Bandits!

Overview and Postmortem
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Overview

Bandits! is a multiplayer custom map for Blizzard Entertainment's *WarCraft III: The Frozen Throne*, developed between September 2007 and February 2008. More information is available at www.dangant.com/bandits/

This document discusses the process of developing *Bandits!,* and presents some of the lessons I took away from the experience.

What is *Bandits*?

Fictionally, *Bandits!* casts players as outlaw warlords, competing for a monopoly on crime in a shattered kingdom. Players must contend not only with one another, but with the vile Sheriff, who seeks to retain his grip over the realm.

Conceptually, *Bandits!* is a real-time strategy experience offering wild and wooly free-for-all play in a vibrant world where daring and underhanded acts of banditry are generously rewarded.

Why *Bandits*?

Bandits! was my attempt at creating a real-time strategy experience designed from the ground up to create competitive free-for-all play.

From a more personal perspective, it was an opportunity for me to experiment with a variety of mechanics and approaches, with the goal of learning through success and failure.

Tackling the issues

In tailoring a real-time strategy game for free-for-all play, I hoped to resolve several phenomena that plague strategy games that are adapted, rather than designed, for free-for-all play. For the purposes of this discussion, "free-for-all" describes games with exactly one winner and three or more players.

Issue 1: Mutual destruction

A common scenario arises in many strategy games with a combat system: one player expends resources to attack another player and deprive them of a similar amount of

resources. In a two player game, whether the attacker is better off can be measured by whether the resources denied the opponent justify the resources spent by the attacker.

In a free-for-all game, however, both attacker and defender are worse off. Their resource levels have declined relative to the resource levels of all other players. The result is that players are discouraged from attacking. This tends leads to long games with little player interaction.

Bandits! would attempt to change that equation. By rewarding players with resources for successfully injuring each other, *Bandits!* would encourage players to attack, rather than to defend.

Issue 2: Hoarding

Hoarding is another common – and very related -- phenomenon in free-for-all games. Players often can decide whether to spend their resources on attacking other players, or on investing in themselves. In a two-player game, this decision comes down to an evaluation of which choice leaves the player better off compared to the opponent. In a free-for-all game, each player seeks to be better off than all other players, and so the decision is more convoluted. Players want to avoid the situation in which they devote resources to injuring a player, but other players invest in themselves. The dominant choice is to invest, and the result is, again, long games with minimal player interaction.

Bandits! would prevent hoarding stalemates by limiting what kinds of investments players could make, and by capping the maximum value of those investments.

Issue 3: Arbitrary politics

The outcomes of many free-for-all games are shaped by politics. When players have the opportunity to attack a player they may have a choice as to whom they injure; these choices may be deliberate or arbitrary. Over the course of a game, a player may have been disproportionately attacked or left alone. If the decisions to injure or ignore that player were made arbitrarily or based on incomplete information, that player's status – as a victim or a benefactor – may not be the product of the player's decisions. A player may be winning or losing through no responsibility of his or her own.

If the outcome of games of *Bandits!* were determined by the imbalances created by arbitrary decisions, then the outcome of each game would be meaningless. To prevent this situation, players who have been unnecessarily targeted should still remain viable,

and players who have arbitrarily been left alone should not reap too great an advantage. Players should not be ruined or crowned prematurely.

Fleshing out the concept

The design of *Bandits!* was motivated by these three dynamic goals – that attacking should be rewarded, that returns on investments should be limited, and that all players should remain viable as long as possible.

The three principles also suggested the game's fictional premise. Players are outlaws who earn their keep through petty theft. Always on the run, they lack the stability to build themselves a future. They are most dangerous when desperate, and most vulnerable when prolific.

What went right?

Flattening the learning curve

Early playtesting of *Bandits!* revealed that new players were having a very difficult time learning how to play. The game provided instructions in several redundant ways, but players weren't absorbing much of what they were told.

One of the game's core mechanics was a territorial occupation system. Players could gain control of territories by constructing buildings inside them. Controlling more territories increased the maximum size of your army. Players were bombarded with messages telling them how to occupy territories and why they needed to do so.

Although the rules governing territories were simple, new players had a great deal of trouble grasping them. It became apparent that players didn't absorb information that was delivered to them unexpectedly or before they needed it. They understood best when the information was delivered precisely when they went looking for it.

In *WC3*, when players needed to increase the size of their army, they would construct a building. The first successful technique for conveying the territory rules was to place the information in the menu used to construct buildings. Players who wanted to expand their military capacity would try to build the requisite building, and instead would encounter the instructions for capturing territories. Playtests of this method showed a major increase in the number of new players who understand the territory system.

Following the success of this exercise, other in-game instructions were moved to contextually relevant places. Players came to learn the rules of *Bandits!* faster, and the volume of instructional text was reduced.

Creating engaging NPC foes

For players to commit a variety of bandit-like deeds, there needed to be victims against whom they could commit crimes. In *Bandits!*, the role of the victim is played by the NPC Citadels and their outlying encampments.

A few axioms guided the design of the Citadels:

- For players to feel as though they were getting away with bandit-like acts, they must not only commit a transgression against the NPCs, but they must also face the threat of retribution for their actions.

- Interaction with NPCs must offer competitive advantages. Those advantages must be clearly communicated to players.

- If NPC interactions offer a competitive advantage, but don't offer a worthwhile experience, then players are being incentivized to do something uninteresting (And likewise, they're being discouraged from doing what they'd rather do).

- There is a fundamental limitation on the NPC experience: every minute a player spent interacting with NPCs is a minute not spent interacting with other players, and vice versa.

Extended discussions with playtesters produced the current system, meeting these requirements. Players almost inevitably must liberate territories from NPCs, and doing so provokes the Citadels to attack them. Players receive a variety of resources from razing the NPC encampments, some of which they can obtain in no other way. Most encounters with the encampments occur early in the game when players may not take interest in interacting with other players, and can be delayed until such a situation arises. There are a limited number of encampments to raid, and effectively diminishing returns for each one raided.

This system thrusts players into the roles of bandits early in the game, giving them their first tastes of reward and retribution, and kicking off a schedule of rewards that

continues throughout the game.

A second major component of the NPC pillaging experience is the invasions that players can make on the Citadels themselves. The outlying encampments are weak; slaying them offers minor, though important rewards. By contrast, the Citadels are large, actively defended, offering huge riches to those who can raze them.

The same four principles apply; players know that the game rewards attacking NPCs and can make a conscious decision whether to attack the Citadels. There exists a twist, however; to create the feeling of "getting away with something," and to encourage players to not spend too much time just fighting NPCs, there is an effective timer on Citadel raids: when a player attacks a Citadel, the Sheriff will travel from the center of the map to defend the Citadel. If the player is not prepared for his arrival, it means the death of all of the player's attacking units; a more prepared player can, at great cost, slay the Sheriff and claim a large reward.

Players react very positively to this experience; the first time it happens, they often learn the hard way what the Sheriff's arrival entails. This motivates them to attempt to kill the Sheriff, which many first-time players do. More experienced players take pleasure at the thrill of attempting to escape the Citadel before the Sheriff arrives, or laying elaborate traps to isolate and kill the Sheriff. On a whole, raiding Citadels proved to be a compelling self-contained minigame.

Conveying the fiction

The format of *Bandits!* doesn't leave much room for storytelling; most players of a quick multiplayer game won't want to sit through cutscenes or take time to read text of any substantial length.

Counter-Strike serves as a good example of a game that conveys a fictional background in a limited environment. The fiction of the game is also its goal: "[we/they] are terrorists trying to [plant a bomb/kill a person/retain hostages] and [they/we] are counter-terrorists who must stop them". The content and mechanics of the game support that fiction, portraying a world in which terrorist and counter-terrorist operations might take place.

Bandits! adopted a similar approach: it portrays a generic but evocative world ("we are bandits who steal from villagers and each other"), and omits unnecessary details. That fiction is supported by the rules of the game: if I attack a building, I get to loot it; if I

kill a villager, the Sheriff will come. Each type of unit does fictionally evocative things: the Barbarian kidnaps peasants and sets buildings on fire. The Sheriff imprisons units. The Pirate yells "Yarr!" and sends his minions into a frenzy.

Perhaps the biggest success of this approach is the way players react to the Sheriff. The Sheriff takes on two incarnations: as a disembodied voice reacting to players' interactions with NPCs, and as a powerful unit who shows up when players attack one of the NPC Citadels. The Sheriff isn't an integral part of the gameplay; his role as the game's antagonist is mostly for flavor, and his avatar in the game is something players encounter strictly by choice. He has no backstory, and the only verbally communicated information about him is that he is a Sheriff whose name is Ailus.

Nevertheless, he elicits strong reactions from players. New players often feel compelled to tell other players of their dealings with the Sheriff. When many players first interact with the Sheriff's avatar (most often by fighting in a Citadel and losing all their attackers to an arriving Sheriff), they become resolved to kill him.

Players intuitively understand what the Sheriff is even when they misconstrue what he is. Some new players refer to him as the "King", but the misunderstanding doesn't alter their understanding of the narrative they have created; that the player committed a crime and now the person in charge is angry at them.

All in all, the approach of using mechanics and a minimum of text succeeded, by creating fiction to support mechanics and mechanics to support fiction.

Experimentation

One of the benefits of developing *Bandits!* as a personal project with a self-imposed timeline and requirements was the opportunity it presented to experiment with gameplay mechanics that might fall flat on their face. Many ideas that went into Bandits! did just that; others were successful; others still were mixed successes.

One idea I hoped to integrate into Bandits!, tangential to its primary goals, was to allow players to wage war remotely. Consider two-player *Tetris Attack*, in which players solve puzzles independently of one another. Although the systems in which the players are operating are mostly removed from each other, each player can harm the other via actions they take in their own system.

In a game with four geographically separated players, I hoped that such systems of

proxy gameplay would allow players to exert power over multiple players simultaneously. Many mechanics to create proxy warfare were tested; the vast majority were failures.

The Mastermind hero, by contrast, was a mostly successful attempt at creating proxy gameplay. Players hire the Mastermind in lieu of one of the other heroes. The price they pay is that their hero is nigh-useless in combat. The power they receive is the ability to control the Citadels and remotely grief opponents.

The Mastermind is a favorite hero of a number of experienced playtesters, and appeals (somewhat intentionally) to players who want to express some sort of intellectual superiority over their opponents; although the Mastermind isn't particularly difficult to use, the idea of working behind the scenes to control the flow of the game makes players *feel* smarter.

A lot of time went into developing the Mastermind, disproportionate to other units, and disproportionate to its role in the overall gameplay of *Bandits!*. Nevertheless, it gives players a compelling new experience, which made the effort worthwhile.

What went wrong?

Trying to make two games at once

As well as the NPC experience turned out, it is a distraction from the core gameplay of *Bandits!*. A lot of new players spend their first few games just attacking NPCs; one of the most surreal moments in playtesting *Bandits!* was watching a group of players spend the entire game by themselves, raiding Citadels, each one quitting once they had razed the Sheriff's fortress. One of these players went so far as to accuse a player who dared attack him of "ruining the game".

Earlier, I acknowledged the zero-sum nature of balancing the time players spend interacting with NPCs and with each other. What I didn't realize until late in development is that the ideal situation involves much less NPC interaction than currently occurs.

From a process standpoint, a lot of time was devoted to the NPC experience that could have been better spent solving issues with the core gameplay.

Although the NPCs can produce great moments in gameplay, those moments are

mostly unrelated to the contest between players. A free-for-all game with four players should be able to provide enough interesting challenges without vaguely relevant minigames.

Not offering players a sense of progress

Many players comment that Bandits! takes too long. As a guideline, I specified from the outset that a game of Bandits! should take about 30-45 minutes, based on the typical length of a game of the popular *WC3* custom map *Defense of the Ancients* match. In practice, a game of *Bandits!* tends to last about 25-55 minutes depending on relative player experience.

In focusing on the quantifiable length of the game, I missed the real issue: players aren't experiencing anything new as the game progresses. A snapshot of *Bandits!* at the fifteen minute mark is qualitatively the same as a snapshot at the forty-five minute mark. Certainly players would have more or less territory, resources, or soldiers, but they weren't facing a different set of challenges or working with a different set of tools.

One of the techniques used to limit players' ability to invest resources was to allow access to all the game's units quickly and inexpensively. Many strategy games offer more advanced tools to players over the course of the game, often requiring that players expend resources for the privilege. One product of such a system is that the game fundamentally changes over time as players are forced to work with and against new sets of tools.

The result of shifting toolsets that players experience different games at different slices of time; waging war in *Civilization* is much different when using tanks and battleships rather than spearmen and triremes. Often, these changes in gameplay force the game to an inevitable conclusion; the game of chess will resolve one way or another when the board is empty enough for pawns to be promoted; a war in *Civilization* can be more rapidly won by nuclear weapons than by tanks than by cavalry than by warriors. Players can be reassured that, even if they can't force a win now, they will have the means to do so later; or, that if they're in a hopeless situation without realizing it, that a stronger opponent will eventually be able to convincingly finish them off. By not substantially changing the rules of the game over time, *Bandits!* doesn't guarantee players that such progress is inevitable.

The difficulty of experiencing meaningful progress in *Bandits!* is also symptomatic of the dominance of negative feedback loops in *Bandits!*. The original design of *Bandits!*

called for players to gain advantages in accumulated increments over time. However, for it to be feasible to win via incremental gains, there must be a way for players to leverage the advantages they gain. *Bandits!* doesn't provide many. Advantages in gold can only be leveraged by spamming attackers. Advantages in hero experience and equipment don't greatly outweigh the advantages afforded to a defender.

By comparison, there are many systems that punish players who pull ahead. Large territories are much harder to defend. Armies can be retrained quickly and inexpensively. Citadels prefer attacking players with lots of territory and past aggressive behavior. And, naturally, players will oppose someone who is winning.

The result of having so much negative feedback is that incremental gains lose meaning, leading to gameplay that's short on dramatic tension.

These flaws aren't intrinsic to the basic gameplay of Bandits!, and it's possible that they could be reparable with additional development time.

A more stratified technology tree could be implemented with advancements made based on in-game achievements; such a system would allow players to turn their accomplishments into tangible long-term advantages, without discouraging them from attacking. Such a system was implemented and tested in later versions of *Bandits!*, in which upgrades to players' units could be achieved by razing enemy buildings; in essence, allowing a players to level up their entire armies via successful banditry.

Beyond that, some existing units are candidates for turning into higher-end units capable of ending games more quickly; the Raider and Vandal come to mind as immediate candidates, being just short of a power level that enables them to rapidly destroy players' bases. Access to them could also be granted as a reward for achievements, such as controlling specific territories or a certain amount of territory. In general, existing game content could be repurposed to give players an evolving toolkit and immediate incentives to accomplish minor goals.

In short, there are accessible avenues for instilling dramatic tension and creating a game that evolves from beginning to end; that these experiential omissions weren't recognized and acted upon soon enough to repair them before the game's release was a failing.

Not understanding the target audience

Players often indicate that *Bandits!* simply isn't what they're looking for in a *WC3* custom map. Although the reasons for this sentiment differ, most who express this opinion cite their desire for a more casual experience than *Bandits!* provides.

WC3 demands that players be able to manage dozens of units and an economy. To play it effectively demands mastery of the user interface and the ability to mentally juggle many geographically distributed priorities. By contrast, most popular custom maps reduce the scope of a player's control to a single unit and limit their short-term focus to a single screen's worth.

With regards to macromanagement, *Bandits!* is much more similar to *WC3* than it is to other custom maps. Many playtesters preferred the more relaxed macromanagement demands of other custom maps.

The inescapable conclusion is this: people who are logged in to *WC3* and looking to play a custom map are probably looking for an experience that contrasts with *WC3*. By providing them with an experience that is more similar to *WC3* than the competition, *Bandits!* targets a narrow audience.

Additionally, many playtesters cited social play as one of their motivations for playing custom maps. Players seek the fellowship that one derives from playing with, or in the same space as, other players. Most popular custom maps support eight or more players; many of these maps revolve around avatars that personify players in a way that an army of faceless units doesn't. The market expresses a clear desire by players for communal play. By comparison, *Bandits!* delivers a more competitive and solitary experience.

Although satisfying a particular type or number of players wasn't an explicit goal of *Bandits!*, having a better understanding of its target audience could have lead to a more accessible game with broader appeal. A study of popular maps and their common attributes would have done much to inform the concepting of *Bandits!*.

Treating symptoms rather than causes

I wasted a lot of time attempting to balance mechanics that should simply have been removed or replaced.

The most glaring example of this was a victory condition that was introduced early in the development of Bandits!. To limit the duration of games, a rule was implemented that allowed a player to win by accumulating a certain quantity of gold. Players would receive warnings as their opponents approached the limit. The assumption was that only players who were dominating the game could amass so much gold.

That assumption was quickly disproved. A number of playtests saw first-time players winning games by accumulating gold because they couldn't spend it *quickly* enough. Anyone who made a concerted effort to accumulate gold could win before anyone would stop them.

Changes were made to the gold economy. Playtesters found new ridiculous ways to win off gold. Every game for weeks on end would be won by gold accumulation. Raising the gold victory threshold was futile; players would find ways to reach it. Although *Bandits!* was still a competitive game, it had ceased to be about thievery; it was a contest to see who could farm gold the longest unmolested.

After a few months of revisions, a playtester who had been very successful at winning games by gold accumulation told me what I should have already realized: the gold victory condition needed to go.

As with the overdevelopment of the NPCs, I had let my approach to design revisions slip. Instead of seeking to attain and retain the original design goals, I was polishing the game in the form that it had come to take.

Conclusions

Bandits! began with a challenge I've wanted to tackle for several years now; being able to try my hand at it was more rewarding than I could have imagined.

This postmortem only scratches the surface of the experience; dozens of memorable stories from the development of *Bandits!* aren't discussed here. All in all, *Bandits!* was an invaluable learning experience for me, and I'm glad to be able to share its lessons.

For more information on Bandits!, including downloads of the level, the teaser cinematic, screenshots, and further writing on its development, visit dangant.com/bandits/