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Rejecting the Myth of a Singular Balance in Favor of a Three-Pronged Approach To Optimizing Game Design

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In mainstream and traditional tabletop roleplaying game communities, a premium is placed on "**Balance**." Even in these cultures, balance is relatively nebulous. Options are highlighted as bad or as overpowered, and debates over the relative merits of each possible selection rage endlessly. Character optimization (or min/maxing) is an entire play style devoted to singling out "imbalance" in a game and taking advantage of it. This focus on figuring out how to "beat" the game, to contort the wording of the game mechanics to defy the spirit of those options, has led to a backlash against balance in the indie/ storygame community. There is a running undercurrent of not playing-to-win but instead playing-for-drama, and that balance can be mostly disregarded as a mathematical quirk.

However, this dismissal is driven by a misunderstanding of balance as a onedimensional numerical concept. In truth, balance is not a single thing at all. Balance is made up of three separate, but interconnected, axes of balance called Success Balance, Interest Balance, and Attention Balance. These three prongs of balance must all be internally balanced, but they do not effectively counterbalance each other. If any one of the three is unbalanced, it risks upsetting the function of the entire game, but designers can't lean harder toward one prong to resolve problems in another. What is meant by these three forms of balance?

Success Balance: The proportion of circumstances where players get exactly what they intend, as compared to times where their actions are stymied, modified, or challenged. When Traditional games discuss balance, they are usually referring to success balance.

† Interest Balance: The proportion of options that excite players fictionally, as opposed to those that are uninteresting despite their mechanical value.

Attention Balance: The proportion of rules that players can reasonably consider and remember at any particular moment.

Over the course of this essay, I'm going to discuss each of these Balances in turn, discussing the **symptoms** (∞) of a game struggling with each balance, how to **diagnose** (□) what in the game is resulting in those problems, and what **treatments** (^{*}) exist to remedy difficulties with each balance.

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Terminology: Mainstream / Traditional & Indie / Story Game/ Lyric Game / etc

These terms, mainstream/traditional and indie/storygame, are used for lack of a better or more solidly appropriate term. The former refers generally to corporate productions that consume the bulk of the market share of tabletop roleplaying games, and especially to Dungeons & Dragons and Pathfinder. Of course, there are plenty of newer Traditional games, like Genesys or the Fantasy Flight Star Wars games, so don't mistake this category to simply mean "old or old-style games." The latter refers to the mostly independent or small-team games (such as PbtA or FitD games, Fiasco, or Sleepaway) that especially thrive on DrivethruRPG, itch.io, or on individual creators' websites. This community has very little specifically binding them together, and vary immensely in philosophy, attitude, and lexicon. Personally, I tend to refer to this community as the indie community, but it is important to note that the OSR (Old School Roleplaying, Renaissance, or Revival, depending on who you ask) community is similarly independent-minded, despite often holding values more in line with traditional tabletop games. I like indie because being smallpress publishers is one of the few things connecting this community, though borderline publishing corporations like Evil Hat and Magpie Games push the definition of independent publishing despite their inclusion in the indie community. Terms are hard, so for simplicity, I'm going to go with "Traditional" and "Indie," I just wanted to be clear about the limitations of those terms.



SUCCESS BALANCE

Success Balance is the most commonly understood form of balance, and is generally what is meant when balance is discussed, especially within traditional gaming communities. Notions of "weak" or "overpowered" options or mechanics are referring to **Success Imbalances**, and min/maxing or character optimization is the process of exploiting Success Imbalances to maximize a player's chances of success.

That, however, is somewhat of a negative definition, exposing what happens when Success Balance is broken. The purpose of Success Balance is to set the tone and level of struggle the characters will face, and to expose all of the game's mechanics and functions at appropriate intervals. This is vital to all games, and as we'll see soon, the indie community's rejection of the importance of balance is driven instead by a prioritizing of Interest Balance rather than a refutation of the importance of Success Balance.

& SYMPTOMS

If you notice these things during play, they are indicators that you should start by examining whether the game has Success Imbalances.

\circledast The tone is more gentle or more dire than desired.

Severity, intensity, and difficulty are all modulated by Success Balance. The more often the player is in control, the fewer undesired consequences they will suffer, and this will make the game feel in-control, reducing the tension of the game. On the flip side, if the player is constantly having control taken from them, they will feel more out-of-control, making the situation more dire.

\circledast Mechanics are being rejected, horded, or not engaged with.

The entire mechanical ecosystem of a game is interconnected, and mechanics meant to interface with Success Balance can be completely ignored if their impact is minimal or the situation is constantly overwhelming. Players who are constantly succeeding rarely seek out mechanics that would only further increase that success rate without providing other benefits, while mechanics that can't rescue a player who is always failing tend to be ignored in favor of those that can.



DIAGNOSIS



Diagnosis of a problem occurs in two places: text review and playtesting. Text review is the process of reading and analyzing a game to try and identify its issues, while playtesting is the process of actually playing the game with the intention to find issues or confirm that a game functions correctly.

Text review is the best way to find mathematical problems.

The exact process of determining Success Balance depends on the exact mechanisms of a game (for example, dice probabilities or the availability of modifiers) but the general guide to look for is "**how often do players get to decide what happens, and how often is what happens taken out of their hands?**" While games that use randomizers (like dice or cards) can calculate these probabilities, even games without them can still wrest control from players. For example, in **Fiasco**, players are allowed to choose where they want to lose control, in framing a scene or in deciding the outcome of the scene. The player still loses control in those moments, and so that feeling of loss of control needs to be accounted for. Fiasco doesn't want players to feel out of control of the story (even if the characters are) so it allows players to remain in control for most of the scene.

Text review for Success Balance involves identifying all moments where the players lose control, how often those moments occur, and what happens when they do. Adjusting that rate, or the severity of events when characters lose control, will shift the Success Balance.

Delaytesting reveals whether the balance is satisfying in play.

Playtesting is the most surefire way to identify if the success rate produces a tone and intensity that is desirable for the game. However, theoretical success rates are rarely replicated perfectly in play, so playtesting does a better job of revealing the full range of possibilities that the system can reveal. While Success Balance is optimized around an ideal rate, playtesting can make clearer what can happen if players get on really lucky or unlucky streaks. Accounting for the ceiling and the floor of Success Balance is just as important as perfecting the ideal situation.

So much of Success Balance is about tone in play, which is hard to assess in text review without a lot of design and reading experience, so playtesting is vital to see if the game is where it needs to be. However, that playtesting can often be unhelpful in isolating which mechanics are unbalanced, so ask lots of questions about players' experience, but don't look for solutions from players.

Text Review versus Playtesting

The two approaches to diagnosing problems are best used in conjunction with each other, but it is best to know the upsides and downsides of each approach before choosing which will be best suited to finding an Imbalance.

Text review is the first line of defense against any problems. The designer should always examine their game before it is ever played to see if there are glaring problems. However, noticing these problems, especially soon after writing the game, can be exceptionally difficult, as it is easy to fill in intention and correct understanding even when it is not actually in the text. Taking a break before reviewing the game is vital for even the vaguest degree of objectivity. Any problems caught in text review, however, are problems that no players will ever need to experience.

Playtesting requires a lot more structure to do helpfully. It requires a player group willing to potentially have a bad time and a substantial chunk of time set aside for the process. An unprepared designer (or one doing exploratory playtesting to simply confirm that there are no issues) can only really discover if there any symptoms of imbalance, while a designer prepared to observe particular things or ask specific questions can try to isolate and diagnose what is causing those symptoms.

Unfortunately, playtesting is ultimately extremely subjective. Players without a lot of playtesting experience can have difficulties naming their experiences, while those with a lot of experience often have their own vision for how to solve problems. Also, all players are unique, and as such true playtesting requires an immense sample size to even resemble being representative of the general audience. As such, the feedback gleaned from playtesting can only communicate so much, and the designer needs to take that feedback back into text review and consider how that information lines up with their own vision for the game and whether it is the actual root of the problem, or if it is just another symptom. Trust players to identify what they didn't like, but don't trust them to know how to fix it. That's the designer's job, and only really can be answered with a holistic understanding of (and vision for) the entire game.

In short, use text review until no more potential imbalances can be identified, then use playtesting to see how those rules manifest in real use. Take advantage of player feedback to determine which potential problems are real ones, treat those problems as needed, and then return to text review to find more potential imbalances. Repeat until none can be found using either approach.

TREATMENT



There are two approaches to treating balance problems, which are both important to involve in solving the game's problems. One approach is to adjust the mechanics of the rules involved, while the other approach is to adjust the presentation to communicate the game differently.

Adjust the numbers, probabilities, and frequency of randomization.

The mechanical treatment for Success Imbalances is simple to understand: change the mechanics so the ratio of controlled and uncontrolled moments elicits the desired emotional response. If players feel like the game is too hard or they're frustrated (in a way you're not trying to achieve), improve the players' success rate or force them into uncontrolled rolls less often, or the reverse if the game is too easy and the players feel more powerful than they are intended to be.

This is easier said than done. Consider changing modifiers to randomizations, resources that can be expended to improve their Success rates, player-specific augmentations, the base probabilities of the randomizer being used, the triggers for when those randomizations are called for, and how often those triggers occur.

• Present game mechanics in different orders, or reword their explanations. Success Balance is based, ultimately, on the ratio between controlled and uncontrolled moments. The ideal balance can be determined through theory and text review, and presentation doesn't factor as strongly into the theoretical ideal balance (as this is often determined before a game is laid out in presentable form in the first place). However, **if the math of the mechanics is sound but that balance isn't being achieved in playtesting, that can be solved through presentation**. If mechanics are being ignored, change how they are explained to clarify the intention and power of the mechanic. For example, if regular use of a mechanic that can provide a +2 bonus is critical for players to achieve the desired Success Balance, make sure that it is clearly displayed and explained on their sheets.

Additionally, it helps to consider the order mechanics are presented. When presented with less-relevant or less-useful mechanics, players start to check out, so the more critical elements should be explained first.

S Mechanical versus Presentation Treatments

When dealing with Imbalances of any kind, the first thought of most designers is to start tweaking the mechanics of the game. This isn't necessarily an incorrect first instinct, but also shouldn't be the only avenue considered to solve issues. A lot of Imbalances, of all types, are also produced when game aspects aren't communicated effectively or efficiently.

Mechanical changes are still usually the first place to look to treat balance issues, especially when it comes to Success Balance, where one can actually determine an ideal ratio to strive for. Mechanical changes reverberate through the system and have far-reaching consequences as they change player behavior (sometimes intentionally, sometimes subconsciously.)

Presentation changes are often overlooked as a solution. However, they possess the power to shift things in much more subtle ways than a mechanical change. The more a player understands a mechanic's effect on Success Balance, the more likely they are to recognize its value and impact. The greater amount of text it takes to explain it, however, the less likely a player is to remember it, or to even read it in the first place. As such, attempts to improve clarity can actually worsen readability.

The worst thing, regardless of game, is when players don't actually read the whole game, or when they give up and don't give a game a full chance to impress them because of the presentation of a game. They don't always identify this as the problem, so designers must be eagle-eyed for signs that players aren't digesting everything they're being told. Here are a couple of fairly universal pieces of advice:

~ There is no such thing as an unordered list. Even when things are told "in no particular order," one of them is still shown first. Player attention falls away over time. Consider what comes first. Order information intentionally, rather than haphazardly. This includes the ordering of sections in the game. Also, unless the entire list is visible, players can easily miss that an ordering is simply alphabetical, so consider alternate ordering schemes for larger lists.

~ Variety in layout recaptures attention. Consistency between pages looks good and adds to cohesiveness, but varying the way info is presented (with lists, paragraphs, sidebars, tables, bolding and italics, and any other way to switch up the formula) brings added focus to a section, allowing for the designer to emphasize what is most important without losing readers.



INTEREST BALANCE

If Success Balance is what is traditionally considered in conversations about Balance, Interest Balance is what is usually what is prioritized by people who claim to not care about balance. Interest Balance is based upon the notion that, instead of players gravitating to options that increase numerical supremacy, players instead tend to choose options that are more interesting.

The truth, of course, is that it is a blend of those two forms of Balance. Some find numerical success interesting, while others don't mind failure if it is guaranteed to be interesting and they can spend their choices on options they find narratively intriguing. It is the designer's goal to set up the game such that players can't wind up uninterested. **No matter what the players choose, they should find the game interesting in their own way.** The problems and imbalances arise if mechanics fail to make any positive impression or if any options are completely and utterly ignored.

& SYMPTOMS

If you notice these things during play, they are indicators that you should start by examining whether the game has Interest Imbalances.

& Players are finding themselves bored.

Boredom is one of the least-desirable emotions at any game table. If players are bored, the mechanics of the game or the options they chose are not interesting enough for them. Check first that they are actually interested in the game in the first place, then check if they chose the mechanics without considering them very much. If they aren't interested in the game, that's an audience mismatch, and the feedback can be de-emphasized. If they chose their mechanics without thinking much, there are uninteresting options lurking in the lists. If they did try to pick ones that seemed interesting, then the execution of the mechanics has not yet lived up to the promise of the concept.

\circledast Mechanics are being ignored and overlooked, or there are mechanics that are very frequently favored.

Interest can't be quantified, but players are excellent intuitive judges of what will make for interesting play. They will avoid uninteresting mechanics, and cluster around excessively interesting ones. If mechanics aren't all coming up about the same amount across different player groups, there is likely an Interest Imbalance at play.



DIAGNOSIS

Diagnosis of a problem occurs in two places: text review and playtesting. Text review is the process of reading and analyzing a game to try and identify its issues, while playtesting is the process of actually playing the game with the intention to find issues or confirm that a game functions correctly.

Look for how often mechanics refer to the fictional positioning.

At the end of the day, all mechanical systems of a game should point to something in the fiction. Not every action needs to be translated into a fictional event, but in general, options that point back at the fiction will be viewed with more interest. Now, even a "purely mechanical" option will have fictional repercussions as player behavior shifts to take advantage of that new power, but during selection, the player will be responsible for understanding how it will be reflected in the fiction. This extra mental work is not desirable for all players, so options that point directly and explicitly to the fiction will tend to gain more traction.

In a way, this can allow Success and Interest to balance each other, but this is a dangerous road to go down. Everything should be interesting, even the more success-impacting mechanics. Similarly, everything should actually be helpful to the player, even things that are mostly just about highlighting interesting moments and actions. For more on this, see the section Interactions.

Let Keep tallies of what options get chosen and what don't.

Interest Imbalances are easily identified through extensive playtesting. If not all options are being selected very often, try to assess why. It's okay to include more niche options for players to choose, but **the players should always have things they're excited to choose.** Also keep an eye on how often, once an option is chosen, it is fully engaged with.

Much more than with Success Balance, where playtesting by robots could nearly manage to point out problems accurately, Interest Balance requires that the playtest group all be interested in the game and its premise in the first place. If anyone is just less into the whole game, it can create false Interest Imbalance indicators where the problems are more about intended audience than specific mechanic issues. These players shouldn't be totally discounted, as all games are likely to occasionally be played by players who aren't totally sold at first, but they can be deprioritized somewhat in favor of feedback from the intended audience.

TREATMENT

There are two approaches to treating balance problems, which are both important to involve in solving the game's problems. One approach is to adjust the mechanics of the rules involved, while the other approach is adjust the presentation to communicate the game differently.

* Equalize the amount of interest across all options until they are all interesting. The fix for Interest Imbalance is, unfortunately, both very simple and very difficult. The goal is for, across a game's whole audience, all the options to be equally desirable. If diagnosis discovered mechanics that are less interesting, they need to be punched up (see below) or replaced with a stronger idea. If the idea well is starting to run dry, turn to presentation to try and rescue things.

A troublesome case is the excessively-interesting option. This is an option that eclipses others because it adds so much to the game on its own that everything else seems underwhelming. The coward's way out of this predicament is to tone it down so it isn't so enticing, but it's ultimately a good thing that the audience is engaging with an option so passionately. The hero's solution is to bring every other option, possibly across the entire game, up to this interest level. This can seem impossible, and is sometimes not worth the time and energy expenditure from a practical standpoint, but it is the best way to produce a truly transcendently interesting game.

• Present things more evocatively, and with consistency.

Evocativeness can include naming and wording of mechanics, as well as explanation text that highlights what makes an option so exciting. The consistency being referred to is providing the same general amount of pointing-to-the-fiction in each option. They don't need to be exactly the same, but a strong discrepancy between the two will make it so that there will be one set of options for players who like options that explicitly point to the fiction and another set for players who like a more mechanically-focused framing of options, and those two sets of options won't have much overlap, effectively providing the two types of players half as many options as it seems they are being provided.

When writing evocatively, be cognizant of the economy of space in layout. Giving options white space to breathe takes more room, but draws more attention to each option than cramming them together does. Again, also consider the ordering in which the options are presented.



Attention Balance is an old concept that does not always get lumped in with balance at all, but can be treated as a balance concern that has interactions with the other Balances. It is sometimes called mindshare, or mental load. **Attention Balance is the idea that, as humans, players have a limited capacity to remember the game system.** Go over that capacity, and players start to forget things or fail to internalize them in the first place. Go too far under that capacity, and they are more likely to feel bored or disengaged, and the game isn't taking full advantage of the minds of its players.

There is a lot of science trying to figure out the limits of how much active recollection humans can manage at once, but in design it's much more helpful to go by feel and feedback, rather than by some hard number.

& SYMPTOMS

If you notice these things during play, they are indicators that you should start by examining whether the game has Attention Imbalances.

☆ The players are stressed out about the game, slow to act, or inattentive. Stress in a game, especially while the player is in control, is a good indicator of them trying to manage all of their options and remember everything. This can cause slowdowns to the game, and if the player feels the need to reference the game text a bunch, there are definitely Attention Imbalances. Inattentiveness can be a sign of the game not engaging their mind enough, and revealing that the game's complexity can be safely increased without taxing them too much.

& Mechanics are being forgotten.

This is pretty simple to notice. If, during play, mechanics are being forgotten regularly, there's an Attention Imbalance. Consider if it's possible the mechanic is being overlooked or rejected, indicating other Imbalances, but players forgetting something they're interested in or that would give them an advantage usually indicates they're juggling too much. If a particular mechanic is being forgotten a lot, it might be a specifically complex mechanic. If various mechanics are all being forgotten, the system as a whole might be a bit overloaded.

DIAGNOSIS



Diagnosis of a problem occurs in two places: text review and playtesting. Text review is the process of reading and analyzing a game to try and identify its issues, while playtesting is the process of actually playing the game with the intention to find issues or confirm that a game functions correctly.

Look for lists with too many options or mechanics that are very long. Attention Balance is the hardest factor to locate in text review, relying on designer instinct to figure out what "too long" or "too many" looks like for the game system. This comes with experience more than anything.

Have another person read through individual mechanics and see if they get lost. Clarity issues can make even reasonably-sized lists or mechanics take a lot more mental effort to keep track of. After writing a design, re-reading it will automatically fill in intentions and fixes, so an editor or partner is very helpful.

Use checklists and play aids to remind people how the game works.

This might seem counterintuitive, as play aids will make it less likely for memory issues to actually manifest in play. However, keep a strong eye on how often people turn to the aids, and which mechanics have them looking for reference materials. This also keeps the game on track and allows other things to be playtested at the same time, as it is very hard to judge Success or Interest Imbalances if Attention Imbalances are preventing the players from even engaging with the rules fully.

At the end of playtesting sessions, ask whether the play aids were useful, and why. Ask if there are additional aids they felt they could use, and the players will point directly to other Attention Imbalances.

As a side benefit, while creating the play aids and reference sheets, if they feel especially packed or sparse, this is a clear indicator of Attention Imbalance. If the mechanics can't be easily summarized and presented, they are going to be very demanding of players. If there's not enough to even fill a reference sheet, consider if there's more to add to the mechanics of the game.

TREATMENT



There are two approaches to treating balance problems, which are both important to involve in solving the game's problems. One approach is to adjust the mechanics of the rules involved, while the other approach is adjust the presentation to communicate the game differently.

▲ Add or remove options and systems.

Attention Imbalance is a complexity problem. If a game is too complex, make it less so. If a game isn't complex enough, add more. This will, of course, reverberate into Success and Interest Balances, so Attention Balance fixes usually necessitate new rounds of testing for Symptoms of those Imbalances.

★ Clarify rules, lay them out cleanly, and create smart reference sheets. Attention Imbalances are mostly fixed in the presentation. Making the game easier to remember can come through a couple of means. Memorable things are often striking, standing out enough to be worth remembering. Rewriting the text to be more evocative and inspiring can make it more naturally memorable. In the opposite direction, simplicity and clarity make things much more digestible for the mind. Whether expanding text with flavor or reducing it to simplify, consider how those changes affect the game's Interest Balance.

Similarly, there is a running conflict between Interest and Attention in layout, where pure cleanliness is often easier to consume, reference, and remember, but a more bold or flavorful layout approach can be striking enough to be memorable despite technically obfuscating the clarity of the text. Deploying occasional intense layout or tone choices to highlight sections worth remembering can be a very effective way to vary layout and keep audience attention from waning at the most important moments.

Reference sheets are a critical part of most tabletop games. However, they are also a design minefield of their own. There must be enough reference material provided, but it must be stripped down to a very easy-to-use version. Still, the mechanics can't break down when robbed of their full context as presented in the core rules text. There can't be too many reference sheets or they themselves become an Attention Imbalance issue, but not enough and the players will spend too much time digging through the core text. These are the place for sparse, clean, ultra-clear rules text.



INTERACTIONS

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The three Balances have a couple of important interactions to consider.



SUCCESS AND INTEREST

As mentioned before, Success and Interest look like they can be balanced against each other, but this is dangerous, and can split options lists in half into success-focused options and interest-focused options. Success Imbalances can result in characters able to do an incredible amount of things without losing control, even things that Interest-focused options were supposed to be promoting, overriding the supposed benefits of the more interesting options. Interest Imbalances can push players away from options that might help keep the Success Balance intact.

INTEREST AND ATTENTION

The biggest difficulty with Interest and Attention interactions is that pointing to the fiction, the best way to improve interest, usually increases text volume, which in turn increases attention load. Especially in situations where interesting options increase a player's number of things they can do (rather than improve their success rates at things they can already do), this can rapidly bloat a character to a degree that they are harder to manage from an attention standpoint. All changes meant to increase interest need to consider if they are making the game harder to keep in the player's head. Even when complexity seems interesting, favor simplicity to keep things manageable.



ATTENTION AND SUCCESS



Success and Attention Balance are fairly complementary, as solving Success Imbalances usually involves refining existing systems, rather than introducing additional cognitive load. However, with each success modifying option a player takes, they are gaining another thing to remember when using that system, so how easy it is to keep track of a player's personal bonuses to success rates is critical to maintaining Attention Balance. This can best be accounted for on reference sheets.



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CONCLUSION



There is no such thing as one singular all-important balance. These balances are, ultimately, a starting point for design optimization. All three are important, and inter-connected, but they are not necessarily the end-all be-all system for assessing balance of a game.

At the end of the day, balance is about optimization, making a game the absolute best it can be. A game with no attention paid to balance can still be good, even great, especially if the designer has an intuitive sense of balance already. Similarly, a very intensely balance-tested game isn't guaranteed to be fun for everyone. However, there are no games that cannot benefit from a balance assessment to aid in revisions. Balance testing is a lens through which to assess a game, and scrutiny and assessment are the best way to make a game its best self.

The above statement that all games benefit from balance testing is always true. This presents a different problem for designers: when is a game done? This is best assessed according to the practicality of the designer's situation. If they're happy tinkering away and never releasing, more power to them. If they don't really have the time, energy, or access to play groups in order to balance test, they might not bother at all, and that's also okay. Perfectionism can be a curse, and designers should set themselves up with end goals beyond "make the best game" to determine when to stop.

One more piece of advice regarding balance: don't let others dictate whether your game is balanced or not. Everyone has different balance priorities, and players usually experience a very small sample size of play that doesn't necessarily reflect the full existence of the game. Balance isn't something to criticize in others, it is a tool for personal development.

Good luck!



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