1. **Why do distinct pixels have the most placements?**

Certain pixels are modified significantly more than others because they hold strategic, symbolic, or contested importance. These pixels are not randomly selected but are focal points of user interactions.

```
[(0, 0, 98807), (359, 564, 69198), (349, 564, 55230)]
```

2. **Why were there so many modifications for each pixel?**

It appears that intense competition among different groups and users led to continuous overwriting. These pixels became hotspots where users repeatedly attempted to establish dominance over a location, leading to high modification counts. But also, we can mention that Pixel 2 and Pixel 3 have similar ranking (order of highest color) placements.

```
Pixel 1: (0, 0) - 98807 placements
1. white: 59282 placements
2. black: 8715 placements
3. orangered: 4209 placements
4. darkmagenta: 2200 placements
5. crimson: 2189 placements
6. turquoise: 2105 placements
7. lightgray: 2104 placements
8. yellowgreen: 1910 placements
9. lightpink: 1692 placements
10. darkslateblue: 1567 placements
11. deeppink: 1427 placements
12. gold: 1172 placements
13. darkcyan: 1093 placements
14. dodgerblue: 977 placements
15. slateblue: 974 placements
16. mediumorchid: 899 placements
17. maroon: 817 placements
18. orange: 780 placements
19. springgreen: 672 placements
20. mediumvioletred: 541 placements
21. mediumslateblue: 510 placements
22. sienna: 480 placements
23. lightslategray: 420 placements
24. teal: 364 placements
25. plum: 310 placements
26. lightsalmon: 302 placements
27. moccasin: 233 placements
28. lightskyblue: 213 placements
29. saddlebrown: 210 placements
```

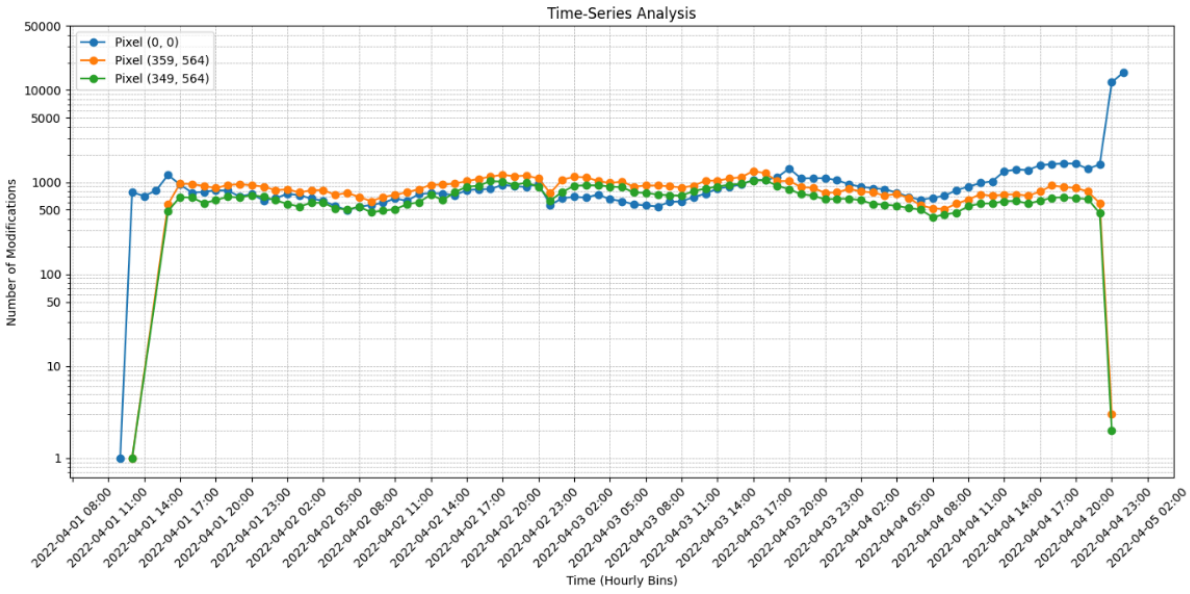
```
Pixel 2: (359, 564) - 69198 placements
1. black: 34726 placements
2. turquoise: 26940 placements
3. orangered: 1656 placements
4. white: 1391 placements
5. dodgerblue: 860 placements
6. crimson: 680 placements
7. gold: 357 placements
8. darkturquoise: 343 placements
9. darkslateblue: 288 placements
10. yellowgreen: 236 placements
11. darkmagenta: 201 placements
12. deeppink: 190 placements
13. lightpink: 179 placements
14. slateblue: 139 placements
15. orange: 127 placements
16. lightgray: 119 placements
17. mediumorchid: 110 placements
18. darkcyan: 84 placements
19. mediumslateblue: 77 placements
20. lightslategray: 70 placements
21. mediumvioletred: 60 placements
22. springgreen: 53 placements
23. sienna: 50 placements
24. maroon: 48 placements
25. darkcyan: 46 placements
26. darkslategray: 43 placements
27. lightskyblue: 38 placements
28. plum: 34 placements
29. teal: 20 placements
```

```
Pixel 3: (349, 564) - 55230 placements
1. black: 27804 placements
2. turquoise: 19404 placements
3. orangered: 2120 placements
4. white: 1512 placements
5. crimson: 846 placements
6. dodgerblue: 461 placements
7. gold: 398 placements
8. yellowgreen: 310 placements
9. darkturquoise: 267 placements
10. lightpink: 246 placements
11. darkmagenta: 238 placements
12. deeppink: 217 placements
13. orange: 207 placements
14. darkslateblue: 188 placements
15. slateblue: 139 placements
16. mediumorchid: 130 placements
17. lightgray: 114 placements
18. darkcyan: 106 placements
19. mediumvioletred: 66 placements
20. mediumslateblue: 60 placements
21. lightslategray: 53 placements
22. maroon: 50 placements
23. darkslategray: 47 placements
24. springgreen: 45 placements
25. sienna: 44 placements
26. darkcyan: 44 placements
27. plum: 36 placements
28. lightskyblue: 28 placements
29. teal: 18 placements
```

3. **Why are there distinct differences and similarities in color ranking between these pixels?**

The time-series graph of modifications provides further insight into how these pixels were modified over time.

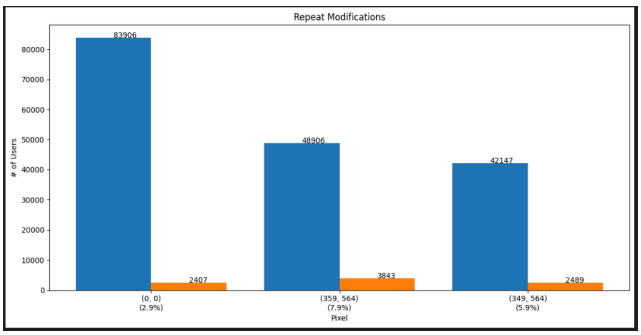
- Pixel (0,0) had an early spike and then maintained a steady rate of modifications.
- Pixels (359,564) and (349,564) had nearly identical modification patterns, suggesting that users followed some similar tendencies on both interest points.

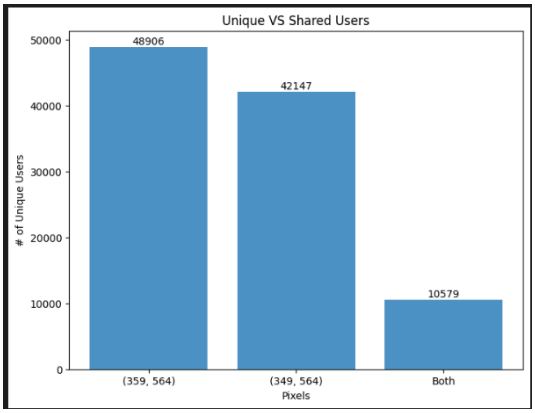


4. **Why do users show similar pattern behavior for Pixels 2 and 3?**

By analyzing user engagement data, we can see patterns in repeat modifications and shared users across different pixels.

- Users who modified a pixel more than twice: Only 3-8% of users contributed repeatedly, meaning most users participated once or twice, while a small dedicated group drove most of the modifications.
- Users who modified both (359,564) and (349,564): More than 10,579 users placed pixels on both locations, proving that these pixels were not independently contested but part of a larger battle.



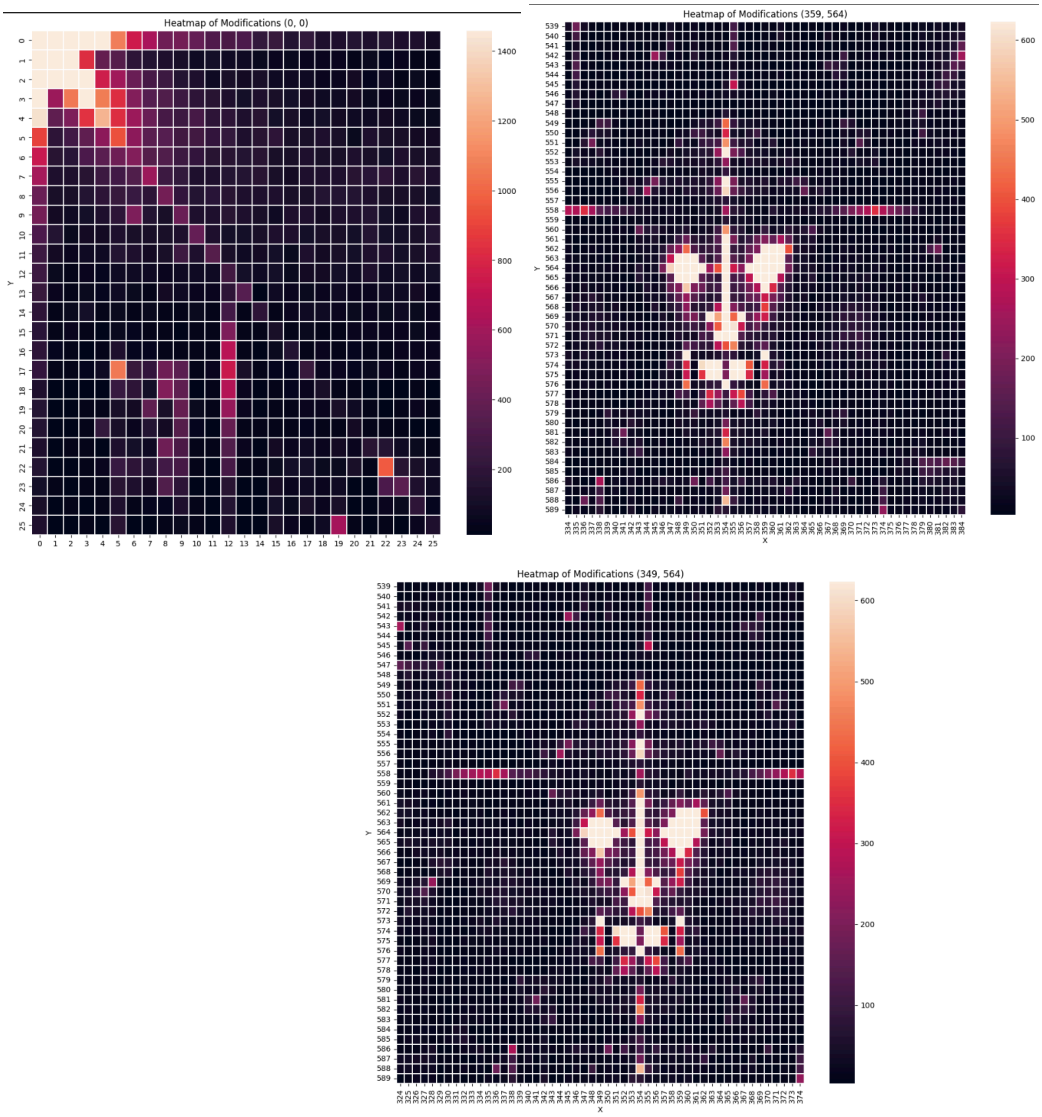


This shows that these pixels weren't modified chaotically by different users but were actively fought over by organized groups. The high overlap of users suggests that factions were trying to control multiple strategic points simultaneously.

5. **Why do groups of users compete for these points?**

Rather than focusing on individual pixels, we analyze wider modification patterns using heatmaps, where visualizations help identify areas with high user engagement and strategic importance across the portion of the canvas.

- Pixel (0,0): stands out due to symbolic significance. Users may target these pixels early on and continuously reinforce them over time.
- Pixels 359,564) and (349,564), show the symmetric patterns in the field modification, especially in the symmetric pattern along the vertical median axis.



Moreover, the heatmap around Pixels (359,564) and (349,564) resembles a "human head-like" shape. This suggests that these locations were part of an organized artistic effort rather than chaotic individual contributions. After a little research, the assumption was proven to be a flag of Straw Hat Pirates from the anime “One Piece”.