

“I Have a Narrow Thought Process”: Constraints on Explanations Connecting Inferences and Self-Perceptions

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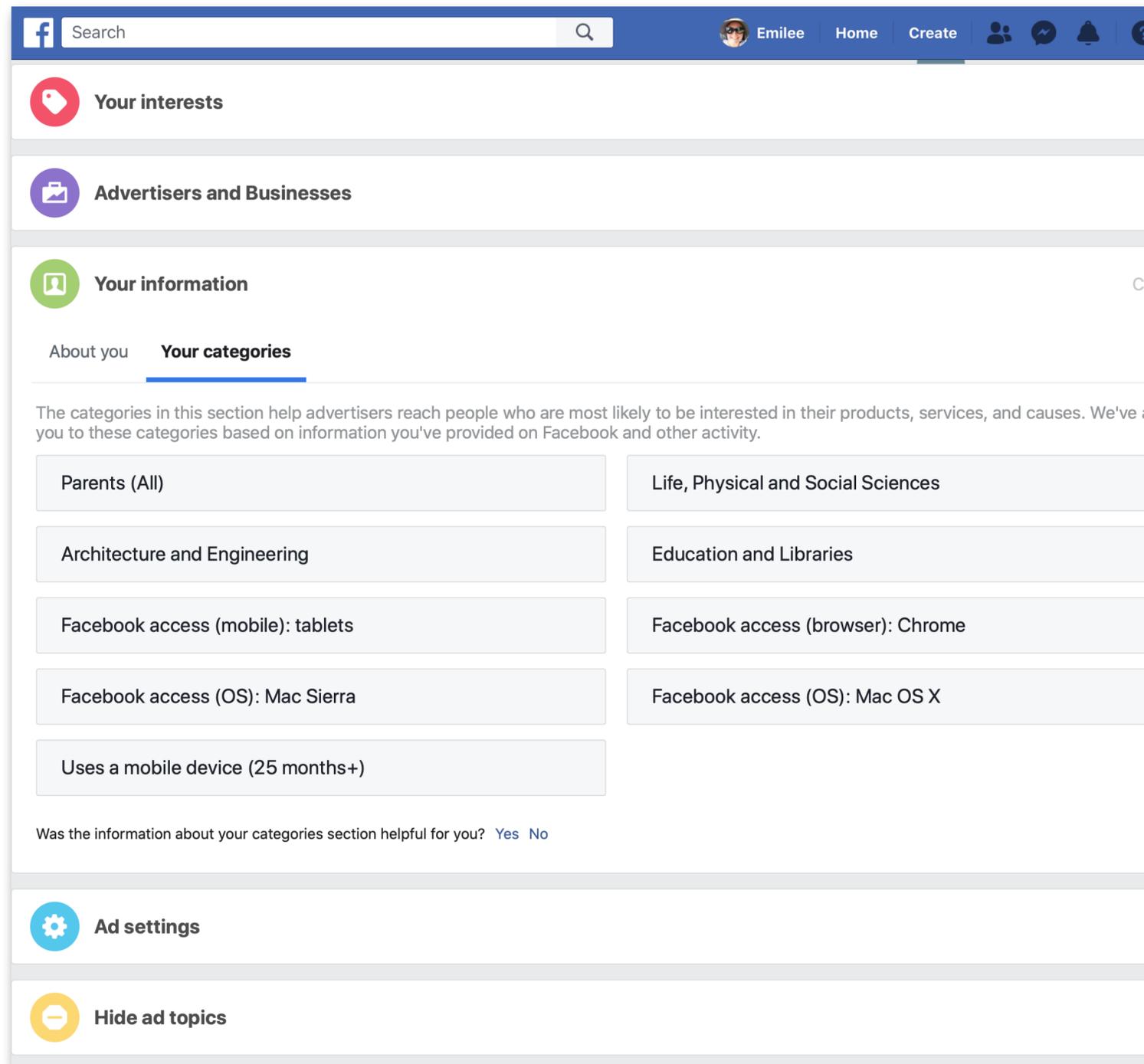
**I HAVE
READ AND
AGREE
TO THE
TERMS
OF USE**

*A typographical critique of things
I agreed to without reading.*

CLEBER RAFAEL DE CAMPOS

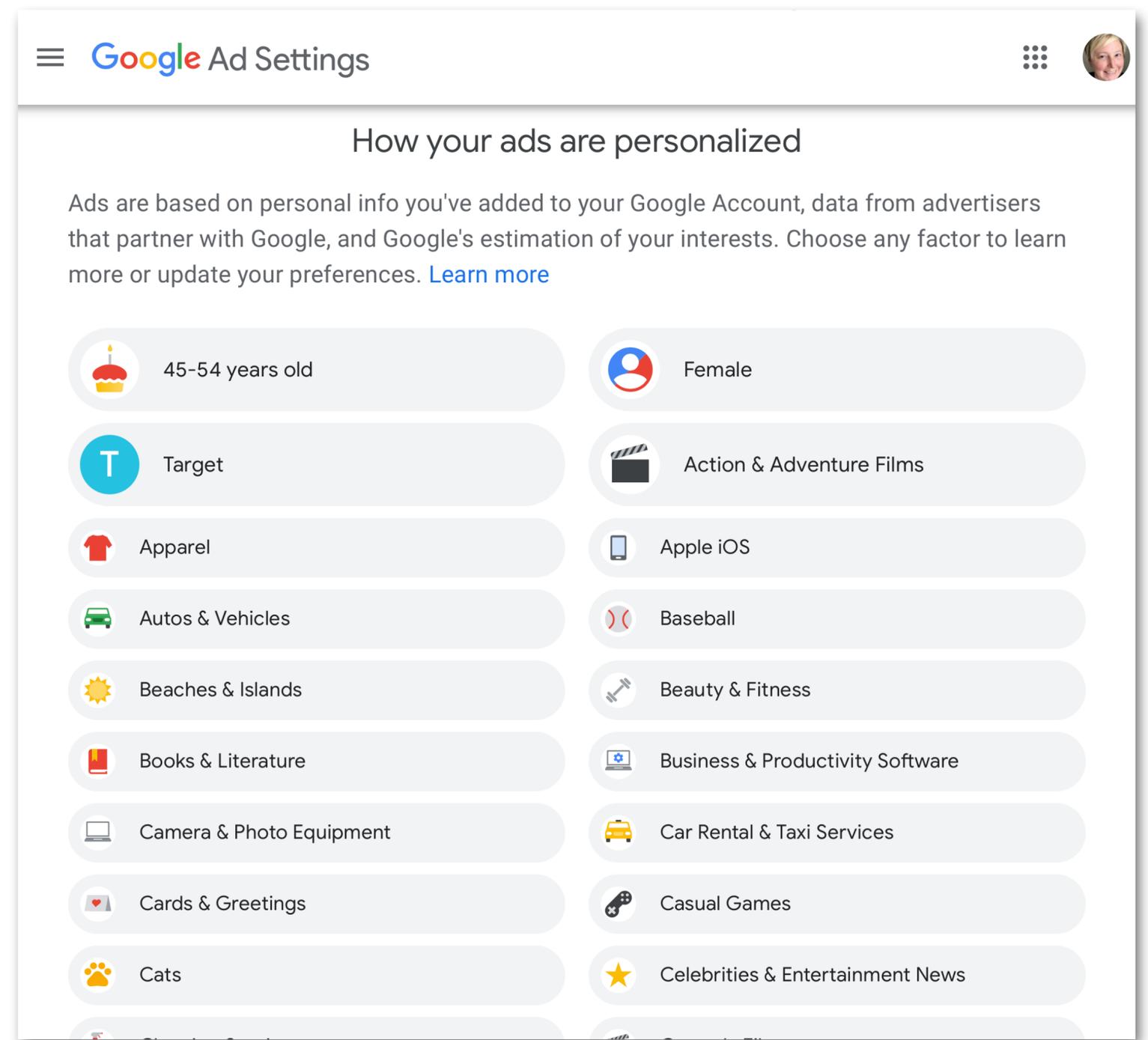


Facebook Ad Preferences



The screenshot shows the Facebook Ad Preferences interface. At the top, there is a search bar and navigation links for 'Home' and 'Create'. Below this, there are three main sections: 'Your interests', 'Advertisers and Businesses', and 'Your information'. The 'Your information' section is currently selected and has two sub-sections: 'About you' and 'Your categories'. The 'Your categories' section contains a grid of category tiles, including 'Parents (All)', 'Architecture and Engineering', 'Facebook access (mobile): tablets', 'Facebook access (OS): Mac Sierra', 'Uses a mobile device (25 months+)', 'Life, Physical and Social Sciences', 'Education and Libraries', 'Facebook access (browser): Chrome', and 'Facebook access (OS): Mac OS X'. At the bottom of the 'Your categories' section, there is a feedback question: 'Was the information about your categories section helpful for you?' with 'Yes' and 'No' options. Below the categories, there are two more sections: 'Ad settings' and 'Hide ad topics'.

Google Ad Settings



The screenshot shows the Google Ad Settings page. At the top, there is a search bar and a profile picture. Below this, there is a section titled 'How your ads are personalized'. The text below this section reads: 'Ads are based on personal info you've added to your Google Account, data from advertisers that partner with Google, and Google's estimation of your interests. Choose any factor to learn more or update your preferences. [Learn more](#)'. Below the text, there is a grid of category tiles, including '45-54 years old', 'Female', 'Target', 'Action & Adventure Films', 'Apparel', 'Apple iOS', 'Autos & Vehicles', 'Baseball', 'Beaches & Islands', 'Beauty & Fitness', 'Books & Literature', 'Business & Productivity Software', 'Camera & Photo Equipment', 'Car Rental & Taxi Services', 'Cards & Greetings', 'Casual Games', 'Cats', and 'Celebrities & Entertainment News'.

Our Approach...

- Show people the inferences Facebook or Google had made about them
- Elicit participants' explanations for the connection (or lack thereof) between themselves and the inferences
- Focus on why some inferences may be easier for them to relate to themselves than others
- Understand what makes inferences make sense to people
- Identify implications for informed consent to inferences

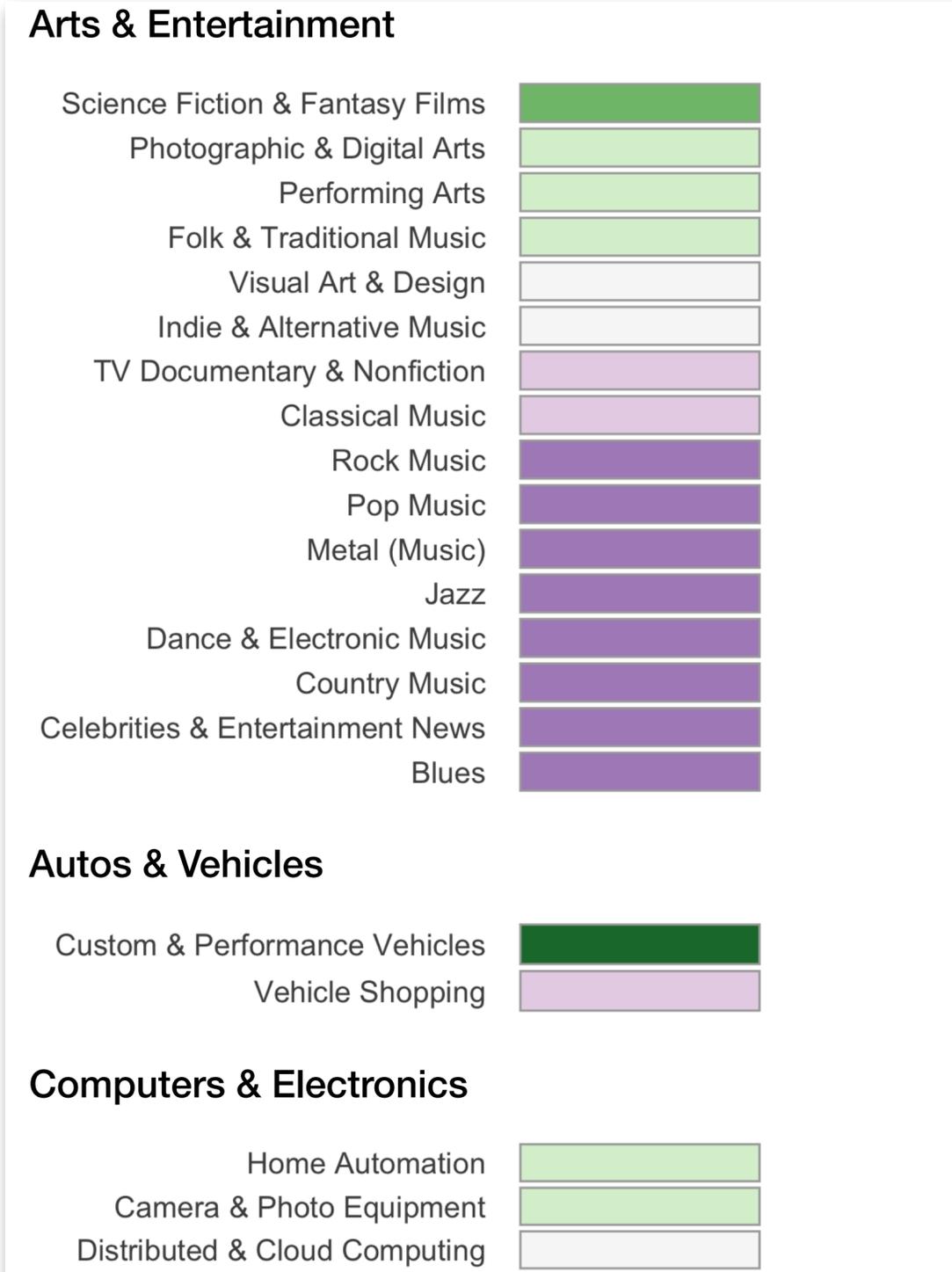
Step 1: Survey to rate inferences

95 respondents, 44 Facebook and 51 Google

- **sensible:** It makes sense that [inference] is associated with me.
- **relevant:** [inference] is relevant to who I am as a person.
- **accurate:** [inference] is an accurate description of my everyday activities.

Step 2: Interviews about reactions

	<i>ID</i>	<i>Gender</i>	<i>Age</i>	<i>Aware?</i>	<i>Number of Inferences</i>	<i>Mean Accuracy</i>
Facebook Participants	P01	Woman	62	No	20	5.05
	P02	Woman	28	No	26	5.44
	P10	Man	44	Unsure	25	4.48
	P11	Man	63	No	24	5.62
	P13	Woman	28	No	33	4.39
	P15	Woman	44	Yes	14	4.00
	P16	Woman	34	No	25	4.84
	P20	Man	38	Unsure	26	4.42
	Google Participants	P03	Man	38	No	59
P04		Woman	32	No	98	4.76
P05		Man	29	Yes	63	2.32
P07		Man	71	No	62	4.44
P08		Woman	59	Unsure	83	4.49
P09		Woman	63	No	40	4.78
P12		Man	31	No	48	3.77
P14		Man	30	No	94	4.68
P17		Woman	48	No	65	3.54
P18		Woman	30	No	104	3.87
P19		Man	38	No	44	3.05
P21		Woman	40	No	46	4.00
P22		Woman	43	No	109	3.07



Types of reactions

Plausible, Implausible, and No Connection

Plausible reactions:
were believable, with specific evidence for why it made sense

Example:

[Parents (All)] Because I have three kids, **well, a lot of my posts are about my kids.** – P13, Woman, Facebook

Implausible reactions:
were initially not believable, but then rationalized

Example:

[Coffee & Tea] I don't drink coffee. My husband does though. **So again maybe, you know?** –P18, Woman, Google

No Connection reactions:
did not make sense, and participants were certain it did not apply to them

Example:

[Golf Equipment] I don't know why that's on there... golf equipment? **I don't golf. That's weird.** –P04, Woman, Google

Acceptance and Discomfort Coexist

“I mean, **there’s a level of acceptance that it happens, but then the more you think about it, it kind of starts to disturb you a little bit more...** some of the things that they make connections for, it takes you a while in your head to get to how they got to that. And it’s a little bit, I don’t know, disconcerting or something. It’s just a little bit uncomfortable.”

-P22, Woman, Google

Platforms which place a priority on obtaining truly informed consent should restrict the inferences they make about users to those which provoke plausible reactions.

Thank You!

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