The Fourteenth Annual Game Design Think Tank
Project Horseshoe 2019

Group Report:
Round Again We Go:
Applications of Cyclical Progression

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Brief statement of the problem(s) on which the group worked

The challenge: Many service-based games last for years, which necessitates a content treadmill to keep players fed and happy. However, many common progression systems borrow from RPGs and MMOs and involve leveling up in linear fashion. For example, players grind up to some max cap, at which point the numbers have started to break down. Such games run into power creep, diluted rewards, and other balance issues when they belatedly extend the progression for a few thousand hours more.

A brief statement of the group's solutions to those problems

An alternative is *cyclical progression*. Players progress but eventually finds themselves (due to a variety of potential reset mechanisms) coming back to the start of the progression. Cyclical progression is not a new concept, but is underleveraged as a solution. This paper delves into the problems space of linear progression, how cyclical progression can be applied to solve those problems, and the new problem spaces that cyclical progression systems face.

Round Again We Go!

Many service-based games last for years and typically require a content treadmill to keep players fed and happy. Additionally, many of these games borrow systems from RPGs and MMOs that employ Linear

Progression Game System (LPGS), such as leveling up. In order to extend the service, developers commonly add more content to the end of these linear progressions. However, this method can often break down over time due to costs, power creep, and/or economic issues. What's worse is that all of this effort and content is only experienced for a brief moment by players before they progress past it. There must be a better way.

Cyclical Progression Game Systems (CPGS) use loops to keep experiences fresh and perpetual. We believe that using CPGS can lead to more sustainable development and play in both RPGs and games that borrow from them. It also provides benefits to other areas like long term player acquisition, engagement, re-activation, and community building/support.

Questions That This Report Tackles

- What are cyclical progression?
- Why, when, and how to cyclify a linear progression?
- What are the pitfalls with cyclical progressions?
- What areas of cyclical progression design have untapped potential?

What Are Cyclical Progression Game Systems?

Cyclical Progression Game Systems are loops which players experience that--when they end--leave players in a state to start the loop anew. In this fashion, the progression can be played perpetually and without end.

These progressions share many commonalities with core loops in game. For the purposes of this document, core loops happen at a micro scale, while cyclical progression loops happen at a macro scale. When loops are applied at the macro scale, games have the ability to stay interesting and novel for a longer time, especially when paired with linear progressions. This document will explore this phenomena more.

Examples of Core Loops:

- **Shooter**: Find enemy ➞ Shoot a weapon ➞ Find ammo ➞ Reload➞ Find enemy ↩
- **RPG**: Win a battle ➞ gain xp ➞ upgrade➞ Win a battle ↩

Examples of Cyclical Progressions:

- **Roguelike**: Begin a run ➞ Experience random elements ➞ Gain mastery ➞ Die ➞ Begin a run ↩
- **Football**: Season Starts ➞ Play multiple games over a set period of time ➞ Achieve Season Rank ➞ Draft new players ➞ Season Starts ↩
- **Idle game**: Interact ➞ Get upgrades ➞ Numbers go up➞ Idle play ➞ Reset world to get permanent bonuses ➞ Interact ↩

Classifying Cyclical Progressions

Combining common progression types with the unique qualities of cyclical progressions builds a foundation for a genre-agnostic taxonomy. This provides a valuable reference for the remainder of the document.

Summary of Progression Types

This 2014 report on progression systems is a useful reference on how progression systems work; it delves a bit into cyclical progressions, mostly focusing on linear arcs and loops.

Listed below are many common ways that developers use progression systems.

- **Accomplishment:** Completion of pursuits, items acquisition, collections & achievements.
- **Discovery:** Discovering world areas/possibility spaces, experiencing the narrative, etc.
- **Powers/Character:** Addition of, or increase in, in-game character power, skills, stats, capabilities,
- **Cosmetic:** Non-functional cosmetic options that provide opportunities to express identity.
- **Complexity:** Game mechanics unlocked over time to onboard and/or incent players.
- **Difficulty:** Increase of challenge over time.
- **Mastery:** Player mastery of skills and knowledge (of game at large, or of specific play-styles, etc.).
- **Influence:** Increase of respect/fame in the community.
- **Ranking:** Increase in standing against other players.
- **Guild:** From entry to rising to a position of leadership within a Guide or the community at large.
- **Community:** Change in social norms over time, reflected in Guilds and the community at large.
- **Identity:** Accruing personal and social value over time that keeps players in the game.

Unique Cyclical Progression Qualities

All cyclical progressions share qualities with linear progressions. However, they also have qualities unique to loops. How all of these qualities interact directly influence how players experience the cyclical progression (e.g., how much of a sense of loss players feel from the reset).

Slope

How does the shape of the progression trend? While linear progressions feature a number of shapes (e.g., sawtooth, exponential), they primarily have an upward slope. Cyclical progressions can have more variety.

- **Upward Slope**: The classic progression that trends ever upward.
- **Downward Slope**: This progression trends ever downward.
- **Sinusoidal**: This progression at first trends upward and then downward (or vice versa). Seasonal temperature (in real life) is a good example of this type of progression.

Reset Trigger

What causes the cyclical progression to reset?

- **Player**: Player action resets the progression.
- **Gametime**: A gametime duration resets the progression.
- **Realtime**: A calendar time/date resets the progression.

Reset Behavior

How does the cycle reset? The magnitude of the reset informs the reset behavior.

- **Hard Reset**: An authored reset that is obvious to players.
- **Soft Reset**: An authored reset layered into a larger system of play and/or over a longer period of time.
- **Dynamic Reset**: There is no authored reset. Instead, it occurs as interaction(s) between the players and mechanics.

Number of Cycles

How many times can the progression effectively cycle?

- **Finite:** A fixed number of cycles. Given that, these cycles are often content-rich (though still provide development savings over purely linear progressions).
- **Evergreen:** A theoretically infinite number of cycles (though in practice this is limited by development scope). Given that, these cycles need to focus on sustainability, etc. This is often accomplished through systemic and procedural design in place of bespoke content.

Cyclical Progression Examples

Prior Art	Progression Type	Slope	Reset Trigger	Reset Type	Number of Cycles
Seasons, as found in real life	NA	Sinusoidal	Realtime	Soft	NA
Seasons/Events, as found in Live Ops Seasons/Season Passes	Multiple	Multiple	Realtime	Hard	Evergreen
Leagues/Seasons, as found in Sports and eSports	Ranking	Upward	Realtime	Hard	Evergreen
Daily/Weekly Challenges/Bounties, as found in Live Ops	Accomplishment	Upward	Realtime	Hard	Evergreen
Daily/Weekly Mutators, often paired with Challenges/Bounties	Difficulty, Discovery	NA	Realtime	Hard	Evergreen
Permadeath, as found in Roguelikes	Multiple	Upward	Player	Hard	Evergreen
Match-based Power, as found in Battle Arenas, Battle Royales	Character	Upward	Gametime	Hard	Evergreen
Ascension/Remort /Prestige, as found in Idle Games, MUDs	Character, Complexity	Upward	Player	Hard	Finite
Loot Chase, as found in RPGs	Discovery, Accomplishment	Upward	Player	Dynamic	Evergreen
Consumables/Item Decay, as found in survival games	Discovery, Accomplishment	Downward	Gametime	Soft	Evergreen
Item Source Decay, as found in games that feature crafting	Discovery, Accomplishment	Downward, Sinusoidal	Gametime	Soft	Evergreen
New Game Plus, as found in many linear/narrative	Multiple	Upward	Gametime	Hard	Finite

games					
Trading/Speculation Markets	Multiple	Multiple	Multiple	Dynamic	Evergreen
META (most effective tactics available), as found in many games	Discovery, Mastery	Multiple	Multiple	Dynamic, Hard	Evergreen

Linear Problems and Cyclical Solutions

Linear progressions in RPGs and MMOs have a number of well-documented issues. While Cyclical Progressions aren't a panacea, they should be one of the first tools a developer considers when trying to solve the issues cataloged below.

Content Exhaustion

If players finish playing all the content in a game, they are done with that game. Often players become attached to a single type of content within the game and call it quits when that content is complete.

Cyclical Solution: Looping Content

Allow players to play through a game's content over and over, starting new each time. Players can re-immerse themselves, so long as the content has enough changes to make the new playthrough feel novel. This can be achieved through numerous approaches, including the selection of a new character class, gaining prestige for a subsequent playthrough, or tackling new goals that require mastery of the content previously played.

Tedium

The game tomorrow feels too similar to the game today. Mastery is achieved and tedium sets in.

Cyclical Solution: Randomized Starting Parameters

Introduce randomized starting game parameters for each cycle. There should be enough so that each cycle creates a new, emergent set of challenges at the intersections of those randomized parameters. A good example of this is the randomized set-up variables of a map, a market, or available powers in a board game.

Obsolete Content

Content (such as areas, activities, enemies, gear, etc.) gets orphaned once players grow past it. This could be due to power creep making old gear into junk, or just the natural progression of the game offering different challenges requiring new solutions. The content is no longer relevant, especially if there's a more rewarding alternative, so players don't return to it.

Cyclical Solution: Remixing

Remix content in each cycle, so that only a portion of the whole appears at once. This keeps old content

in circulation, and it will get more use and stay fresher as the context around it shifts each cycle.

Completion Loss

Adding new content can create anger over “moving the goalposts.” This could take the form of additional collectibles in a set, a raised level cap, or the return of the final boss. Players expect that when they complete a thing, it stays complete. Completion is a motivation and reward for many, and invalidating completion feels bad and akin to losing progress.

Cyclical Solution: Gearing

Imagine a cyclical progression as a gear that can mesh with other progressions’ gears. One form of gearing that many games use is similar to rack and pinion gears: players create and reset progress on a cyclical progression (pinion gear) to gain progress on a longer-term linear progression (rack). So instead of adding more runway at the end of a completed linear progression, use rack and pinion gearing to create new parallel linear paths to progress on and explore as the player cycles through the game. Add new gears to breathe new life into the old cycles without destroying the sense of completion.

Player Cohort Inequality

Due to different amounts of time spent playing, players can end up in a “chasm of doom” between each other, such that they can’t interact in a meaningful or desirable way. This is common in MMO games where the bulk of players are in the early levels or at endgame content, and no one can be found in-between. This disconnects new and veteran players and hurts player concurrency, making multiplayer games feel more empty than they are.

Cyclical Solution: Realtime Resets

Have all players cycle through the same content during the same time period. Reset power levels such that new and elder players can play together if they choose. Create events to re-engage players and get them excited for what the new cycle has to offer. This way all the players are playing the same general content at the same time, and in the same place.

Inventory Hoarding

Players want to hold on to inventory forever, regardless of whether it’s consumable or durable. Players might think it could come in handy later, have social capital, or could be part of a set they can complete later. This can create anxiety for players who constantly run up against inventory limits.

Cyclical Solution: Consistent Resets

Having players start over has many benefits, and an empty inventory is one of them. Players can begin acquiring once more, finding new and interesting combinations of goods each time. Also, knowing that the inventory will reset makes it more likely that players use consumable items more frequently. Use it or lose it!

Game Is Daunting

Games seem to be in a perpetual competition to be as vast as possible. While this can result in some truly

incredible worlds, it can also be extremely daunting for a busy adult to fit into their life. Players now have to ask themselves, “Can I commit to 100 hours of gameplay?” Vast game can almost feel like a chore when the road is laid out that far in front of the player. Despair can set in when players progress far enough into the game to learn how far they really have to go. Information overload can also have this effect.

Cyclical Solution: Achievable Cycles

Keep cycles short enough to feel achievable. Players can see the horizon and feel like they can get there with the time they have. Yes, they know there will be another new cycle waiting for them afterwards that will introduce new mechanics and content, but they can decide to keep going or stop at that point, so the experience feels less stressful as a whole.

Streaming Walkthrough

Games are often watched on stream now, and it is an important part of a game’s marketing. Linear games can often be watched like a movie, and because of that, makes playing those games less valuable. Furthermore, once a streamer finishes a linear game, they will stop streaming it, and the organic marketing stream ends.

Cyclical Solution: Remixing & Emergence

By having remixed and/or random elements collide in each cycle, any emerging gameplay can feel unique to players. This means that a streamer’s playthrough will be interesting, and a player’s personal playthrough will also be interesting in different ways. As a bonus, sweet emergent moments have a greater share-worthiness, making them awesome for streaming.

Expensive to Produce

Games are expensive to make. Linear progression content (e.g., narratives, aesthetics, assets) is often used only once per player experience, requiring developers to commit massive resources to generating each hour of gameplay.

Cyclical Solution: Remixing & Procedural Generation

Make assets such that they can be remixed by developers or by procedural generation systems. This results in a variety of emergent combinations, adding novelty, but also reusing content over and over in new and interesting ways. It stretches the value of every dollar spent on quality assets.

Pitfalls Of Cyclical Progression

Cyclical progressions have a lot of benefits, but they also have pitfalls. This section highlights the key pitfalls and how developers can avoid or mitigate them.

Loss of Progress

The greatest pitfall of cyclical progression is a loss of progress. After all, progress is one of the great motivators in gaming and in life, and a cyclical progression by its very nature will take that away. All

players who place a high degree of value on the progress that they make within a given cycle may never want to experience the loss of that progress. There are two types of loss to consider:

Loss of Game Progress

This can include accomplishment and discovery progressions. For example, players can lose accomplishment progression in a roguelike each time they die. This is the more commonly identified type of progression loss and is potentially easier for players to accept. Here are some basic methods for addressing that loss:

- **Gearing:** Gearing can offset a feeling of loss. Rack and pinion gearing is a good example of this: the quicker progress on the cyclical progression (pinion gear) earns progress on the slower linear progression (rack). This relationship transfers the player's attention away from the short-term loss towards the long-term gain. Again, roguelikes are an excellent example of this.
- **Memorializing Play**: People love mementos. Even though a vacation ends, for example, people feel good about it because they've taken photos and/or recorded video of the vacation to live on in their memories. Take a moment when resetting progress to ritualize it and treat it with reverence.

Loss of Player Progress

This can include mastery and identity progressions. For example, players can lose mastery if they no longer have access to a certain tactic/strategy. They can lose identity progression if they no longer have access to certain cosmetics that allow them to express themselves. This type of loss is potentially more challenging for players to accept because it directly impacts their sense of competence and autonomy.

- **Immutable Foundation**. Create a foundation of "must-have" gameplay that is present in every cycle (e.g., Classic Cards in a CCG; Tank, DPS, Healer Classes in a MMO). This provides a reliable bedrock for mastery and identity with a consistent set of UX and player choices.
- **Pacing & Variety**. Introduce new gameplay at an appropriate pace. If gameplay varies too much or too quickly, it puts more burden on players to learn it. Additionally, allow players to transfer some of their mastery from old gameplay over to new gameplay (e.g., flying → gliding).
- **The Vault**. If beloved content goes away, make sure it comes back. Set expectations that it will return and celebrate when it does. Similarly, if mastered gameplay elements go away, ensure they reappear in future cycles so that players feel that their investment in mastery was worthwhile.

Player Expectations

Most traditional RPGs have featured linear progressions. With the rise of games as a service, however, cyclical progressions are becoming more commonplace. Yet players still have an unpleasant reactions to cyclical progressions due to misaligned expectations.

The primary expectations that must be set (and reinforced) are that the progression is indeed cyclical and how its mechanics work (i.e. what gets reset). This is especially important if the progression in question is one that has traditionally been linear, such as Power Progression. Moreover, expectation management is what makes it difficult to introduce cyclical progressions post-launch.

Additionally, players will experience dissonance in a cyclical progression if the theme/metaphor for the progression does not contextualize the reset. Having a strong context for the reset makes it easier for players to accept that reset as part of the game. The best examples of games that do this well feature verisimilitude (i.e., cycles and resets that are woven directly into the plot, lore, and world design).

Endless Off-Ramps from Infinite Highways

The end of each cyclical progression is a potential off-ramp for players to churn, and in a successful game, players will face this moment many times. It is a critical moment to manage well.

- If cycle times are too short, then the progression might feel unsatisfying, or players may be forced to replay too much content too often. If they face the option to part ways with the game too often and they don't have enough to look forward… it's game over.
- If cycle times are too long, players may not notice that there even is a cyclical progression, and thus the game will lose all the benefits of a cyclical progression. Moreover, if the game is satisfying as a single cycle, then it isn't taking advantage of the benefits of cyclical progressions.
- If a cyclical progression has no plateaus/markers of progression, it can lead to lack of motivation to continue. Players need visible milestone targets to make each cycle meaningful to them.

Here are a few ways to stay in the sweet spot, where players are feeling novelty in each new cycle, and are curious to see what unfolds:

- **Loop Chaining**: Have multiple loops in the progression. Whenever a player finishes a loop, they are part-way through a new loop and may feel compelled to continue on. When using these to bridge a reset, there is never a clear "off-ramp" for players.
- **Remixing & Procedural Generation**: This is the ideal way to keep gameplay novel, enticing player curiosity about what the next cycle holds in store for them. Ultimately, players stop playing games when they get bored. Remixing & Procedural Generation help to keep the game fresher for longer.

Never Ending Narrative?

Cyclical progressions can theoretically last forever. However, many (if not most) popular stories have a well-defined beginning, middle, and end. Given that, how do we create narratives that never end? And how can we do it in a sustainable way? This is a topic with no easy answers that requires its own separate paper. Many games forgo sustainability and build cyclical narratives around classic storytelling techniques, budget be damned. However, there are numerous other games that feature clever cyclical narratives that may point a way forward:

- **Roguelikes:** These relatively narrative-light games embrace cyclical progressions as part of their game loop. Advancement requires acquiring new goods (i.e., items, abilities, powers, cards) to use in future cycles. Most progressions reset with a character's death or victory condition.
    - The moment-to-moment story resets (in tandem with procedurally generated levels).
    - In certain rogue-likes, there's a plot that advances with each reset.
- **"Groundhog Day" games**: These narrative-heavy games integrate cyclical progressions into their theme and plot. The result is a plot that cycles over and over again until players reach the end of the meta-plot. Players can also acquire new goods to help with future cycles.
    - Other player choices made in one cycle have an impact on future cycles.
    - The games encourage players to make different choices each time through the plot.

Fear of Missing Out (FOMO)

As noted before, cyclical progressions reset based on a number of triggers, including gametime and realtime. In particular, realtime cyclical progressions force player resets, and this can cause FOMO in certain situations:

- The cycles are too short for the amount of content in them, making players feel that they can't play

at their own pace or that they need to play all the time.
- The cycles feature exclusive content to incentivize investment. However, this exclusive content often has high player value but isn't guaranteed to all players. Given that, some players won't even start a cycle late because they won't be able to get the pinnacle rewards at the end of the cycle.
- In a similar fashion to classic RPG Levels, cycles can create division in the player base. Players who start late or can't keep up with their cohort can get left behind.

While FOMO can compel players in small doses, it can demotivate players and cause them to resent the game in large, long-term doses. A player should never say, "I felt so much better after I quit the game!" Here are some basic ways to avoid creating FOMO:

- **Right-size**. Adjust cycle length to be appropriate to the amount of content in it.
- **Catch-up**. Allow players to catch up in their cyclical progression should they start or fall behind.
- **Judicious Exclusivity**. Allow all players to earn high value rewards, especially if they're perceived as part of the value proposition of the Game or Season Pass price point. If there are exclusive rewards:
    - Make them temporarily exclusive. Players can earn it through another means later.
    - Make them meaningful to a narrower audience. This can often take the form of a small cosmetic status symbol, either in place of or as a variant on the formerly exclusive reward.

Untapped Cyclical Progression Tactics

This section shines a light on new and existing tactics that have untapped potential in cyclical progressions. Each tactic features both a high-level description and examples of how it could be deployed.

Loop Chaining ⛓

Addresses: Loss of Game Progress, Endless Off-Ramps

As noted in the previous section, cyclical progressions can overlap so that when one ends, players are in the middle of another cycle that motivates them to continue into the new cycle. (Loot chase behavior is a good example.) Alternately, the end of one cycle can set the stage for the next one, giving players something to look forward to and making the end of a cycle exciting. Consider the following methods when creating loops:

- Loops of different cycle lengths (e.g., polyrhythmic) so that they don't end at the same time.
- Loops with narrative beats that seed the following cycle. For example:
    - Tease a new storyline two thirds of the way through the current loop.
    - Introduce next season's boss as a character in this season.
    - Recruit a sidekick who becomes the player character in the future.
- Goals for the current loop that feed into future cycles. For example, discovering the Macguffin required to achieve a larger goal down the road.

Procedural Narratives 📺

Addresses: Player Expectations, Loss of Game Progress, Endless Off-Ramps, Never Ending Narrative

Narrative in a cyclical progression can take inspiration from procedural television (e.g., sitcoms, detective stories). Each new cycle is a self-contained story arc with low persistence from one arc to the next. Narratives then become more "slice of life" or "villain of the week," an approach that has sustained untold

popular television programs. A procedural approach also has the benefit of allowing players to participate in a cycle without needing all the context of the cycles before it. Here are some additional considerations:

- This procedural approach provides room to focus on character development and smaller stories within the world over the course of each cycle.
    - This can be paired with larger plot-heavy narrative released on an annual (or so) cadence. The serialized narrative fills the gaps between the larger releases.
- If there is a main plot, it could act instead as a geared progression that advances in parallel with the cyclical progression. It can move slowly over the course of years,
- Enemies, NPCs, and the world can respond to player actions from the previous cycle.
    - Enemies in particular can become recurring characters that remember and call out previous interactions with them.
- If there isn't an ending to the plot, don't set up player expectations for one. That will just frustrate players and make them disengage with the game over time.

Bevel Gearing ⊥

Addresses: Player Expectations, Loss of Game Progress, Loss of Player Progress

As noted before, most games that employ gearing use a cyclical progression to drive a linear one (i.e., rack and pinion gears). However, a cyclical progression can also drive an orthogonal progression, much like bevel gears. A simple version of this is how a weekly Challenge cycle also drives a Mutator cycle for those same Challenges. When considering bevel gearing:

- Build a possibility space large enough to explore with orthogonal vectors.
- At the end of each cyclical progression, modify the progressed mechanics in a way that it provides a fresh experience and/or asks new questions for the player to answer.
    - E.g., After upgrading a red Fireball to its maximum power, players can begin researching a new blue Fireball spell that has a different damage pattern that gives players a wider range of tactics to use. After upgrading blue Fireball to it maximum power, players can begin researching a new version… and so on.
- Consider revisiting popular variants in future cyclical progressions.

Recycling ♲

Addresses: Inventory Hoarding, Cohort Inequality

RPGs tend to promote collecting a sizable number of durable goods (i.e., items, abilities, powers, cards). Power creep can incentivize players to divest themselves of goods, but are there other ways of doing that? Consider the following approaches to promoting divestment:

- Moments at the end of each cyclical progression that prompts players to clean their long-term storage. Encourage players to only keep the things that spark joy!
- Seasonal utility (e.g., Fire-resistant boots are valuable in the Season of Flame, but not in the Season of Ice).
- Donation to other players or for a cause.
    - Use community events (e.g., collect *n* number of items) to prompt donations.
    - Donations to other players can increase reciprocity and social bonds with those players.

Cyclical Goods ⏰

Addresses: Inventory Hoarding, Expensive to Produce

Consumables and Item Decay are a very common method for addressing hoarding and creating cyclical progression in item gathering. Using cyclical goods creates a larger game around gathering and using items that circumvents inventory issues, without completely resetting inventory. Here are some example methods:

- A consumable that provides a bonus when used shortly after acquisition.
    - This is similar to item decay, but typically in item decay, the item is fully functional even right before it expires. With this method, the item is best used fresh.
- A durable that's only available under certain cyclical conditions (e.g. at certain competitive ranks and needs to be re-earned when those ranks reset).
- A durable that's only available based on the results of a community election. After the next election, the good potentially changes to something new (again based on the results).

Finite Resource Economies 🔒

Addresses: Loss of Game Progress, Loss of Player Progress

Economies with a finite number of resources lend themselves to cyclical progressions, as they allow players to easily grasp the totality of resources and re-allocate them if needed. Here are some examples to consider:

- Power loadouts with a point system (i.e., each ability costs a number of points to equip).
    - Players can customize their loadout within the constraints of the point system.
    - Each cycle, vary the point cost on powers while maintaining the same number of points overall in order to promote new loadouts.
- A crafting system with a finite number of scarce resources.
    - As this scarce resource runs out, incentivize players to pursue a more available substitution good. Once that is exhausted, the process repeats.
    - Alternately, incentivize players to disassemble/recycle older, previously crafted Chase Items to generate more of the scarce resource to use in crafting new Chase Items.

Cyclical Balance Tweaks 📈

Addresses: Content Exhaustion, Obsolete Content, Tedium

When managing a metagame, developers tweak the gameplay balance each cycle based on how players play. At the end of a cycle, they introduce new goods (i.e., items, abilities, powers, cards) or modify existing ones to incentivize players to try new strategies/tactics or to deter degenerative play. This could happen more dynamically during a cycle, giving players a more active role in balancing the game and creating emergent situations. Here are some examples to consider:

- Abilities that become more powerful when fewer players are using them. The more people use that ability, the weaker it becomes. This can be reset per cycle.
- The highest ranked players get to vote for how to change the balance for the next cycle.
- Players vote and pass "laws" within a current cycle (e.g., to retire a certain card or weapon from the game) that turn into development feature requests for later cycles.

Social Pyramids 🔺

Addresses: Cohort Inequality, Endless Off-Ramps, FOMO

Adding a social dimension to cyclical progressions has great potential. Players can share their rewards and/or knowledge from their current cycle, priming the start of the next cycle for themselves and others. The players they assist benefit from their rewards and/or knowledge; the assisted players can in turn pay it forward to new players. Here are some examples to consider:

- Vanguard players (i.e., the first players to achieve the pursuit) must sherpa the rest of their cohort in order to receive their reward (as well as a hint for the next cycle).
- Vanguard players can share their durable good (i.e., items, abilities, powers, cards) with the rest of their cohort for use in the next cycle, gaining power proportional to how many players use that good.
    - Alternately, Vanguard players could share their loadout or some other seed/starting point.
- Goods have the chance to mutate when shared, spawning new goods into the world (e.g., the red Fireball mutates into a blue Fireball names after the Vanguard who shared it).

Memorializing Play 😭

Mitigates: Player Expectations, Loss of Game Progress, Loss of Player Progress, Never Ending Narrative

Games can look to the process of grieving to find metaphors for ending cycles, as well as the process of remembrance for carrying forward into new cycles. It can also look to the myths and stories built around death to assist with this. However, death is not the only form of loss; loss can take the form of graduations, retirements, molting, metamorphosis, and other transitions to a new stage of life. Even though some games do this well, there's more potential to discover. Here are some considerations:

- Create a cathartic moments for players.
    - Allow players to mourn their loss (e.g., a wake or end-of-the-world party).
    - Allow players to actively destroy their goods (e.g., a ritualistic pyre), perhaps with an unexpected result.
- Make players' loss feel like part of something bigger than themselves (e.g., Guild).
    - An individual loss benefits their Guild with future rewards.
    - Heroes fallen in the service of the Guild are memorialized in a crypt.
- Create mementos for players to remember the past. Instead of a permanent loss, it feels like a warm memory to be treasured. These can include:
    - Screencaps as part of a in-game history or scrapbook.
    - Non-interactive artifacts (e.g., trophies) that exist in a collection.
    - Gameplay artifacts (e.g., gear, weapons) that celebrate the past.
    - In-world artifacts (e.g., statue or plaque) that commemorate events.
    - Real world artifacts (e.g., 3D-printed player character, Shutterfly-style album).
- Allow players to directly re-experience the past.
    - Play flashbacks or historical missions to learn something new.
    - Create a Ghost recording system that allows players to observe the past as it happened.
    - Play as a favorite deceased character from a previous cycle in a limited time Game Event.
- Allow players to interact/benefit with those who have passed into a new stage in life.
    - Visit Ghosts of former Characters/Pets to provide help (e.g., a buff) in the present.
    - Infuse the "Soul" of former Characters/Pets into a current item (e.g., a weapon).
    - Visit a former Character who has retired to become an NPC (e.g., shopkeeper) that loans special goods.

A Fresh Start 

Addresses: Loss of Game Progress, Player Expectations

Building off the idea of Item Decay, an upward sloping progression (e.g., character progression) that contains gameplay benefits could also accrue detriments. A cyclical gameplay progression can wipe away those detriments, providing to players a sense of relief that offsets feelings of loss. A basic example of this is accumulating Curses in a card deck that are removed at the end of a run. Here are some examples to consider:

- Player characters age and die, and their powers decay over time, as with Generation-style games.
    - Any powers, abilities, or items they have mastered must now be passed on to an apprentice.
- Powerful abilities also contain powerful afflictions. Over the course of a progression, characters accrue afflictions over time that can be removed at the end of a cycle.
- Continued collection encumbers player inventory, blocking abilities (e.g., jumping) that were once available. Ending a cycle reduces encumbrance making those abilities available again.

Best Practices

Here are actionable best practices to keep in mind when implementing cyclical progressions.

1. **Respect player investment.** Do not take player-invested time or money for granted and avoid making short-term gains (e.g., leveraging FOMO) at the expense of long-term player sentiment.
2. **Create a strong metaphor for the progression and reset.** Game systems work best when they have a strong context to help players make sense of them, and this is vital for resets in particular. Build a setting and narrative around this metaphor.
3. **Clearly set expectations.** Make sure players understand they are in a cyclical progression and that the progress will reset. Clearly communicate how it will reset.
4. **Use rack and pinion gearing**. Long-term, player-associated progressions often work best as linear progressions. Use cyclical progressions to drive those linear progressions.
5. **Carefully craft any power/character resets.** These potentially impact identity in addition to gameplay. Consider letting the player opt-in. If it is a realtime reset, maintain consistency and metaphor. Give the player high-value rewards for a power reset.
6. **Consider making resets less obvious**. This leans into the natural decay of human attention over time. It can be accomplished with a number of techniques (e.g., loop chaining, sinusoidal progressions).
7. **Give players the ability to catch-up.** This helps keep them motivated during the cyclical progression. Be careful when trying to monetize this, as it can take advantage of FOMO.
8. **Take care with exclusive rewards.** Never make something that's part of the overall value proposition exclusive. Keep any exclusive rewards targeted to specific audiences and scope them accordingly.
9. **Memorialize previous cycles.** Allow players to grieve any losses and create feedback loops that celebrate and reflect the choices that players made.
10. **Employ repetition with variation.** Each cycle should feature a ratio of new, different, and the same content (e.g., ⅓ new, ⅓ different, ⅓ the same as the previous cycle). Invest in an emergent sandbox, remixing, and/or procedural generation to assist with this.
11. **Explore new ideas.** Cyclical progressions have a great deal of untapped potential. Discovering an innovation in this space can make a new game stand out from the pack.

Links / Resources

- Danc's initial topic proposal: https://www.projecthorseshoe.com/2019/09/17/cyclical-progression-systems/
- Raph Koster's paper "Do Levels Suck?": https://www.raphkoster.com/2005/12/16/do-levels-suck/
    - and part 2: https://www.raphkoster.com/2005/12/22/do-levels-suck-part-ii/
- Danc's blog post on progression loops: http://www.lostgarden.com/2012/04/loops-and-arcs.html
- PH 2014 workgroup paper on Progression Systems: https://www.projecthorseshoe.com/reports/featured/ph14r3.htm