Content Moderation in Presence of Fringe Platforms

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3rd Year Paper Presentation

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Introduction

- **Online** hateful/**unsafe content** considered bad *per se*, and:
  - e.g. Jiménez-Durán (2022) links online hate to **offline violence**
  - e.g. **20%** of terrorists radicalized **exclusively** online

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➡ EU Response: **Digital Services Act**

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Broad question: consequences of **content moderation**?

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Content Moderation on the level of Content Unsafety

…while **allowing** for **Migration*** to a **fringe, unmoderated** platform

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Research Questions:

➡ How **users choice** is determined by **content moderation policies**

➡ How the **level of unsafe content** is affected by **users choice**

➡ What incentives do platforms have to self-regulate?

➡ **Characterize the optimal regulation to minimize unsafe content**

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Twitter, Instagram, Facebook

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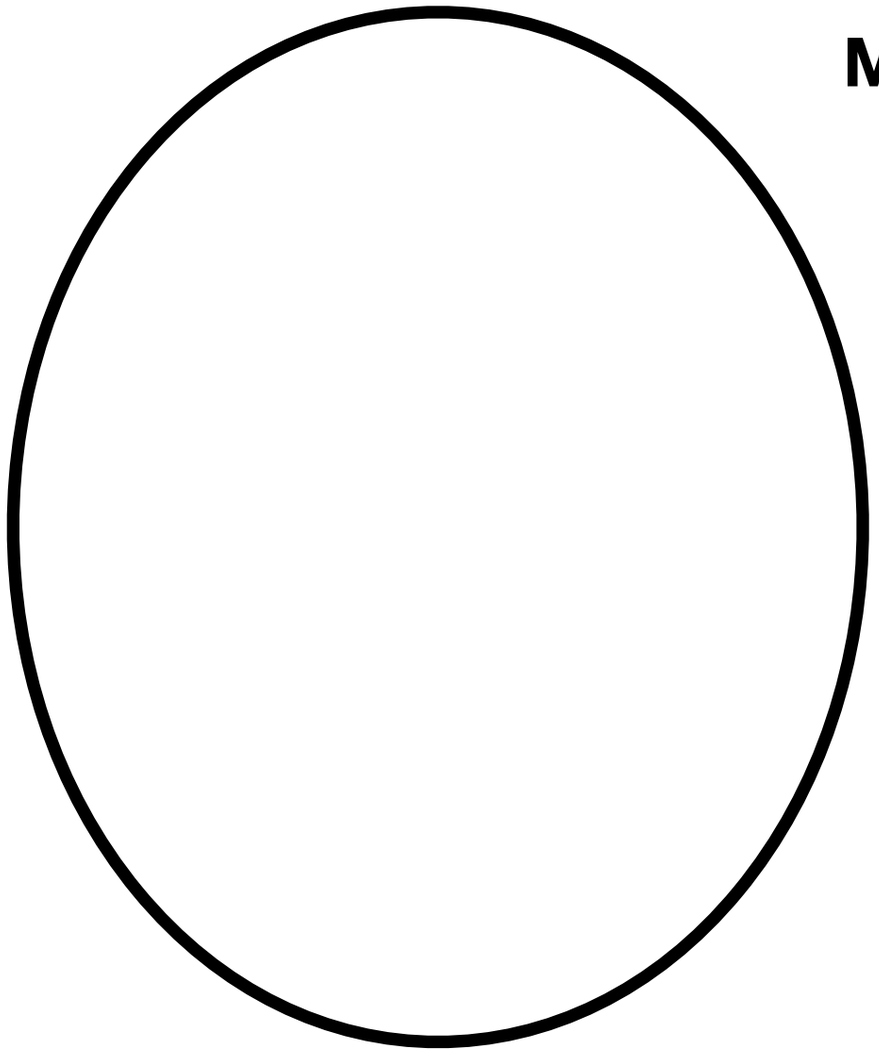
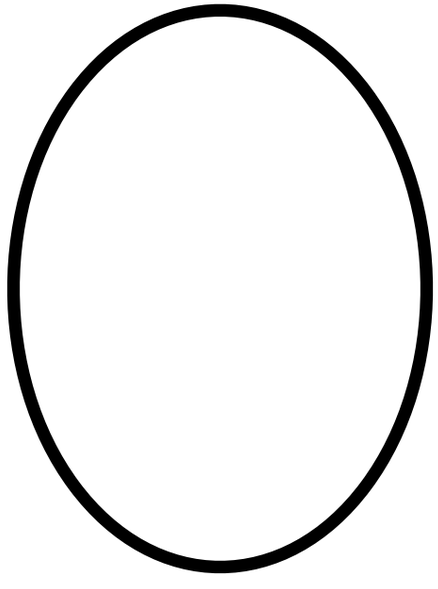
8Chan, Truth, Parler

Main User's Trade-off

Unsafe User



Moderated Platform



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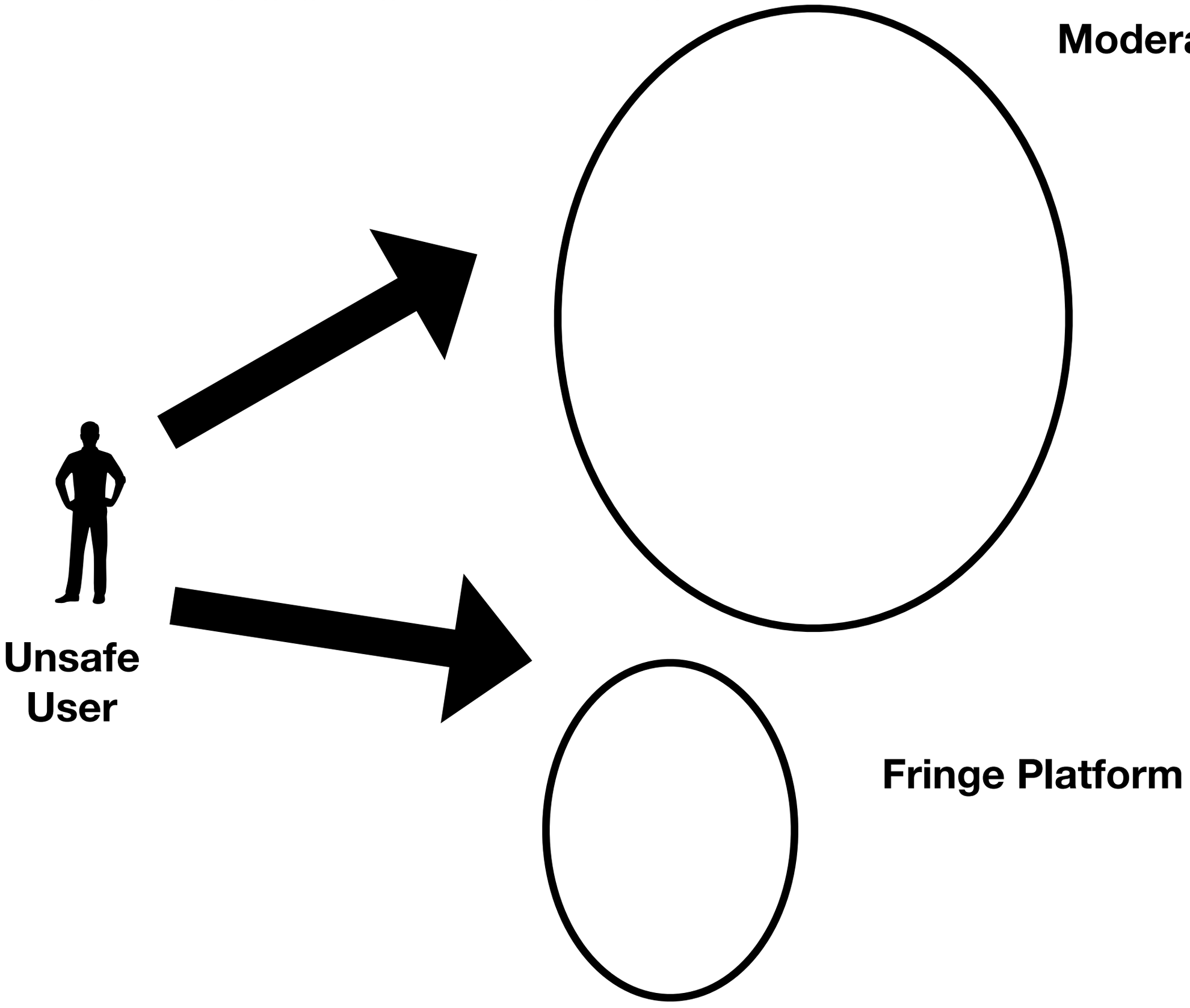

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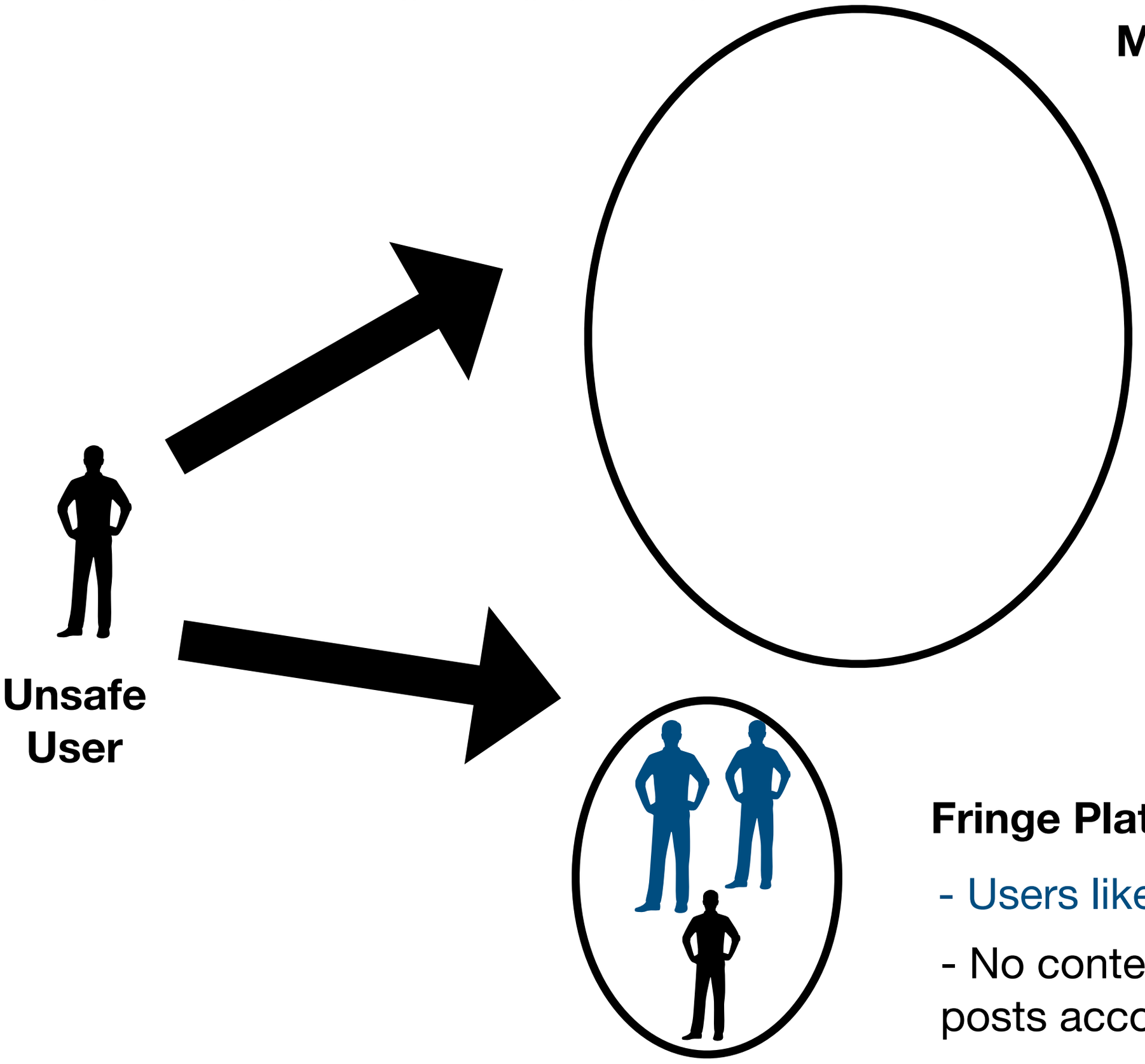

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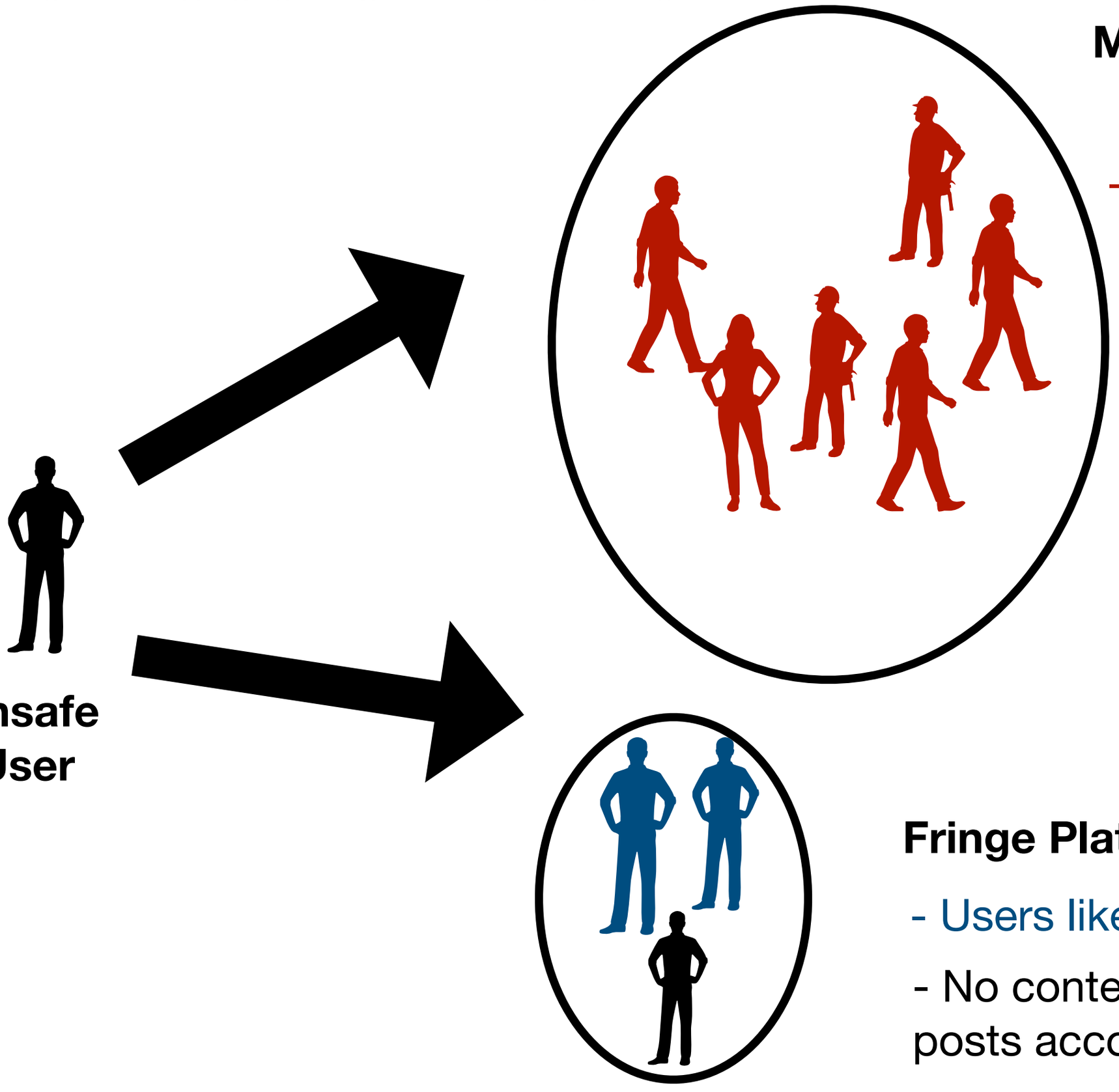

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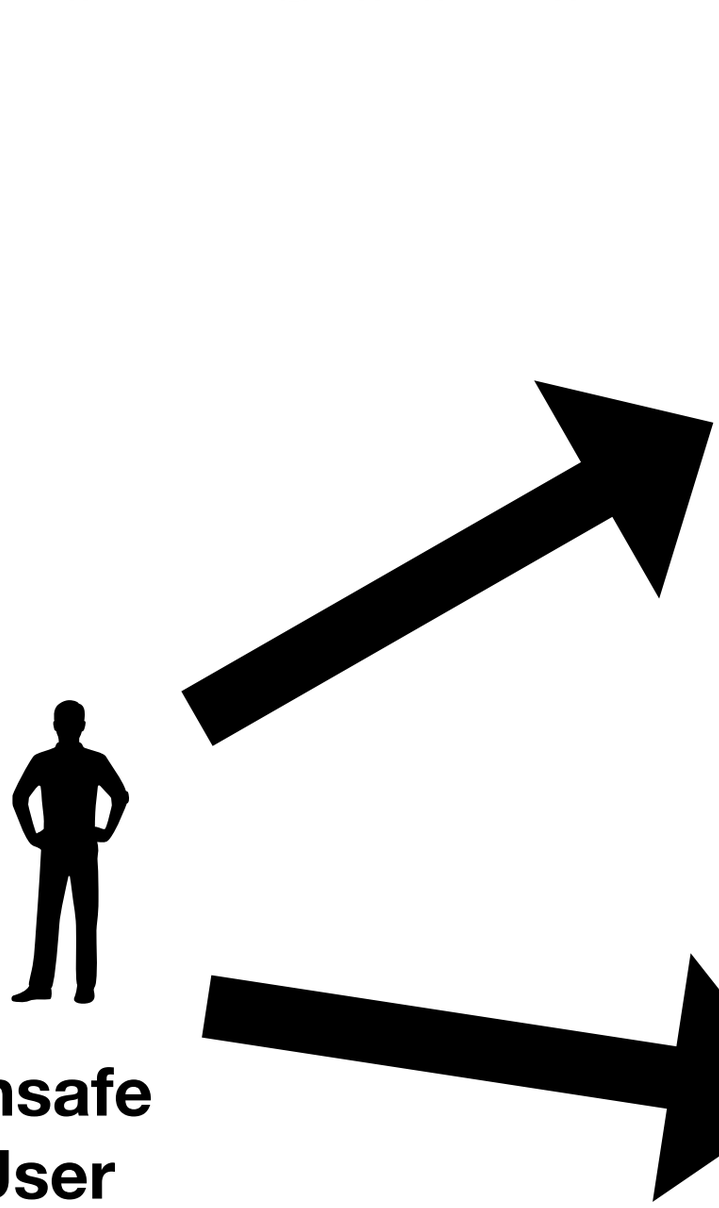

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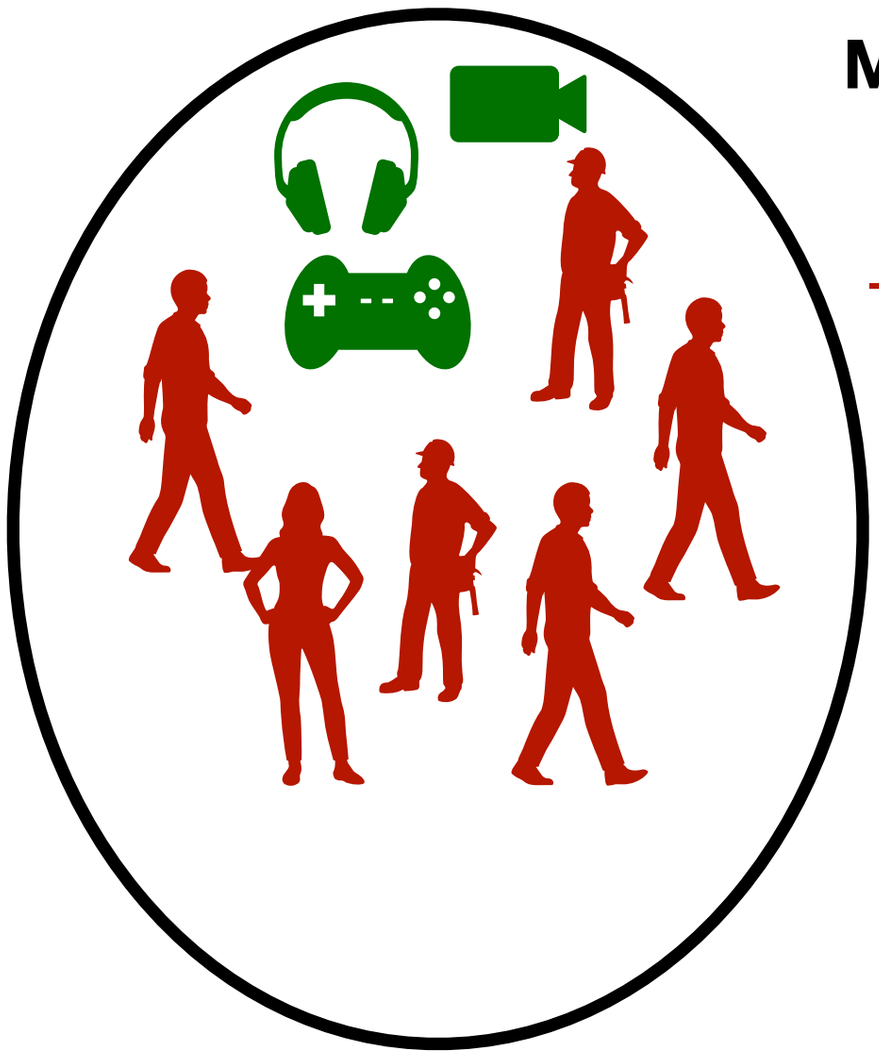

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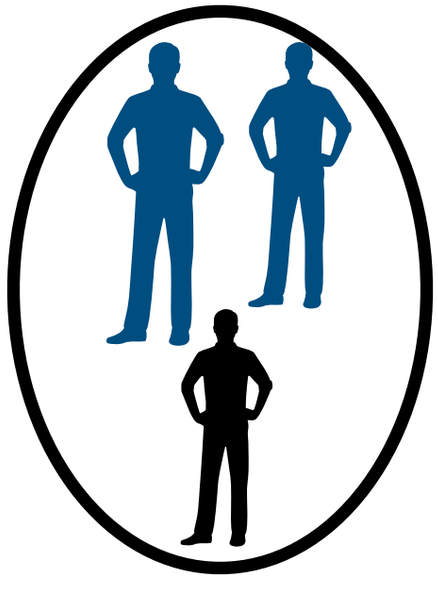

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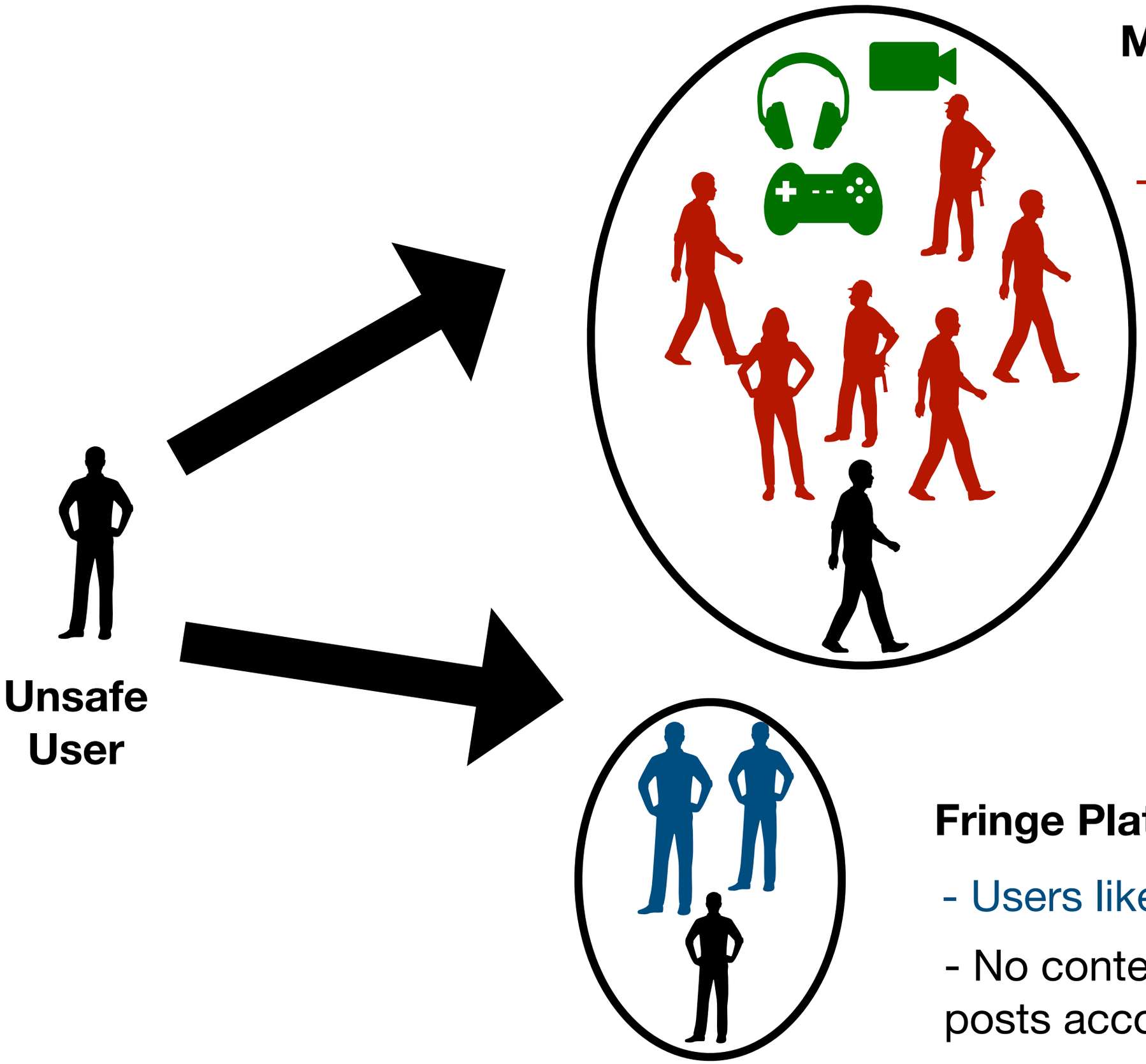

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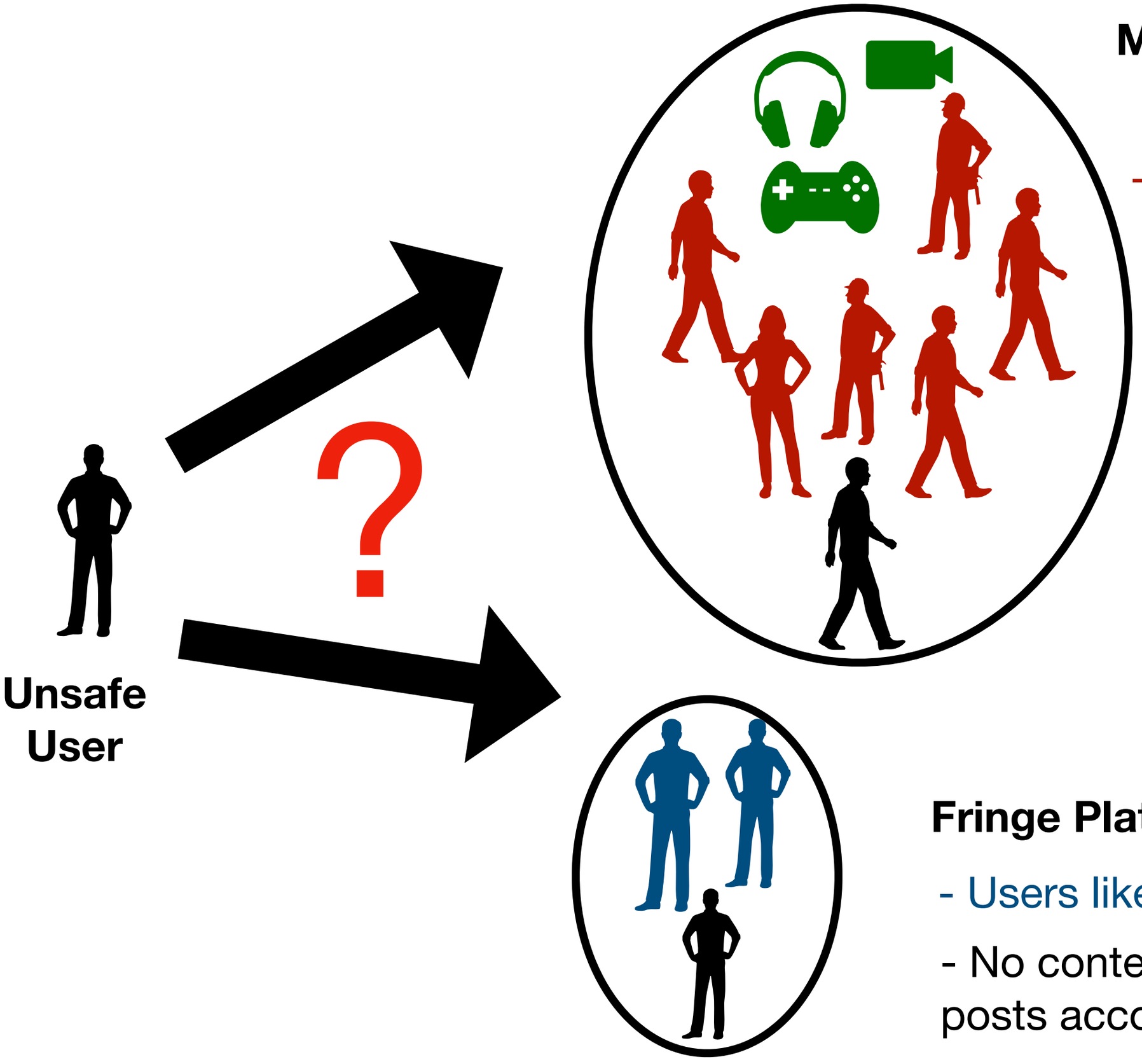

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2. **Policy:**
   - With **large** network effects, **too much self-regulation**
   - **Regulation** only **useful** with **small** network effects (or high competition)

Contribution (and literature)

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- **Content Moderation Literature** (Madio & Quinn, 2024, Liu et al. 2021)
  1. On design: duopoly + endogenous content + homophily in unsafety
  2. On its consequences:
     - First to study (theoretically) migration, and therefore:
     - First to study **leakage**: ↑ Moderation may produce ↑ unsafe content

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- Analyzed potential mechanism behind empirical observations (Rizzi, 2023; Agarwal et al., 2022)
- Other Literature on Social Media (Zhang & Sarvary, 2012; Abreu & Jeon, 2019)

Roadmap

I. Model and Equilibrium

II. Policy

III. Extensions (if time allows)

- Multihoming
- Radicalization & Offline Violence

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- User i in platform j **reads** a random sample of the content, of avg type $\bar{\theta}_j$

$$\bar{\theta}_j = \int_{i \in j} \theta_i^C \mathrm{d}i$$

= average type of content in platform j

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Rk: No outside option!

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$(1 - b\bar{\theta}_1(K))$: Price of ads

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…platform (2) just exists with $K_2 = 1$

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3. Profits and payoffs are realized

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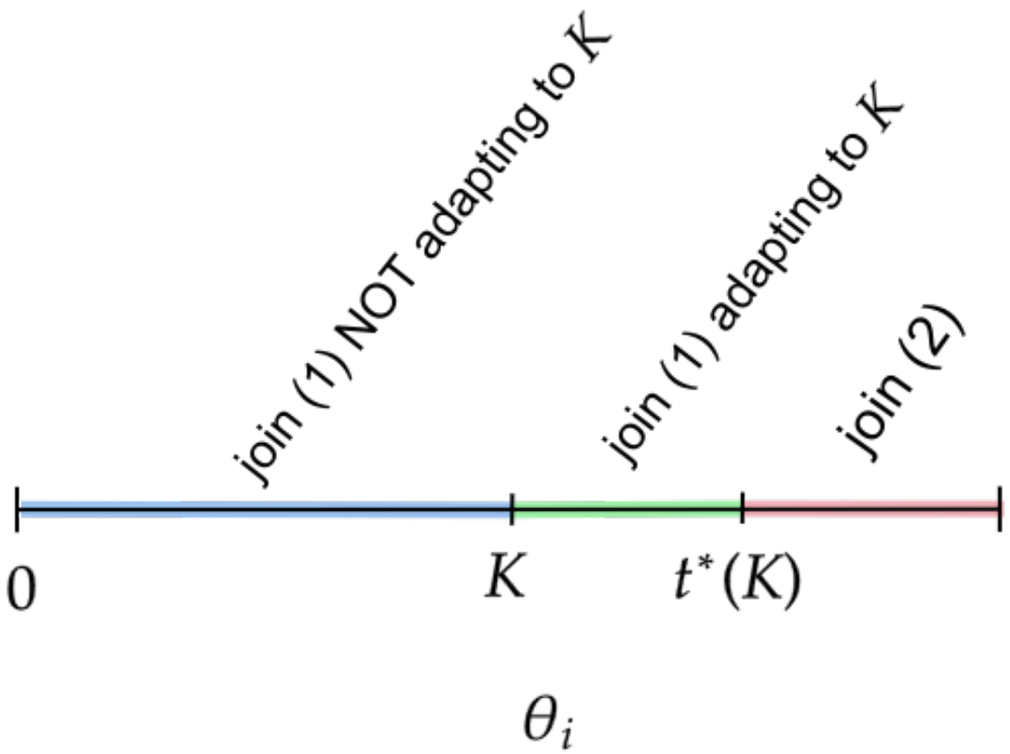
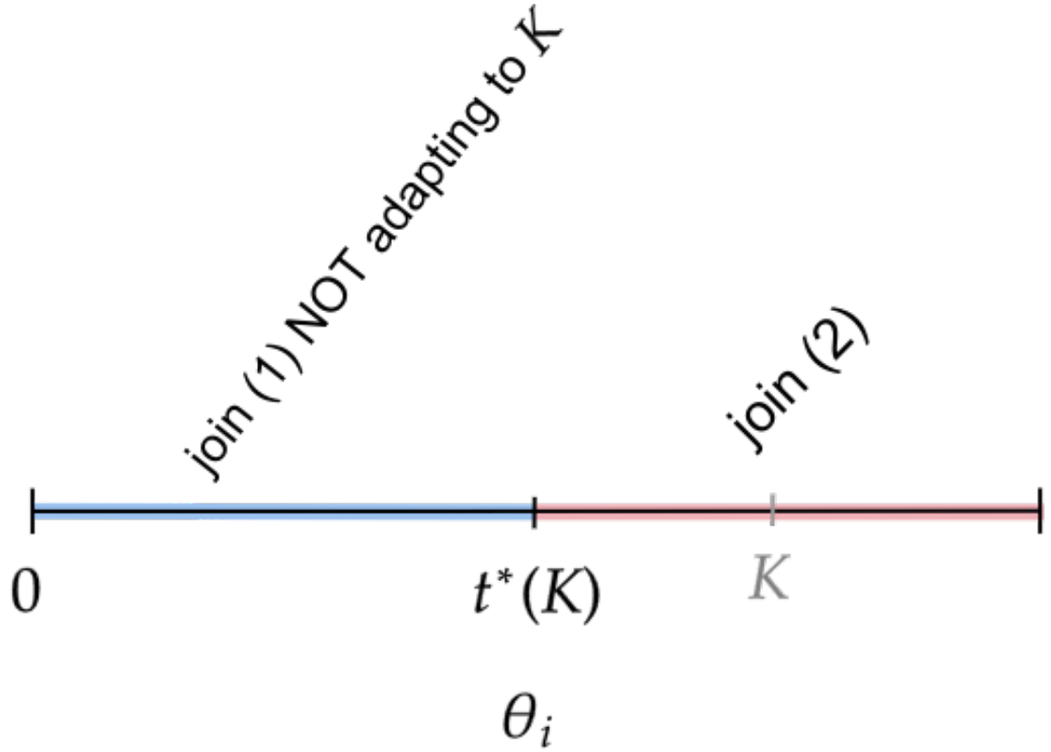
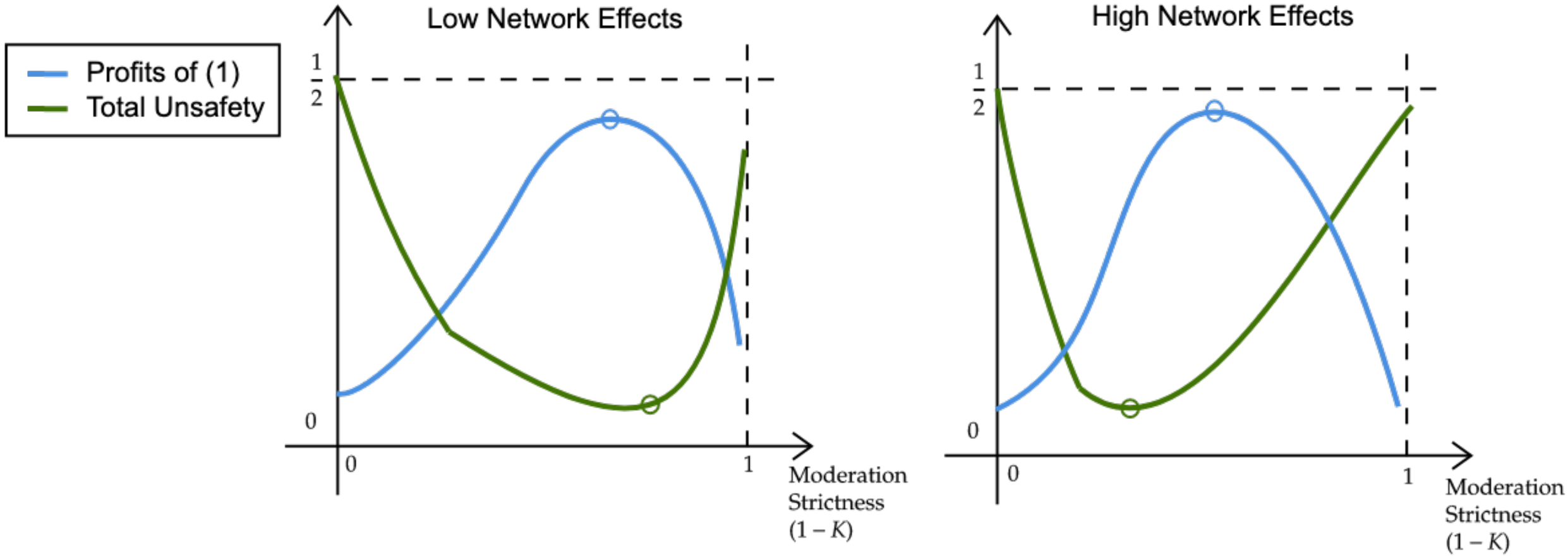
Low K (strict policy)



High K (lenient policy)



Characterization of the Equilibrium



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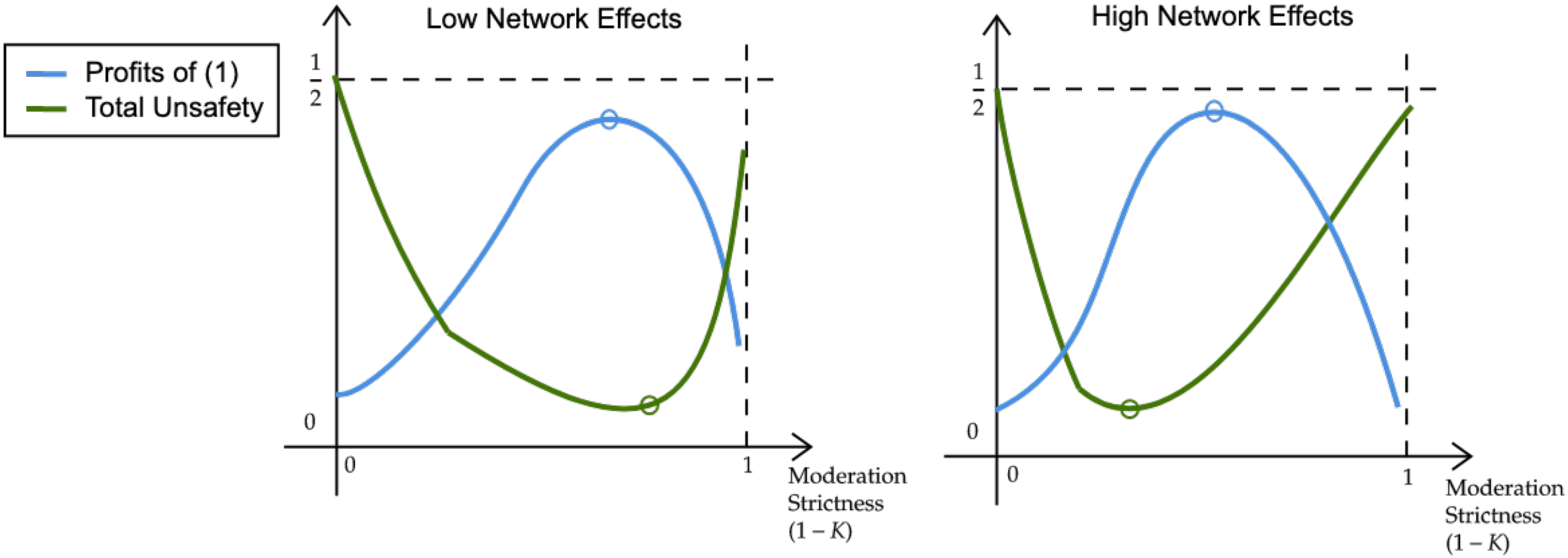

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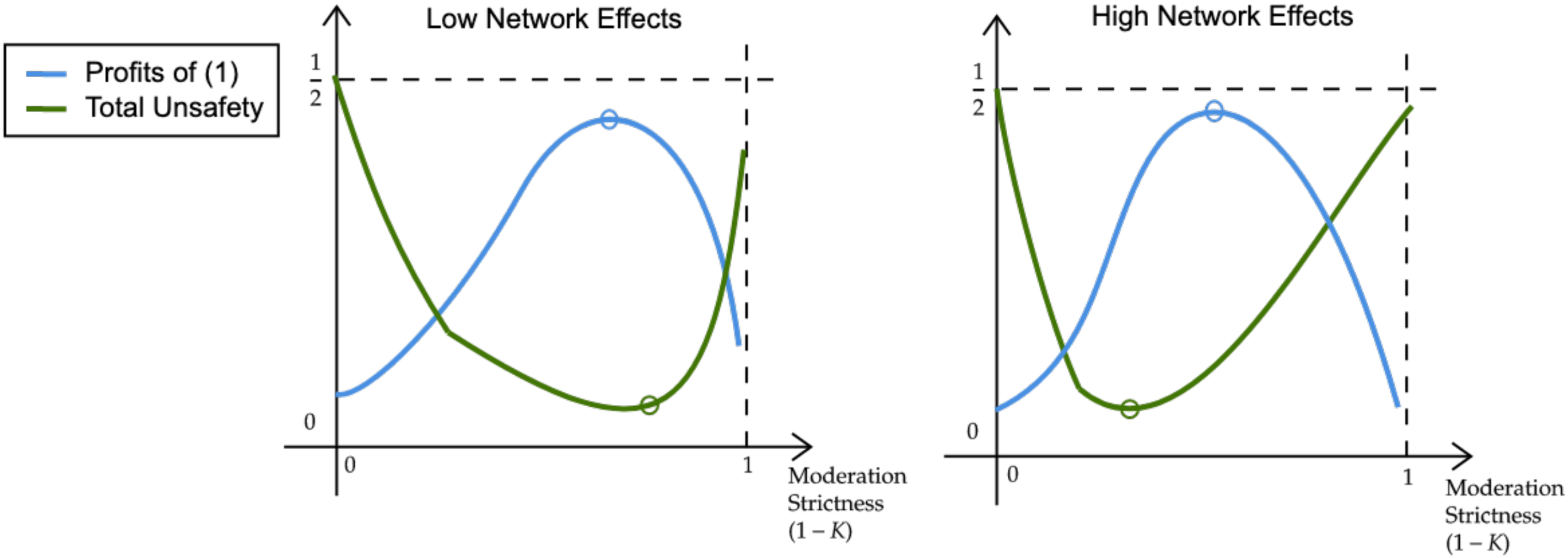

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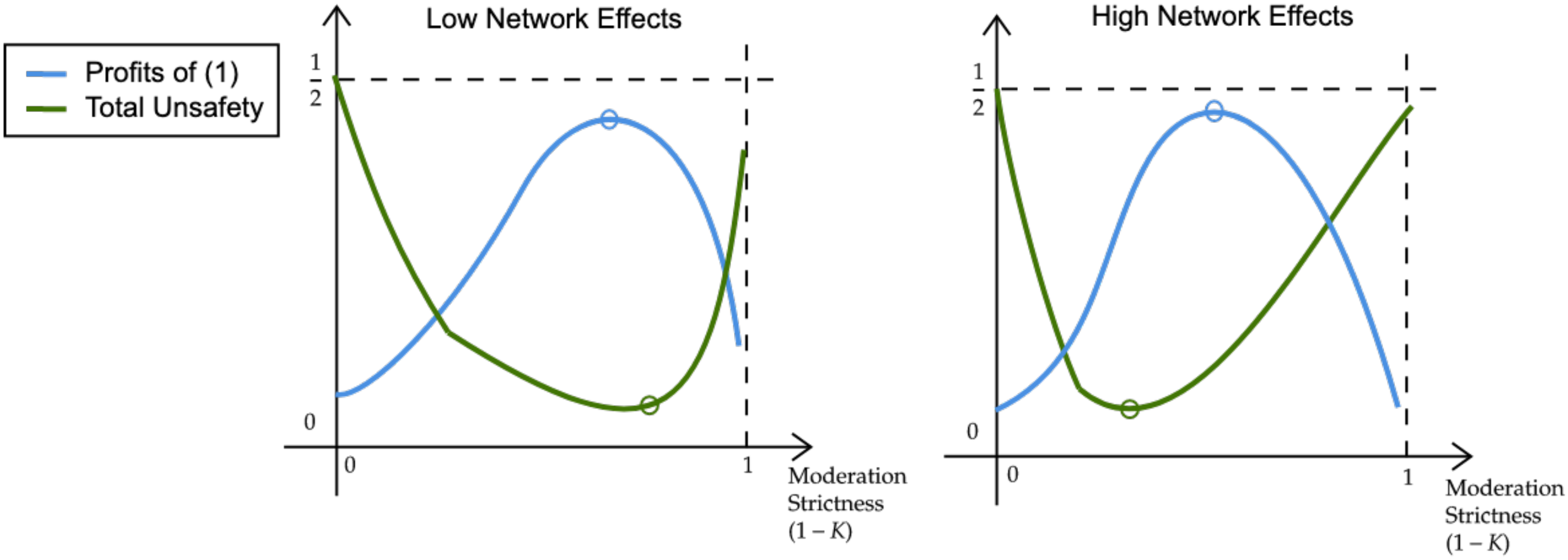

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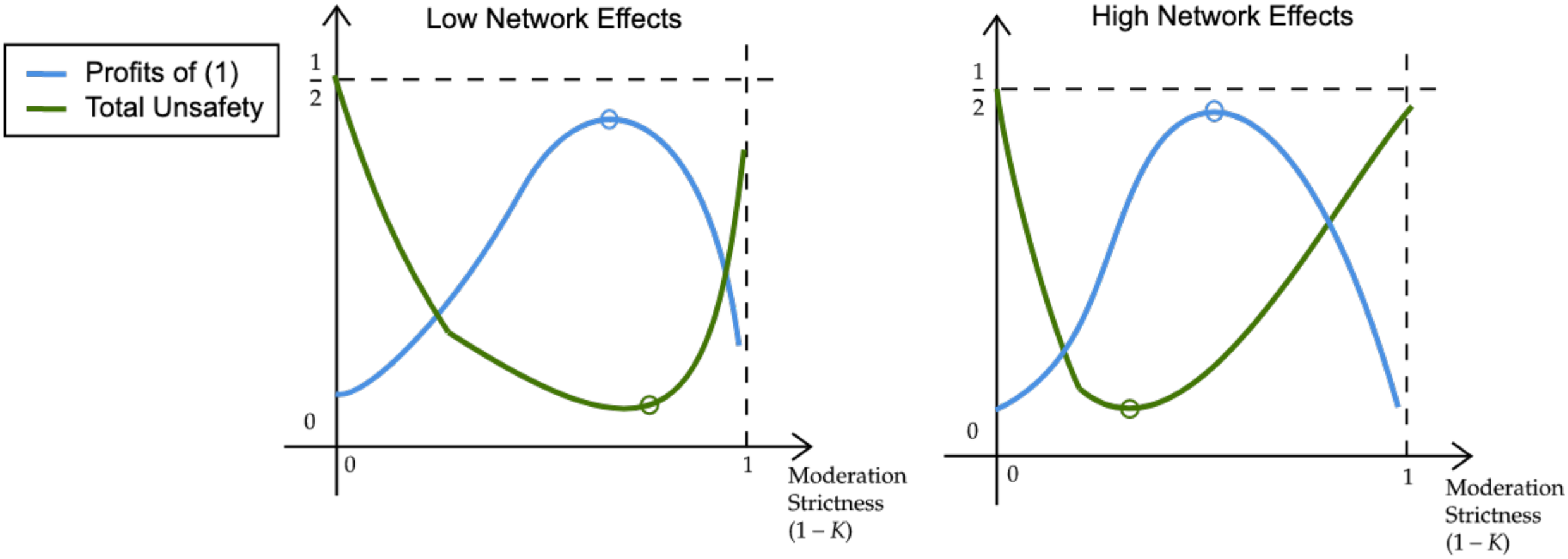

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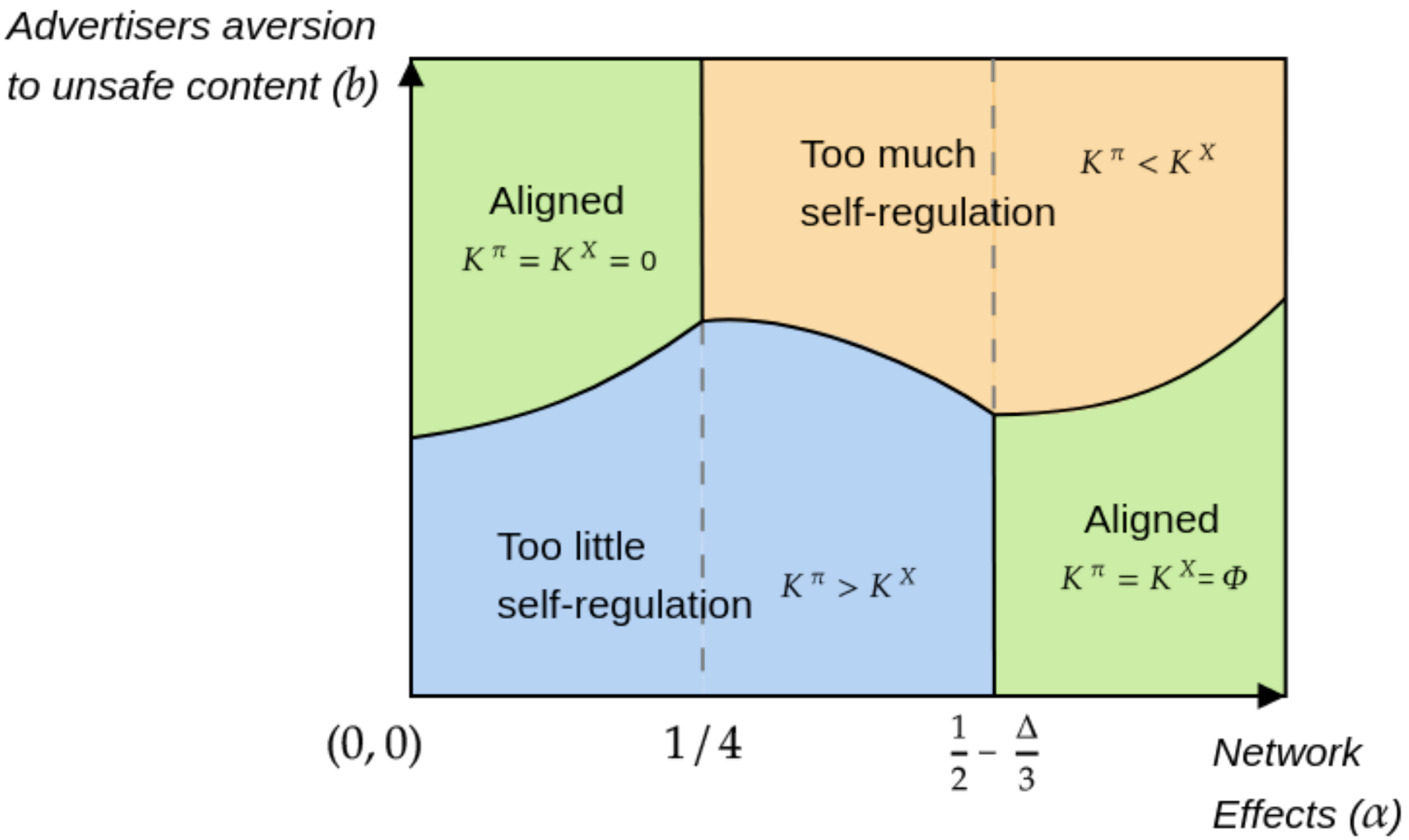
III) As symmetry ↑, strictness ↓ for **platform** but ↑ for **regulator**

Policy (imposing a minimal content moderation)



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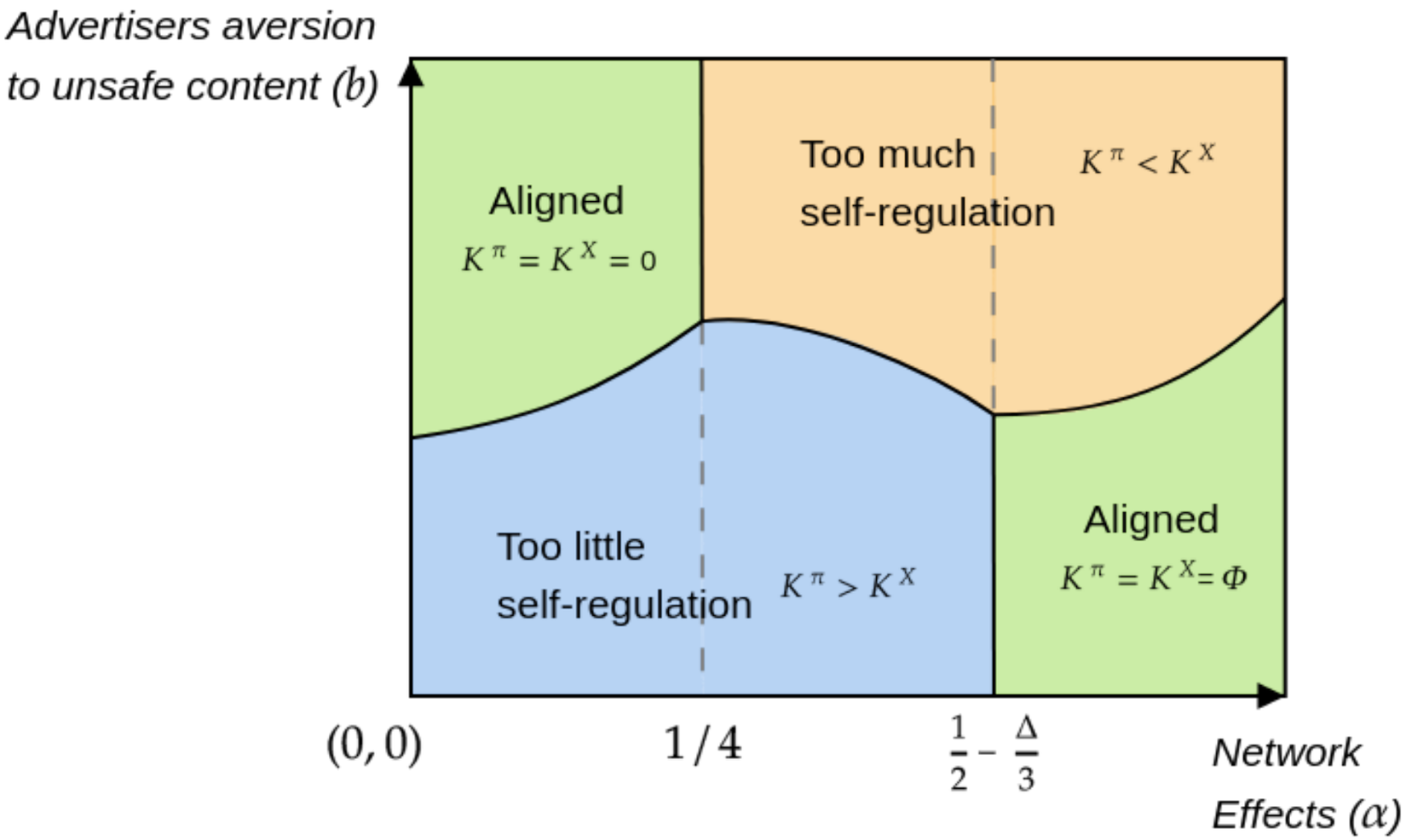
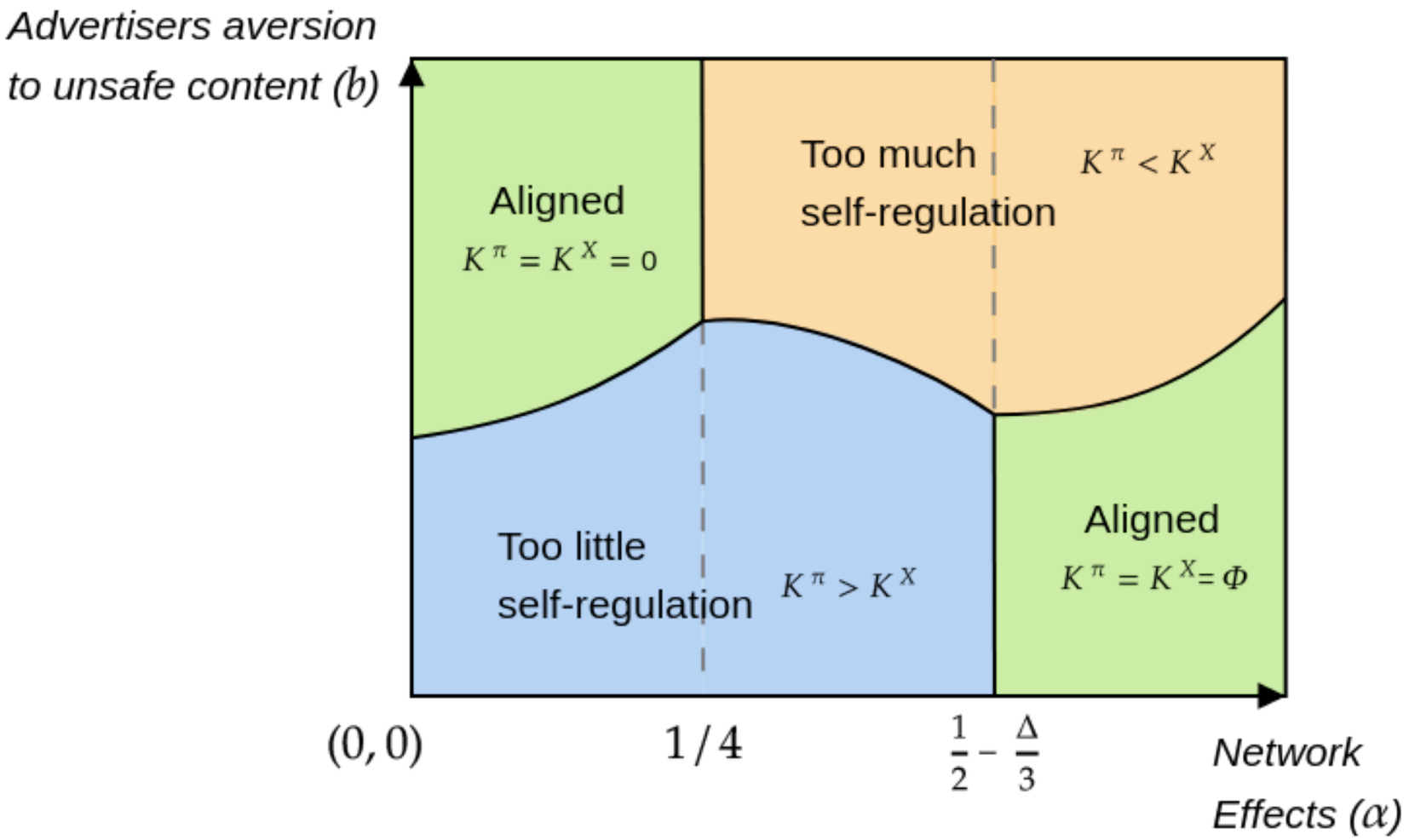


Blue Area:
Beneficial for the regulator to impose a minimal moderation policy

Policy (imposing a minimal content moderation)



Blue Area:
Beneficial for the regulator to impose a minimal moderation policy

Orange Area: such a policy wouldn't bind. Regulators would like to impose a maximal moderation policy to attract users from the fringe platform.

Extensions

MULTIHOMING

OFFLINE VIOLENCE

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Multihoming $\approx$

Soften Network Effects = $\downarrow\alpha$

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Result in the literature
(cf. Crémer et al 2019's report for the EU)

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- **More Lenient** than w singlehoming with **high network effects**
- **Stricter** otherwise

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Main Result:

Moderate content moderation can reduce (increase) offline violence

Users are attracted to safer platforms and converge to the safer content they find there

Conclusion

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Main takeaways:

- Potential **migration** reshapes the economic incentives of the agents
- Minimal content moderation policy ONLY if the outside option is bad enough
    - Partly due (thanks) to network effects (what I explored here)

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(Near) Future

- **Structural** Empirical Model, we need counterfactuals

Working on that

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- Other *non-IO* applications

e.g. Cancel culture (~Tirole's safe spaces)