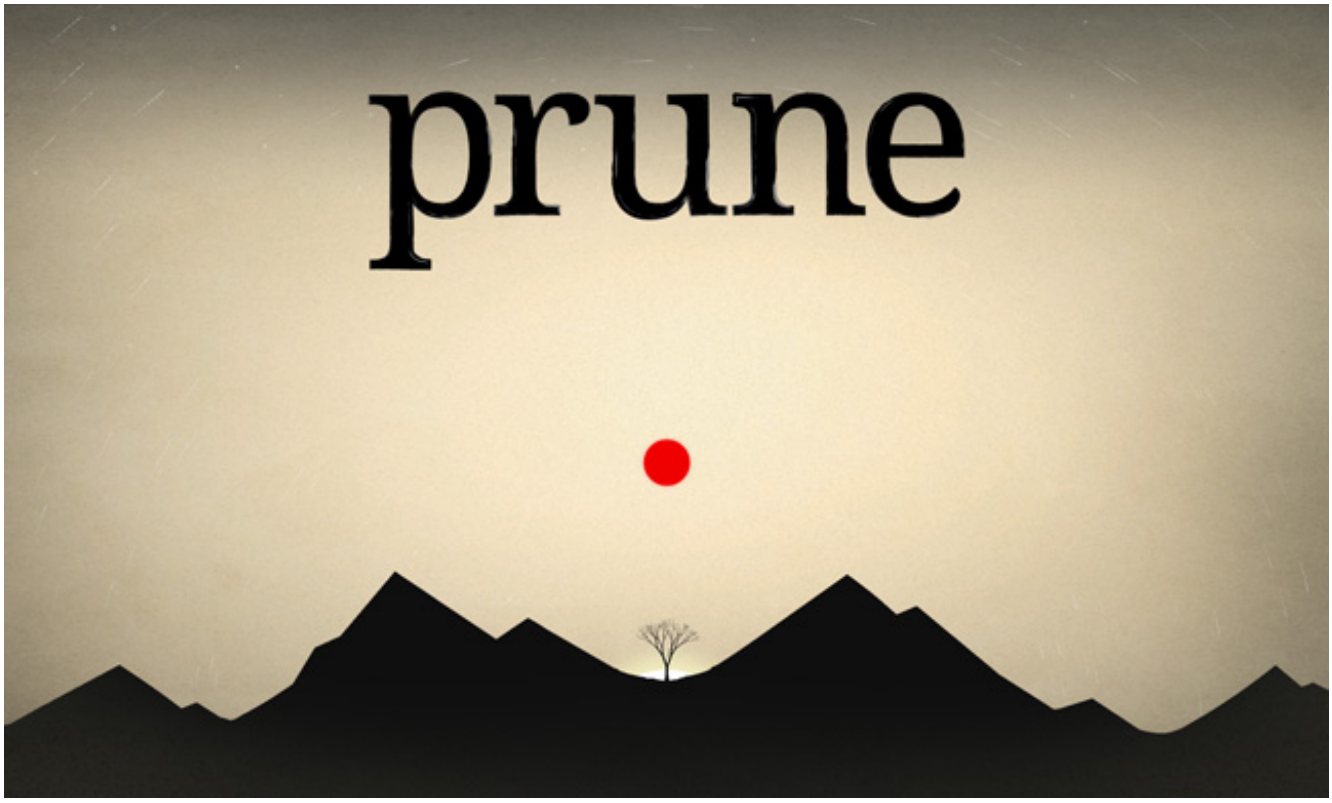
course, all of this that I'm describing develops into this vicious downward spiral wherein you get discouraged and stop doing any productive work on the game, which in turn discourages you further, causing you to lose more calendar time, ad infinitum.

This is something that isn't talked about as much as it should be in the indie scene. So often we only pay attention to results. Was the game a hit? Was it successful? Did it pay off the dev costs? We sweep under the rug the process, the struggle, the emotional drain. In the future I need to focus more on my creative process and direct more of my attention to my mental health before it gets too late.

Conclusion

Even though I struggled and made a whole lot of mistakes, I'm still really proud of *Prune*. My goals for going indie were to live modestly, work on new and interesting games, and make just enough money to get by. As my first project, *Prune* has done all of this and more.

One of the best parts about the experience has been the player reception. I didn't make the game for *gamers*—there's plenty of options out there for them—but for anyone. My heart has been warmed over and over again upon receiving touching emails from old ladies who have never played a video game in their life. I'm humbled that my tiny game has resonated with so many people and am incredibly grateful that I'll be able to continue on this journey going forward.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