

## The Purpose and Meaning of Drop 7

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I play Drop7 so much that when I have my iPhone in hand my wife assumes I'm playing the game (and often, I am). I have played the game to get through particularly painful tattoo sessions, but also to while away five minutes waiting to renew my car registration or even during a particularly long cut scene. I have attended meetings completely derailed by the game— one by one, attendees picked up their iPhone to look something up or answer a text message only to be lured by the game. A friend described for me the instinctual pull of the game when he first wakes. When dedicated players gather, we often discuss our relationship to the game, how and why they stopped playing for a period, and why they inevitably returned.

I would like to propose the term Drop7 practitioners for people like myself— individuals who find something more in the game than one might suspect an iPhone game could provide. This essay is an attempt to understand the game's effect on me.

I first heard about Drop7 from a friend. I knew it was an area/code game, which caught my attention— I had a previous thing with their Facebook game, Parking Wars. I had also spent time playing the studio's Chain Factor,[68] so I figured I would probably enjoy this new iPhone variant on that game. The most common elevator pitch of the core game shared by Chain Factor and Drop7 is something along the lines of "Sudoku meets Tetris," but this formulation does not really do it justice. The comparison with Sudoku goes only as far as the use of a grid of numbers and a simple math-based system. The Tetris reference comes from the falling block puzzle heritage originating with the Russian game.

Drop7 presents players with a seven by seven grid into which they drop discs numbered one through seven into the columns. Well-placed discs "break" one or more discs already in the grid when the number on any of the discs matches the total number of discs in its row and/or column. Take this screenshot:

The best decision is to drop the 1 disc onto the second column from the left. Because the 1 disc would be alone in its row, it would break. And because the 1 disc creates the fifth disc on that column, the 5 disc two below would break as well.

Gray discs require two adjacent breaks to convert to a randomly assigned number. At regular intervals of dropped discs, a new row of gray, neutral discs are added from below. The game ends when there are no more grid spaces onto which players can drop discs or when one or more discs advance past the top row.

There are three game modes: Sequence, Normal and Hardcore. In Sequence mode, the dropped discs appear in the same sequence throughout a game, which allows the player to develop long-term strategies. 30 discs are dropped before a new row of gray discs are added to the bottom of the grid. In Normal mode, the number on the dropped discs is randomized, making it impossible to develop long-term strategies. As in Sequence mode, 30 discs drop before a new row is added.

Sequence and Normal mode are leisurely paced, so much so that Drop7 practitioners find them to be profoundly dull. For me, and all other practitioners I know, there is really only one game: Hardcore. In Hardcore mode, five random discs drop before a new row of gray discs is added at the bottom of the screen. This makes for an intense game utterly lacking in forgiveness. This is where math and falling block puzzle mechanics alchemically meld to create the Drop7 practitioner's space.

My relationship with Drop7 started like that with any other game; I first seek understanding, and then, if the game fits my tastes, I start down the path to mastery. My Drop7 mastery-seeking phase was largely spurred on by (not-so-friendly) friendly competition via in-person and Facebook friend list peacocking. I moved past that fairly quickly, now only occasionally crowing about my scores.

Ever since I obtained a solid grasp on the gameplay and found my place in Hardcore mode, my play has largely taken the form of a quasi-meditative activity. While running, cooking, washing dishes and other activities during which I mostly operate on autopilot, I often find solutions to design problems, ideas for writing, new angles for class assignments, and other concerns that require simmered thinking. While playing many other games, I often find myself thinking beyond or about the experience at hand. For example, I have played through *Uncharted 2: Among Thieves* and *Assassin's Creed 2* while writing this essay. While climbing, jumping, swinging, stabbing, shooting, sneaking and otherwise moving Nathan Drake and Ezio through their paces, I think about the games' relationships to their genres; I compare my experience to the reviews and other things I have read; I consider how I will make use of the games in the classroom; I think about the laundry I need to do, or the

dogs I need to let out, or the essay I need to finish. When playing Drop7, I rarely think beyond the game. I am usually able to carry on a light conversation,[69] but beyond that, the game defies my usual multi-tasking ways.[70] The game transforms me from a serial multi-tasker into a singularly-focused, in-the-moment player.

Why does the game have this power? Where exactly does the alchemy take place that uses math to bind the grid and the discs to create an experience that locks me in and brings me back over and over?

The game's design— specifically the interaction design and game system— carves out the space within which the practitioner works. The interface and interaction design is mostly well done.[71] Drop7 avoids the finger-in-the-way problem of many iPhone games, largely due to the player-controlled pace of the game. The natural rhythm of the game is to make a choice, then pull the pointing finger back to see the results of the last move. In my own experience and those of others I have watched play, there are often pauses of 10, 15 even 30 seconds or more as the game state is evaluated and a decision is made about the placement of the next disc.

When I first started playing, I treated the discs like Chess pieces, resting my finger on the disc to be dropped as I slid it back and forth across the top while pondering my options. I found this led to the occasional misfire. I now tend to minimize the amount of time my finger makes contact with the screen— I consider my choices, make my decision, touch the screen in order to position the disc for release, and then pull away my finger to watch the outcome of my decision. My play style has become physically minimal with the only outward sign of my engagement the infrequent disc-placement gesture.

The degree to which Drop7 provides feedback on player actions and system response varies based on settings determined by the player. At the most extreme, every action is accompanied by a sound effect and an animation— the landing of discs dropped by the player, the breaking of discs, the scoring of points, the chain-breaking of discs, the advancing of rows, the end of the game. The sound effects can all be turned off— in fact, I've never met a Drop7 practitioner who leaves them on. For me, the event sounds completely change the experience of the game; they are very child-like and do not at all seem appropriate for the serious practitioner's work. I even go so far as keeping the soundtrack muted. Though it generally fits the aesthetic of the game, the ebb and flow of the music usually doesn't correspond to that of my gameplay. Instead, I listen to

my own music,[72] or more often, I play in silence.

Drop7 provides layered, localized visual feedback to make clear the cause-and-effect of my actions. Discs that land in a spot without causing any disc breaks do not trigger additional pomp and circumstance once they land in their slot. Discs that cause breaks trigger a series of animations: the background of the impacted row and/or column transform from black to white; impacted solid gray discs change to the half-gray state, while impacted half-gray discs transform into a numbered disc; breaking discs first grow about 30% larger, sometimes begin to rotate, then quickly shrink away; the points earned for each break float up from its disc and then slowly fade away; and finally, if the broken disc(s) are buried in the column stack, the disc(s) above hover briefly, then fall and settle into their new location. If additional disc breaks are caused by the preceding break(s), then the entire process repeats until the chain is complete.

While this may seem like an embarrassment of riches, the animations are tightly integrated into the rhythm of the game and become transparent, efficient markers of game events. From a basic gameplay perspective, they are necessary for the player to keep up with the ever-changing game state. From a pure game aesthetic perspective, the animations activate the screen, creating a sense of liveliness on an otherwise staid, almost static screen. Indeed, the animations are a significant contributor to the game's hypnotic draw—they are where the mathy core of Drop7 comes to the surface.

The interface quickly recedes, leaving you, the grid and the discs alone to sort things out. The math is really simple: numbers one through seven plus the nothingness of the gray discs. It is perhaps the high grokability of the game's underlying system that makes it swallow the practitioner whole. When the "moving parts" of a system are something ingrained in your brain as deeply and intuitively as the addition and subtraction of numbers 1 through 7 plus the null of the gray discs, there is that much more space for contemplation within the game's space of possibility.

Take this screenshot:

I have a 3 disc to place and a number of possibilities to consider: the rightmost column would convert the broken gray disc to a number while breaking the 3; atop the second column from the right would clear the three 6 discs, and then trigger a chain by having the 3 disc land as the third in that row and column; on the third column from the right would clear the two 5 discs, and then create a three-disc row chain; dropping it

on the fourth column from the right would simply create a three in a row; placing it on the second column from the left would create a break when the next row is added; or finally, dropping it on the leftmost column would prepare the two 6 discs to break when the next row advances. Each of these choices has a consequence in that moment, but also for the disc drops to come.

Drop7's core decision loop is deeply satisfying. The game thwarts the deep strategic thinking of Chess or Go, and wholesale rejects the twitchy gesture of many popular iPhone games. Drop7 is a game of methodical, calculated, movement from one math-moment to the next. The randomness of the discs to be dropped coupled with the random number values assigned to the converted gray discs thwarts extensive strategic planning. Still, there is room for thinking within the current decision and even a move or two ahead based on the probability of the next disc being a number you can use and the number of discs remaining before the next row advances. But for the most part, attention remains ever in the present— this disc, these rows and columns, these possible choices. There is a real satisfaction in disappearing inside a system that so acutely narrows my decision space.

This is the heart of the practice. Drop7 is about sustaining the focus necessary to keep the advancing rows of gray discs at bay— not about power-ups, achievements and the other immaterial trappings and demands of the game- and real world alike.

Like most games, there are distinct early, middle and late stages to a game of Drop7. The early game is the loosest and most open-ended. In the early game, I feel light on my feet, nimble and ready for the discs to fall. Those first couple of levels are like warming up before a game of basketball or a run— limbering up, reawakening the necessary muscle memory. The math is wide open in the early game— so much space, so many options for each dropping disc. High numbers allow me to close out rows, or work without worry on high-number columns. Low numbers close out rows and let me break through to the bottom of the screen. There is no such thing as a problem in the early game— even clusters of 1 discs cannot hurt me.

For some, the early game is all about completely clearing the screen to achieve the elusive 70,000 screen clear bonus:

I've easily played a thousand games of Drop7, and only twice managed to obtain this goal. Thinking about it rationally, the odds are stacked against the screen clear bonus happening. Hardcore mode only

allows five discs before a new row is added to the bottom. To clear all discs before this happens take a lot of luck in which discs you start with, and which five discs you have to place before the next level advances.

Most Drop7 practitioners will tell you the screen clear bonus is a fool's errand. It is nearly impossible to obtain, yes, but more importantly, to come to that realization is to begin understanding the game. Fate, in the form of the starting discs and the randomly assigned discs to be placed, is beyond your control. Both times I have achieved the clear screen, I was not even pursuing it. It just happened, like a shooting star that I happen to glance up and see— completely out of my control, yet a reward all my own.

Invariably, a time comes, usually around level four or five, when there are several rows of gray discs below a crust of numbered discs. This is the start of the middle game, the longest part of the practitioner's experience. It can go on for five or six to several dozen levels depending on the luck of the discs and your mathematical savvy in placing them. The tone changes from the bravado and confidence of the early game to the real task of the Drop7 practitioner: contending with the ever-advancing gray unknown. The middle game is like an abstracted production of Ionesco's *Chairs*, but with some means of addressing the suffocating, torrential influx.

Looking for anyway to break up the gray discs becomes the imperative during the middle game. Different philosophies exist amongst Drop7 practitioners. Do you work columns of high numbers (5's, 6's and 7's), or do you focus on clearing rows? Working the columns often creates trenches or cliffs, allowing for breaking up the sea of gray discs on the bottom levels, and setting up the potential for point-rich chains. Row-clearing strategies require patience and the risk that waiting will cause too many gray rows to form below if you cannot tunnel down successfully.

The middle game is something akin to the manipulation of an atheist's rosary. I become locked into the rhythm of the discs, the consideration of disc placement and watching the outcome of my choices. The middle game of Drop7 is about riding the wave of the luck and your ability to think through the possible placements of the current disc to maximize the outcome of your drop. All that matters is keeping at bay the sea of gray. The less gray there is, the less unknowns there are; to hold back the tide is to delay the inevitable.

Eventually, a misplaced disc or simply the unluck of the draw jars the practitioner out of the meditative middle game and into the end game:

The end game springs brutally upon you like a head-first spill off a ten speed. It is typically characterized by a shell of 1, 2 and 3 discs across the tops of most columns, with only one or two spaces left to work the gray discs.

Now and then, there is a game in which the end-game tide inexplicably returns you to the middle or even the early game thanks to a fortuitous sequence of discs that sets off a lengthy chain reaction of disc breaks. What seemed like a dire state with barely a single space left along the top of the grid transforms to several open rows of space with which to work. Though not as elusive as the clear screen bonus, the end-game save is a rare experience to be shared in hushed tones with other practitioners like an inverted fisherman's "the one that got away" tale.

The only hope during the end game is mining columns to break the buried gray discs to change into favorable 4's, 5's, 6's and 7's that in turn trigger chains. Once the shell of low numbers caps all seven columns, the end game is set and it is just a matter of discs until the GAME OVER screen appears.

The end game can be handled in two ways: to see the game through to the end, or cut your losses and start a new game. Practitioners are evenly divided on this point. The impatient and point-conscious— those not really in tune with the purpose and meaning of Drop7— see they have reached the end game, and without a second thought start up a new game by double-clicking the menu bar at the bottom of the screen and selecting NEW GAME. I tend to ride out the end game, knowing the PLAY AGAIN button awaits me on the other side.[73]

I know I will never "beat" Drop7— it isn't one of those games. The fundamental math and the randomness of the discs don't give you the chance. Playing Drop7 is the art of converting Sisyphian drudgery into a form of meditation. Drop7's disc-dropping is an object lesson in the futility of resistance to life's unpredictability and the certainty of an end— you push the discs around but you never really control them. This, I think, is what keeps me hooked on Drop7. It is a space of possibility where the consequences are never more lasting than the PLAY AGAIN button, and the soothing reminder of the random nature of life is safely ensconced in the grid and discs and the ever advancing gray unknown.

#### Endnotes

69 A little background on the game. Chain Factor is an alternate reality game (ARG) designed by area/code for the CBS program, Numbers.

Chain Factor functioned as the “trailhead” for the ARG. The game appeared to be a web-based falling block puzzle game, but as players moved through the game, they encountered strange error codes with addresses, strange phrases, and other curiosity-piquing clues.

Within the ARG’s narrative conceit, the game was the diabolical plan of a terrorist that used players as a sort of hive mind to unlock a sequence to blow up a bridge in an episode of the television program. Chain Factor created a situation where the “casual gamers” who played the web-based game were unlocking codes and clues that were then used by the ARG-players to solve the mystery.

Once the ARG wound down, area/code developed Drop7 as a simplified iPhone version of the web-based game.

70 Strangely, many of my better games happened while idly chatting.

71 This deep absorption has made the process of writing this essay difficult; I have had to work hard to remain outside my own play in order to work out details of exactly how the game operates.

72 I’m not particularly enamored with the two menuing systems— the main controls at the start and end of a game, and the secondary menu accessed by double-clicking the bottom of the screen.

73 For what it is worth, Nosaj Thing’s *Drift*, Rechenzenstrum’s self-titled first album and Michael Nyman scores for Peter Greenaway films are my favorite Drop7 accompaniments.

74 Far and away the most insidiously enabling thing about Drop7 is the placement of the “play again” button— the upper left portion of the game over screen. I tend to hold the iPhone in my left hand with my right thumb braced against the bottom and my right middle finger stabilizing the top of the phone. That leaves my right index finger on the loose to play the game. It tends to hover around the upper left of the screen. So when a game ends, the most natural gesture is to let my index finger drop down on to the “play again” button just below. Too easy, too natural a gesture. This, combined with my inclination to want to keep playing, makes it likely that I will play a number of games of Drop7 in a row.