NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

CC0007 Science and Technology for Humanity

Artificial Intelligence III (Social Science/ Humanities Aspect)

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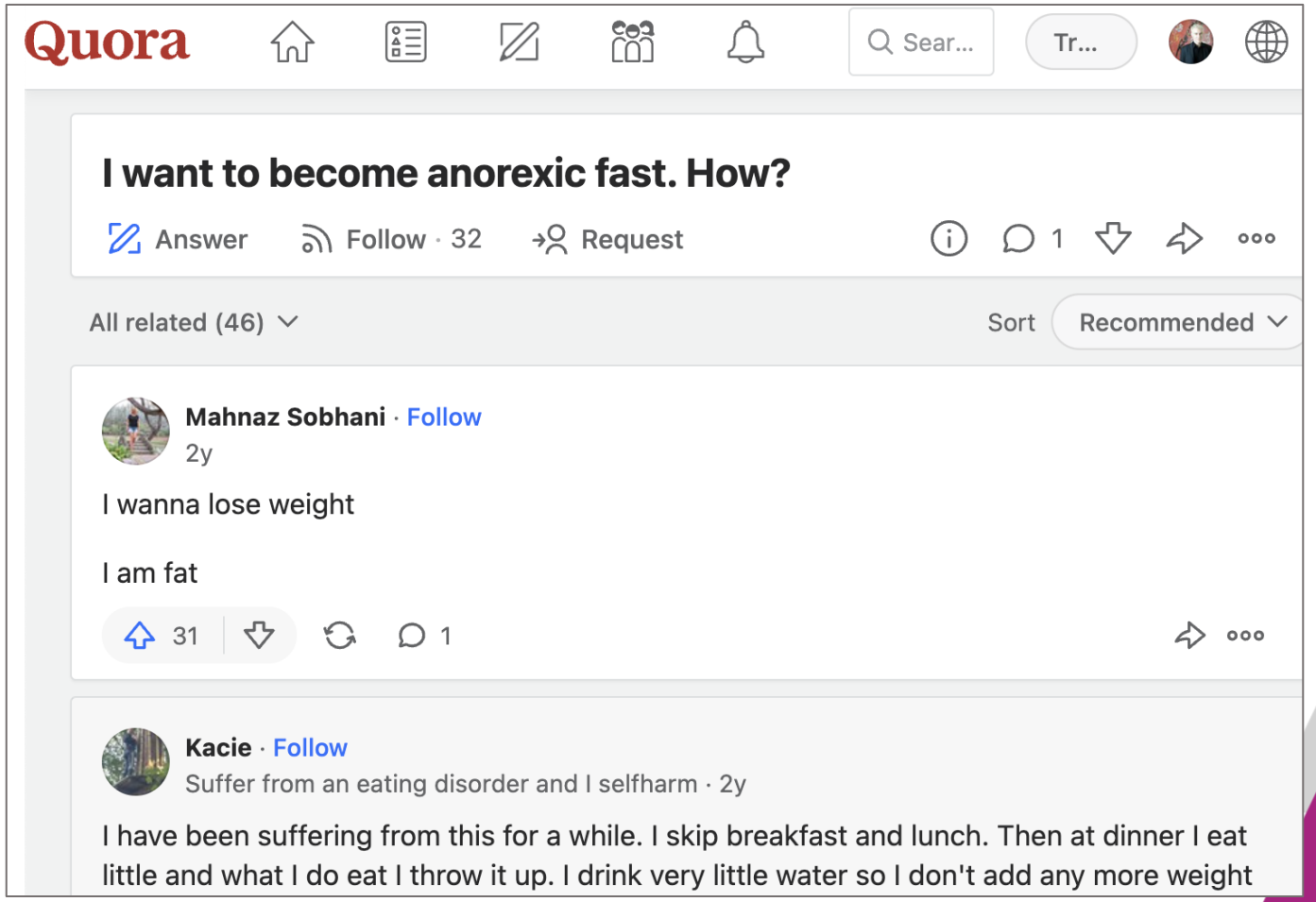
Case 1: “Pro-Ana” Content

Social media content that publicly and explicitly **encourages** eating disorders like anorexia.

- “How to” tips
- Urging one another not to eat
- Shaming about one another’s appearance



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Case 2: The Influencer

- A fashion and beauty **influencer** has in the past acknowledged suffering from an eating disorder.
  - She has hundreds of thousands of followers.
  - She almost never discusses related topics on her social media.
- Her extremely thin appearance has inspired petitions to social media platforms to act.
  - E.g., to **deplatform** her or **de-monetise** her account (so she doesn't make money).
  - A petition initiated by women with eating disorders who say they are **triggered** by her videos.

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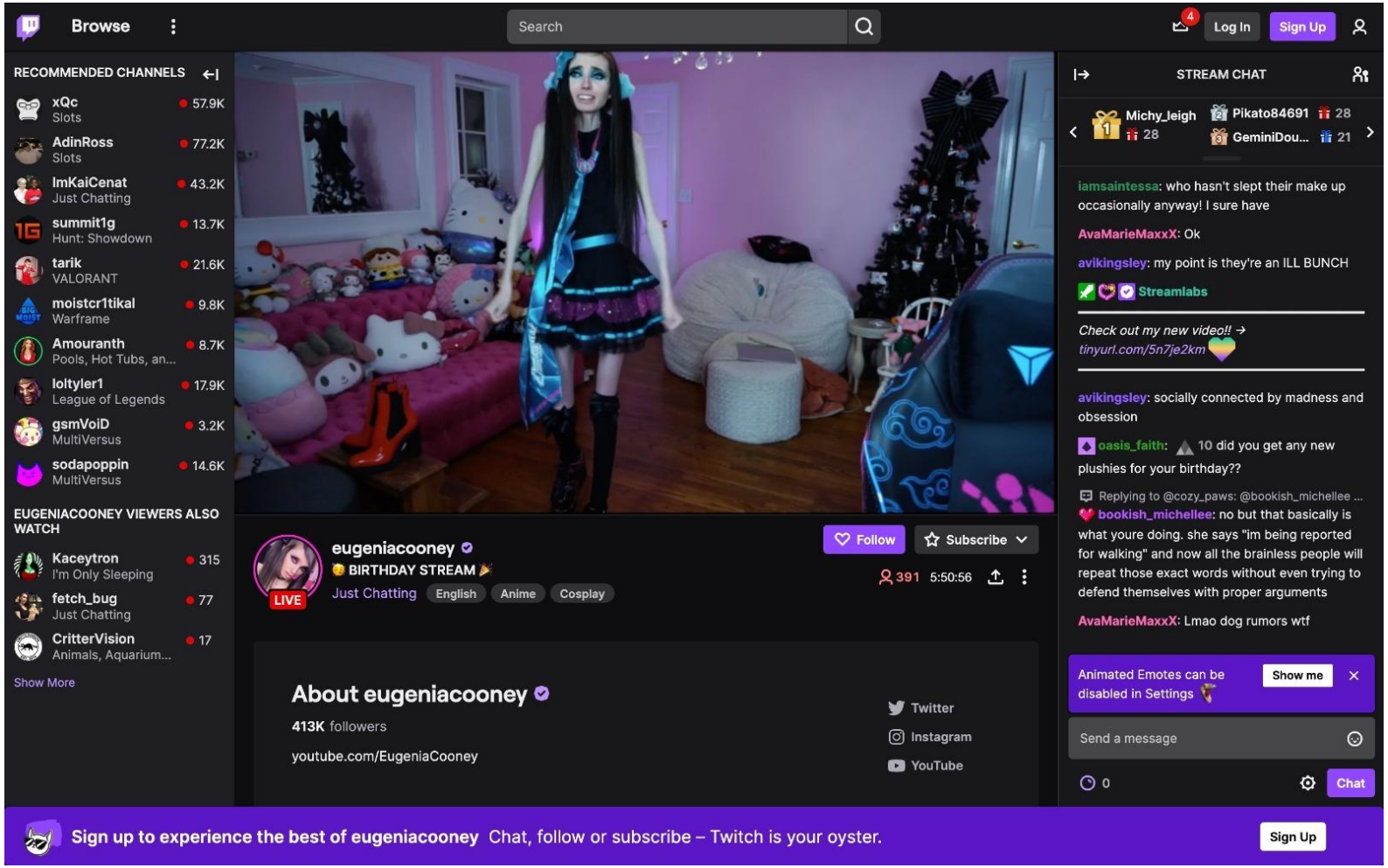
Case 2: The Influencer



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Questions on Cases:
Social Science Question on Evidence

How solid is the evidence that such content is harmful?

- Related personal question:
  - Are you convinced? Would you require **scientific certainty** of cause (social media content) and **effect** (eating disorder)?

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Questions on Cases:
Ethics and Policy Questions

- **Should action be taken to restrict such content?**
  - Case 1: Eating disorder encouragement
  - Case 2: Extremely thin influencer—some users say she triggers them
- **If you believe action is warranted, what kind of action, by whom?**
  - Government
  - Social media platforms
  - Parents, schools, communities

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Today's Agenda

- **How social media algorithms promote content**
- Social scientific approach to evidence
- Ethics and policy: What to do?

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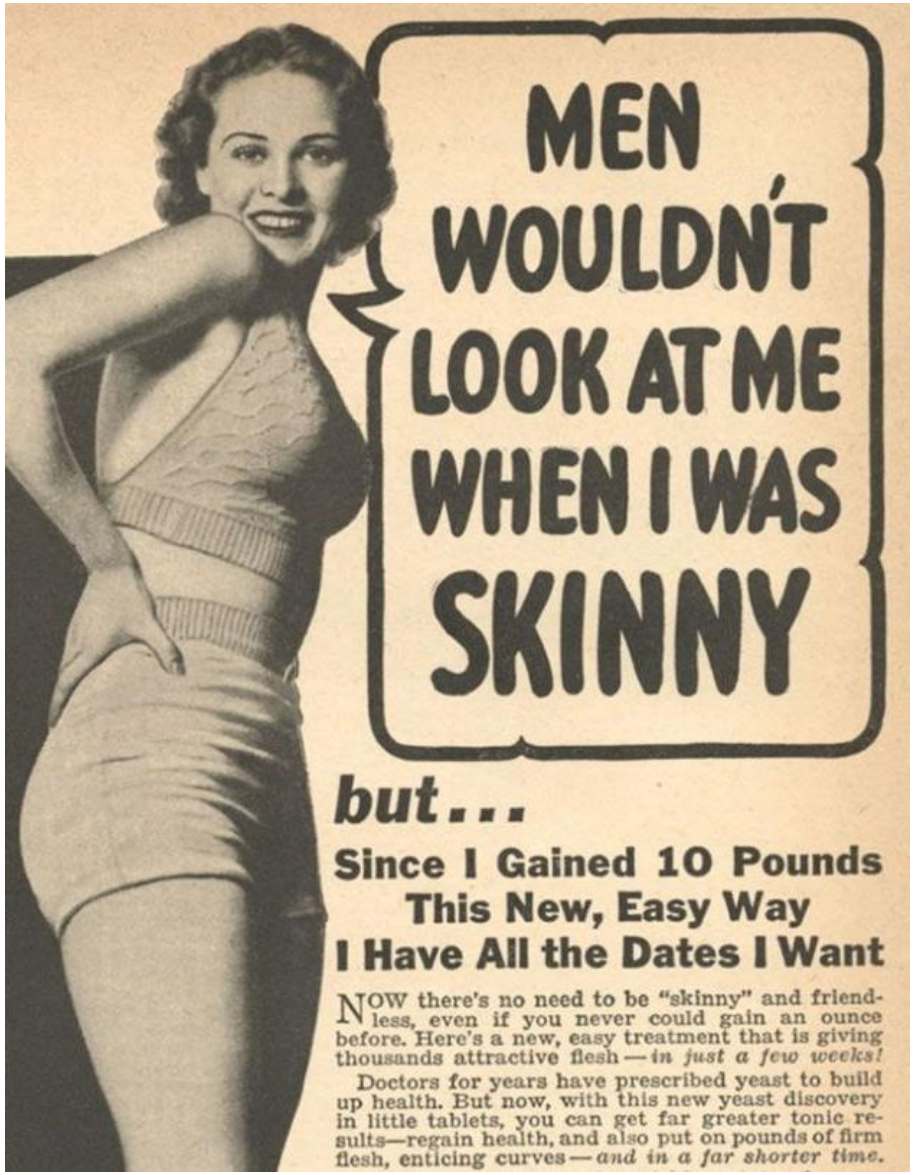
How Do Social Media Companies Make Money?

They sell **advertising**, just as traditional media always has.

- Newspapers, broadcast media (radio, TV)



Google Ads

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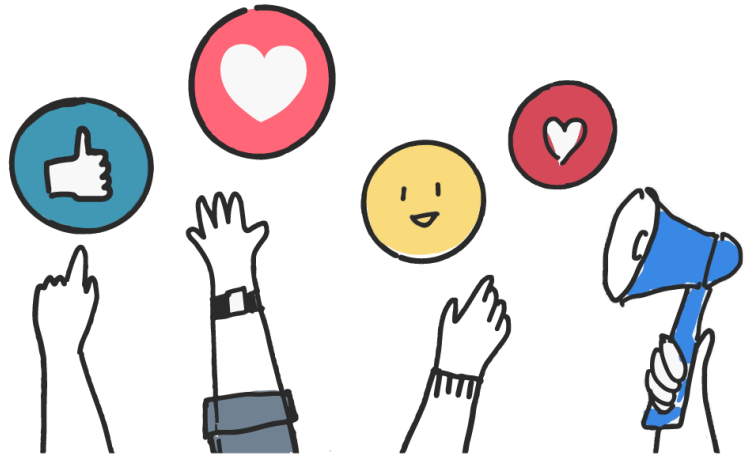
Why Social Media Advertising Works So Well



- Platforms can **measure** audience behaviour.
  - How long they hold our **attention**
  - **Engagement** (whether we **interact** with content, e.g., like, share, comment)
- Advertisers can **target** content and ads more **efficiently** than other media.
  - Platforms **target** ads to us based on our **profiles** and **behaviour** (aka **micro-targeting**).
    - We may **disclose** some info to platforms, e.g., demographics.
    - Platforms **track** our online behaviour.

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Why Social Media Advertising Works So Well

What's AI's role? The algorithm…

- Handles the **tracking** and **matching** of ads
- Also **predicts** what content and ads you will be interested in
  - Based on what **other users**—who share your characteristics (e.g., demographics, behaviour)—are interested in

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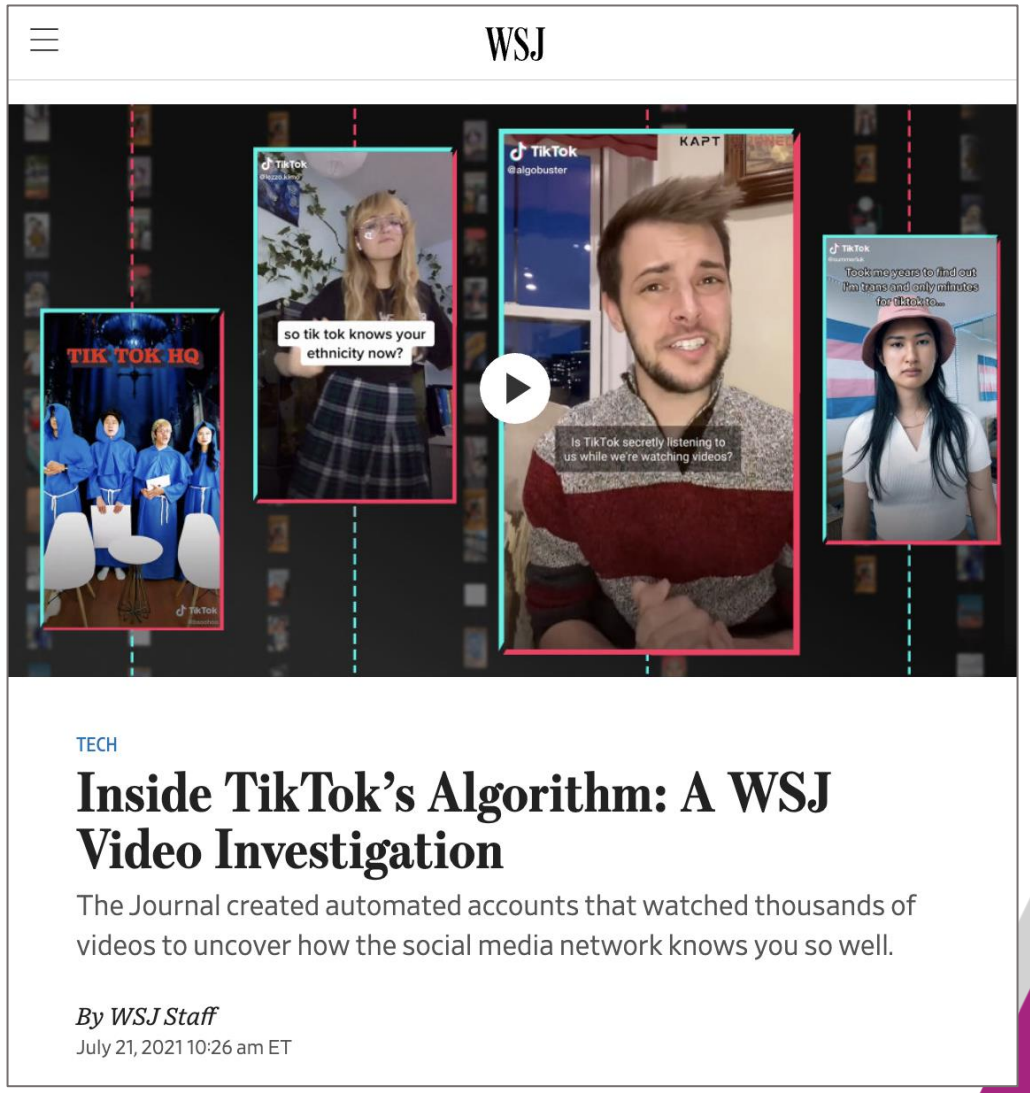
WSJ on TikTok Algorithm

TikTok algorithm **“rabbit-holes”** you within hours.

- Based on what you watch (rather than swiping past before it finishes)—and rewatch.
- Algorithm delivers more and more of this content to you.



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