



You Play Like a **Girl!** Harassment in **Xbox Live**

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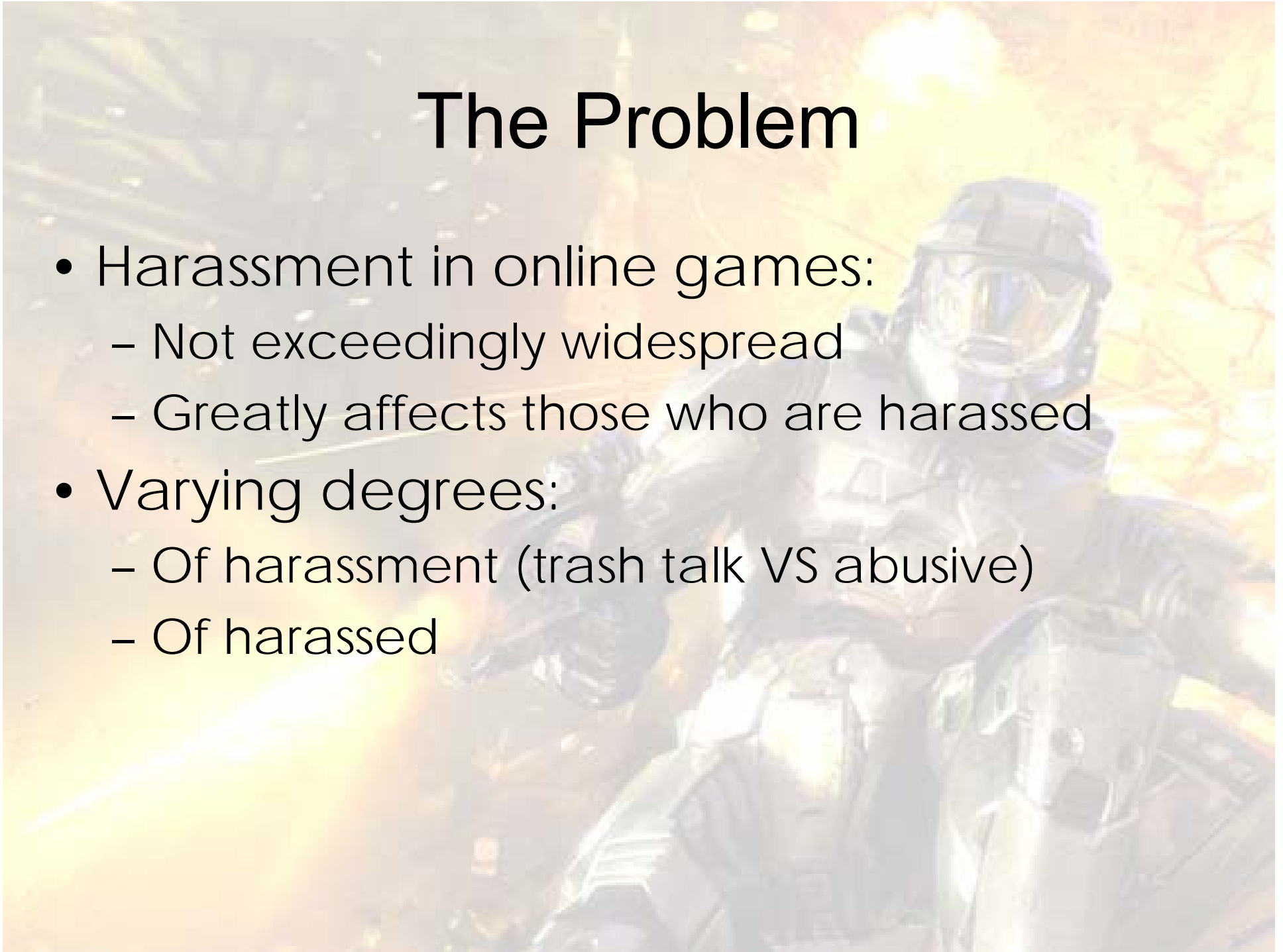
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The Problem

- Harassment in online games:
 - Not exceedingly widespread
 - Greatly affects those who are harassed
- Varying degrees:
 - Of harassment (trash talk VS abusive)
 - Of harassed



The Players



Apathetic:

Don't care who they play with, or about being moved.



Trash Talker:

Is comfortable with trash talk or mild harassing; will adapt.



Non-Trash Talker:

Do not appreciate (but can tolerate) trash talking, and **do not** like harassers.



Harasser:

Harasses players, including other harassers; will not stop if asked.

Determining a Player's Type

- Available attributes:
 - Chat logs
 - Preferred player list
 - Block list
 - Reputation
 - Lifetime opponent count
 - Number of games played



Using Chat Log Data

- Chat logs
 - Identifying “hot” words and phrases
 - Cursing, inflammatory remarks, “yo mama”
 - Correlation between remarks and responses from other players
 - Future research needed for chat analysis
- Analysis yields a number n from 0 to 1 indicating likelihood of player being a harasser or a non-harasser (H or NH)

Using Reputation Data



- Reputation
 - Five star scale
 - Public system bases reputation on ratings given by other players
 - Research system bases reputation on ratings and other players' block lists

Using Block List Data

- Block list's affect on reputation

$$\text{block ratio} = \frac{(\# \text{ of block lists player is on})}{(\# \text{ of games played} * \text{lifetime opponents})}$$

- If player block ratio is >

$$\text{avg block ratio} + \frac{\# \text{ players} > \text{avg block ratio}}{\sigma}$$

- Then a star is removed from reputation

- If player block ratio is <

$$\text{avg block ratio} - \frac{\# \text{ players} < \text{avg block ratio}}{\sigma}$$

- Then a star is added to reputation

Calculating Character Rating

- Determining character rating

$$\frac{\begin{aligned} &\text{chat analysis of a player} \\ &+ \\ &\text{player's reputation / 5} \\ &+ \\ &\left(\frac{\Sigma(\text{character ratings of players} \\ &\quad \text{on preferred player list})}{\text{lifetime opponents}} \right) \end{aligned}}{3}$$

- Generates a number from 0 to 1

< .5 harasser

>= .5 non-harasser

Theory Model

βn Harassers	$\alpha \geq$ harassers per room
$(1 - (c + 1)\beta)n$ Apathetic	Don't care
$c\beta n$ Non Harassers	$\alpha \leq$ harassers per room

Stable Configuration

- Stable configurations:
 - at most α harassers with non harassers or apathetics
 - any number of harassers and apathetic with no non harassers
- Variables:
 - n people total
 - k people per room
 - n/k rooms

Example

- Beginning room breakdown:
- $[(\alpha + \epsilon)] [(1 - (\alpha + \epsilon))]$ where:
 - $\alpha + \epsilon$ is the number of harassers in the room
 - $1 - (\alpha + \epsilon)$ is the number of non harassers per room
- Let's say that there are m such rooms, and then $n/k - m$ rooms that are full of just apathetic people.
- Number of rooms that have more than α harassers is m .
- In order to be able to swap the unhappy people we would need $\beta < 1/(1/\alpha + c)$.

We Can Choose Bounds:

$(1/12) n$ Harassers	$1/10 \geq$ harassers per room
$(3/4) n$ Apathetic	Don't care
$(1/6) n$ Non Harassers	$1/10 \leq$ harassers per room

Everyone is happy!

- In our model, there are always enough apathetic people such that:
 - We can switch an unhappy person with an apathetic person so no one is unhappy
- The time it takes to reach a stable configuration is linear

The Players in the Model

- Simplified to “blue” and “red”

Unhappy when there are $< 90\%$ blue players

Unhappy when there are $< 20\%$ red players



Non-Harasser:

Do not appreciate (but can tolerate) trash talking, and **do not** like harassers.

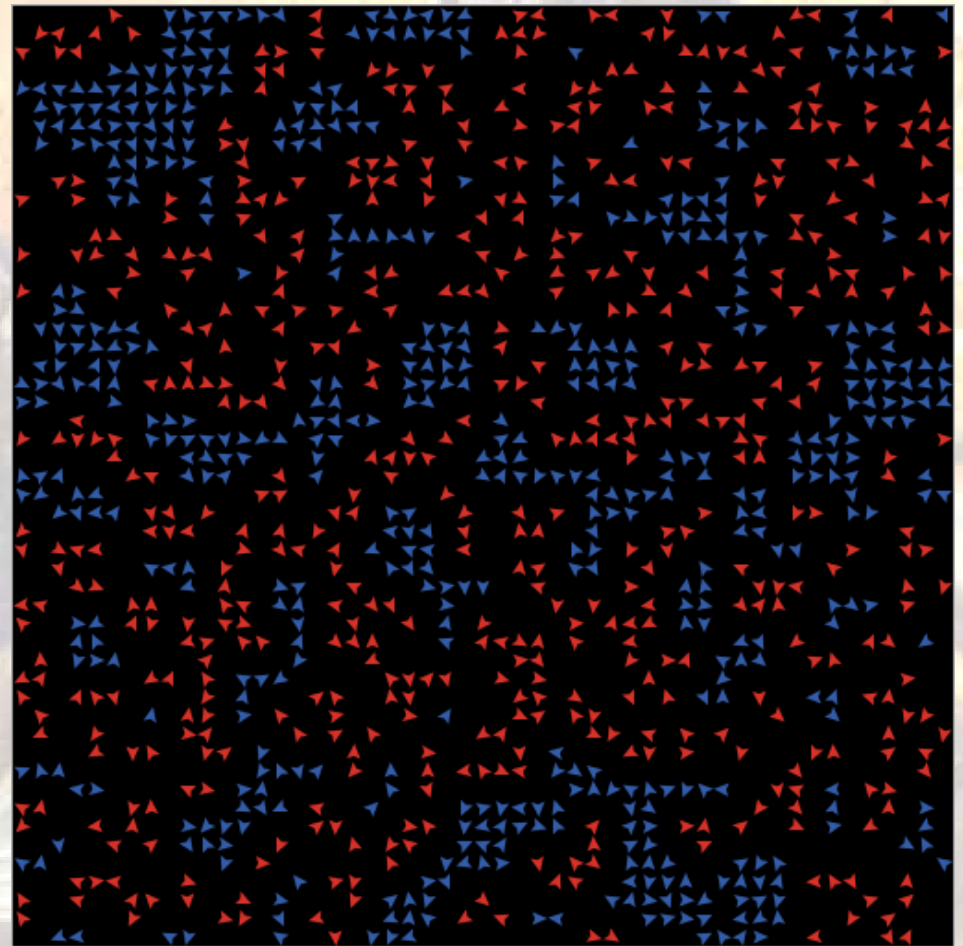


Harasser:

Harasses players, including other harasses; will not stop if asked.

Example Model

- Populate with 25% red and 75% blue (place randomly)
- Unhappy players move; happy players do not
- Players move in a 5 square radius



Future Work

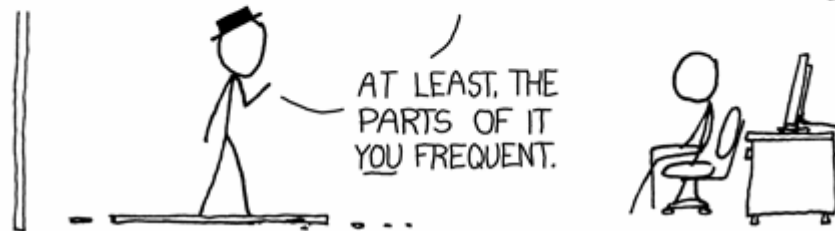
- Room boundaries (break up simulation)
- Incorporate other player types:
 - Apathetic
 - Trash Talker
- Real world simulation
 - Players joining / logging out
- Chat analysis



HI. I'M HERE ABOUT THE GIRL WHO VISITED YOUR IRC CHANNEL LAST NIGHT LOOKING FOR JAVA HELP.



WHEN SOMEONE WITH A FEMININE USERNAME JOINS YOUR COMMUNITY, AND YOU SAY "OMG A WOMAN ON THE INTERNET" AND 'JOKINGLY' ASK FOR NAKED PICS, YOU ARE BEING AN ASSHOLE. YOU ARE NOT BEING IRONIC. YOU ARE NOT CRACKING EVERYBODY UP. YOU ARE THE NUMBER ONE REASON WOMEN ARE SO RARE ON THE INTERNET.



AS SOMEONE WHO LIKES NERDY GIRLS, I DO NOT APPRECIATE THIS. I'M HERE TO BAN YOU FROM THE INTERNET. THE GAL BEHIND ME WITH THE EMP CANNON IS JOANNA - SHE'LL BE ASSIGNED TO YOU FOR THE NEXT YEAR. TRY TO GO ONLINE AND SHE'LL MELT YOUR PC.

