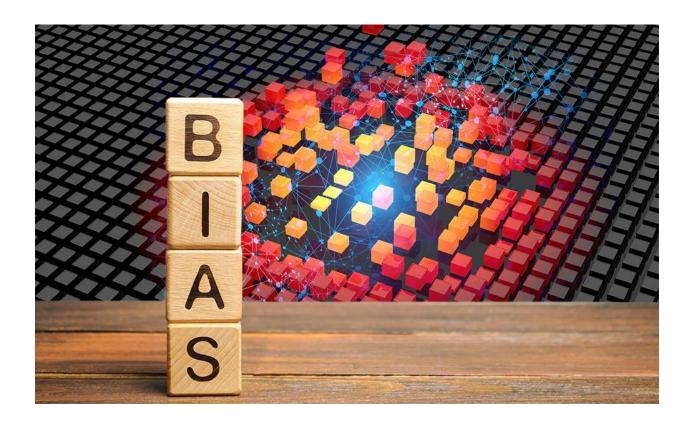
# TECHNICAL AND EMERGENT BIAS

Bias in the App/Website: Shein

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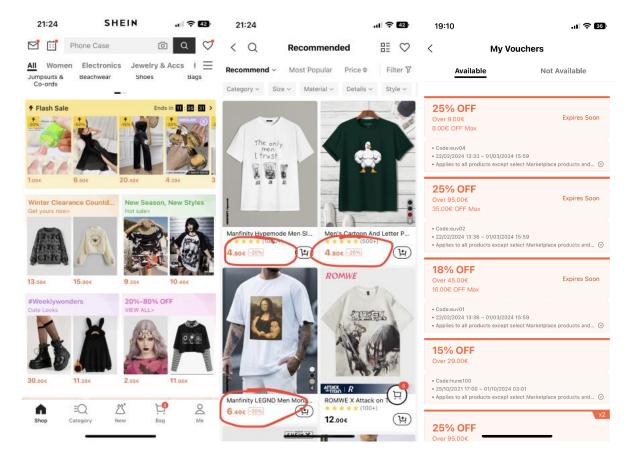
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# Part 1:

What devices/tricks does the app use to make us behave/react/respond using our intuition rather than our reason?

Constant Notifications: The app constantly sends out notifications about sales, and items going out of stock, even though when you check back, there is still there. This drives a sense of urgency and desire, especially when an item is in your basket, and you have been thinking about it or forgot it

Constant Sales: Shein has constant sales on, that they will remind you of it whenever you open the app, and with banners all over the place, and on items. It once again drives a sense of urgency and desire to act quickly as you do not want to overspend, and lose that sale, especially when you can see the timer countdown. You want the best value, but they constantly have sales, if one ends, another one starts instantly.



Personalised product recommendations: <u>Shein</u> analyses user history, browsing behaviour, and interests and provides personalised recommendations. This can influence users to make impulsive decisions based on their preferences and intuition, and this can also be backed up with other tactics, like constant sales.

Marketing Strategies: Shein's main marketing strategy targets specifically the Gen Z portion of the general population. They utilise social influencers to promote products, and or their app, by showcasing how easy, and how much you can get for so little. Thus, many people flock to the app, and act urgently to buy things they may not need.

**Infinite Scrollbar:** Shein has an infinite scrollbar, when you go into a certain tab, search, or even product, you can keep scrolling to keep finding more and more. Usually on top is the popular products across Shein, or if you used the app enough, it will be curated for you.

# Identify technical and emergent biases in the app.

<u>Feedback Loops</u>: Through the apps use of gaining a user's preference and through the users' interaction with the app itself, it will keep recommending items that are similar to your preferences and other items that you have bought in the past, making it so you see the same items after using the app for a consecutive time in one go.

<u>Feature Selection Bias</u>: It seems that the features of this app are geared towards women, possibly due to the algorithms used, and picking up the data that the most common users of the site are women. The purchasing of mainly women's products would only reinforce this bias, even though there may be a high number of men also using purchasing from the site.

<u>Cultural Bias</u>: It seems that this app has a cultural bias towards those living in western countries, like Europe and North America. This is due to the models displayed and items for sale that would be fashion styles and trends that would be popular in these areas. This cannot be confirmed though, as we have not been able to see if the website and its items change depending on the country you are in.

<u>Gender Bias</u>: The site is aimed mostly towards women; homepage only displays items for woman. Finding other sections can be hard to locate as the interface is not very intuitive.

Accessibility Bias: The site has a lot of pinks and red and could be difficult for users with colour blindness

Overgeneralization: It has a tendency to make broad and sweeping generalisations about the people that use the app. It stereotypes the customer base, as the main home page is mostly advertised to young women, overlooking the diverse and varied customer groups that could also be using the app. This may lead to potentially alienating or underserving potential customers who do not fit into this narrow market.

<u>Underrepresentation</u>: Most of the items are displayed on woman with petite body types. They also don't have as many options or advertisements for men to shop on the site, which would discourage those who aren't represented as much to shop on the site.

<u>Interface Design Bias</u>: SHEIN has lots of different websites for pc users. The website (<u>m.shein.com</u>) is designed as the same way as the phone app. It's tending to ask you to try their phone app in this way.

# What data do you think the app collects?

We believe that much information, both private and public, is being collected by Shein from its users.

#### Official Identity

• Nationality & Citizenship: Knows from delivery address.

#### Personal Information

- Home Address: For shipping, you need to input your home address.
- Telephone/Mobile Number: Upon checking out for a delivery.
- Email Addresses: Upon signing up, you get asked to put in an email.
- Previous addresses: Upon checking out for delivery, you can input new addresses, but it keeps the older ones in an address book.

### Financial Records

• Credit cards/Debit cards: Needed to make a purchase

# Internet Search

- Clicked Links: When clicking on an item, it starts recommending you related products and styles.
- Files & Apps: Through settings on an iPhone, it wants access to Siri & Search.

#### Location

- Mobile phone GPS: When you open the app, it asks for permission to use your exact location from your phone.
- Smart watch: Sends notifications to smart watches if they are connected to the phone itself.
- Fitness trackers: Browser block a motion sensor request, implying there may be fitness tracking information being collected.

# Web Browsing

- Websites Visited: Information could be found from the cookie
- Content Accessed: Information could be found from the cookie
- Frequency of Visits: Information could be found from the cookie
- Adverts Clicked: Information could be found from the cookie #BlameGoogle

#### **Preferences**

- Behaviour Patterns
  - Where you go: If it has your GPS location from your phone.
- Your Tastes
  - Things you like: When signing up, asks for preferences. When clicking into products, it keeps recommending related products.

#### Personal Habits

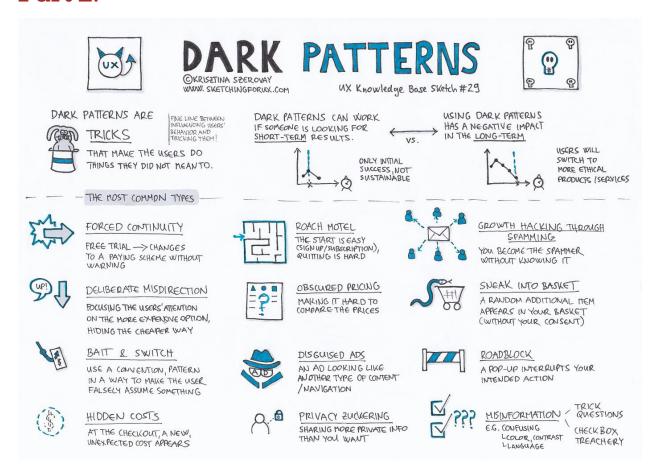
- Leisure Activities:
  - What you like to do: Depending on items you buy, it will learn what you like to do, i.e.
     Tennis.
  - Where you like to go: If it has your GPS location from your phone.
- Consumer Choices:
  - What you like to buy: When signing up, asks for preferences. When clicking into products, it keeps recommending related products.

How much you consume: The more you buy of something, the more it recommends,
 i.e. Matt bought pins, it keeps giving them pins.

# Device and Usage Information

- Device Type: Information on device type will be sent over the network.
- Operating System: OS information can be found in the user agent when sent over the network.
- Browser Type: Will be sent over the network as part of the user agent.
- App Usage Data: For their own App
- Connection Information: UDP/TCP connections will be shared.

# Part 2:



# Dark Patterns in Shein:

• Disguised Ads: Some ads are hidden within the app as products you can buy, some people will click on things even by mistake and be redirected to sketchy sites, however these ads are rare, however.

- Roach Hotel: Setting up Shein is quite simple, you can sign in through a few methods, whether
  its Facebook or Google, but once they have access to your e-mail, they will constantly send
  you mails, and even if you block the receiver or tell them to unsubscribe, it still appears. It is
  a pit fall.
- Hidden Costs: Items are sold as seen, and shipping gets calculated, but they add specific extra taxes to some items, or if you don't spend enough, you pay shipping, as it is usually for free, but some users think it is always free.
- Forced Continuity: In SHEIN, users are prompted to log in or register an account to continue
  with their checkout. While this request seems reasonable, it is framed to track orders, save
  shipping information, and facilitate future transactions. This requirement acts as a gatekeeper
  to completing a purchase, leveraging the user's investment in their selected items to motivate
  account creation or login.
- Deliberate misdirection: In Shein they may not force your focus to the most expensive option, but they will do the opposite in deliberately showing only the items that are currently on sale, which may lead to more sales for them as the users think they are getting a good deal when there may not be a reduction on that item at all.
- Sneak into basket: when using Shein, after going through a purchase or not, they will
  purposely leave certain items in your basket, with an icon indicating that there are items in
  that basket. Even though they may not be checked to be purchased.
- Bait and Switch: When users deleted everything in their own basket, a button named "Shop Flash Sale" will be prompted, somehow makes users think the items they just deleted are on sale for several hours left only.
- Roadblocks: As soon as a user opens the sites a pop up offering free coupons that offers money off (e.g. 5% off, 10% off). This window must be closed before the user can continue.

# Comparison:

For these dark patterns, most don't have any similarities to the technical and emergent biases, as they are very different in behavior on the website/app. Though that isn't to say that thy may have small similarities, such as the gender bias having some similarity to bait and switch, as with bait and switch, the most common sales promoted to the user would be items for women. This would mean that most of the dark patterns and biases go hand in hand and promote one another, instead of having similarities between the two.

#### Values:

Which dark patterns would likely impact certain values of the users

Roach hotel: personal information.

Hidden costs: financial records.

Forced continuity: personal information, financial records,

Deliberate misdirection: personal habits, preferences.

Sneak into basket: preferences

Bait and switch: preferences, personal habits.

Roadblocks: personal habits, Device and Usage Information