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Privacy, Autonomy, and Internet Platforms

--Frank Pasquale

When do internet platforms start stunting users, rather than enabling them to become what they want to be? Facebook's recent psychology experiment sharply poses that question for those on both sides of the platform.¹ Ordinary Facebookers, resigned to endure ever more intrusive marketing manipulation, were thrown for a loop by the news that they may be manipulated for no commercial reason at all. Researchers inside Facebook (and their university collaborators) saw their own identity questioned. Were they true scientists, or some new kind of inquirer?

It's time to deepen the story of the experiment as a "loss of autonomy," by connecting the strictures imposed on insiders and outsiders. Ordinary users can't access, challenge, or try to adapt the code that Facebook uses to order their newsfeeds, except in the crude and stylized ways offered by the company. Social scientists have to play by Facebook's rules to get access to the data they need—and we can probably assume that a more informed consent process was either tacitly or explicitly rejected as too much of an interference with the ordinary business of Facebooking. So the restricted autonomy of the researchers in turn led to the impairment of the autonomy of the users. This exemplar of values sacrificed in the name of market rationality is a microcosm of much larger trends in ordinary users' experience of the web, and researchers' experience of their own craft.

¹ Violet Blue, *Facebook: Unethical, Untrustworthy, and Now Downright Harmful*, ZDNET (July 1, 2014), http://www.zdnet.com/facebook-unethical-untrustworthy-and-now-downright-harmful-7000031106/?s_cid=e539&ttag=e539&ftag=TRE17cfd61.

All to Improve User Experience

Ask an internet platform spokesperson why his or her firm made nearly any decision, and you'll hear some variation on "to improve user experience." But we all know that it's only a certain kind of user experience that is really valued, and promoted. For Facebook to continue to meet Wall Street's demands for growth, its user base must grow and/or individual users must become more "productive." Predictive analytics demands standardization: forecastable estimates of revenue-per-user.² The more a person clicks on ads and buys products, the better. Secondly, the more a person draws other potential ad-clickers in—via clicked-on content, catalyzing discussions, crying for help, whatever—the more valuable they become to the platform. The "model users" gain visibility, subtly instructing by example how to act on the network. They'll probably never attain the notoriety of a Lei Feng, but the Republic of Facebookistan gladly pays them the currency of attention, as long as the investment pays off for top managers and shareholders.³

As more people understand the implications of enjoying Facebook "for free"—i.e., that they are the product of the service—they also see that its real paying customers are advertisers. As N. Katherine Hayles has stated, the critical question here is: "will ubiquitous computing be coopted as a stalking horse for predatory capitalism, or can we seize the opportunity" to deploy more emancipatory uses of it?⁴ I have expressed faith in the latter possibility, but Facebook continually validates Julie Cohen's critique of a surveillance-innovation complex.⁵ The experiment fiasco is just the latest in a long history of ethically troubling decisions at that firm, and several others like it.

Unfortunately, many in Silicon Valley still barely get what the fuss is about. For them, A/B testing is simply a way of life.⁶ There are some revealing similarities between casinos and

² Mike Konczal, *Buying the Future*, NEW INQUIRY (Apr. 3, 2014), <http://thenewinquiry.com/essays/buying-the-future/>.

³ Anupam Chander, *Facebookistan*, 90 N.C. L. REV. 1807 (2012).

⁴ N. Katherine Hayles, *RFID: Human Agency and Meaning in Information-Intensive Environments*, 26 THEORY, CULTURE & SOC'Y 47, 66 (2009).

⁵ Julie E. Cohen, *The Surveillance-Innovation Complex*, BALKANIZATION (May 11, 2014), <http://balkin.blogspot.com/2014/03/the-surveillance-innovation-complex.html>.

⁶ Bryan Christian, *The A/B Test: Inside the Technology That's Changing the Rules of Business*, WIRED (Apr. 25, 2012, 8:47 PM), http://www.wired.com/2012/04/ff_abtesting.

major internet platforms. As Rob Horning observes, Social media platforms are engineered to be sticky . . . Like video slots, which incite extended periods of “time-on-machine” to assure “continuous gaming productivity” (i.e. money extraction from players), social-media sites are designed to maximize time-on-site, to make their users more valuable to advertisers . . . and to ratchet up user productivity in the form of data sharing and processing that social-media sites reserve the rights to.” That’s one reason we get headlines like “Teens Can’t Stop Using Facebook Even Though They Hate It.”⁷ There are sociobiological routes to conditioning action.⁸ The platforms are constantly shaping us, based on sophisticated psychological profiles.

Grant Getters and Committee Men

The characteristics of Facebook’s model (i.e., exemplary) users in many ways reflect the constraints on the model users in the company—i.e., the data scientists who try to build stylized versions of reality (models) based on certain data points and theories. The Facebook emotion experiment is part of a much larger reshaping of social science.⁹ To what extent will academics study data driven firms like Facebook, and to what extent will they try to join forces with its own researchers to study others?

Present incentives are clear: collaborate with (rather than develop a critical theory of) big data firms. As Zeynep Tufekci puts it, “the most valuable datasets have become corporate and proprietary [and] top journals love publishing from them.”¹⁰ ‘Big data’ has an aura of scientific validity simply because of the velocity, volume, and variety of the phenomena it encompasses. Psychologists certainly must have learned *something* from looking at over 600,000 accounts’ activity, right?

⁷ Bianca Bosker, *Teens Can’t Stop Using Facebook Even Though They Hate It*, HUFFINGTON POST (June 24, 2014, 2:01 PM), http://www.huffingtonpost.com/2014/06/24/teens-facebook_n_5525754.html.

⁸ Emily Yoffe, *Seeking*, SLATE (Aug. 29, 2009, 5:40 PM), http://www.slate.com/articles/health_and_science/science/2009/08/seeking.single.html.

⁹ Kashmir Hill, *Facebook Added ‘Research’ to User Agreement 4 Months After Emotional Manipulation Study*, FORBES (June 30, 2014, 8:16 PM), <http://www.forbes.com/sites/kashmirhill/2014/06/30/facebook-only-got-permission-to-do-research-on-users-after-emotion-manipulation-study/>.

¹⁰ Zeynep Tufekci, *Zeynep*, TWITTER (June 30, 2014, 9:27 AM), <https://twitter.com/zeynep/status/483648018789711872>.

The problem though is that the corporate “science” of manipulation is a far cry from academic science’s ethics of openness and reproducibility.¹¹ That’s already led to some embarrassments in the crossover from corporate to academic modeling (such as Google’s flu trends failures).¹² Researchers within Facebook worried about multiple experiments being performed at once on individual users, which might compromise the results of any one study. Standardized review could have prevented that. But, true to the Silicon Valley ethic of “move fast and break things,” speed was paramount: “There’s no review process. . . . Anyone . . . could run a test . . . trying to alter peoples’ behavior,” said one former Facebook data scientist.¹³

Why are journals so interested in this form of research? Why are academics jumping on board? Fortunately, social science has matured to the point that we now have a robust, insightful literature about the nature of social science itself. I know, this probably sounds awfully meta—exactly the type of navel-gazing Senator Coburn would excommunicate from the church of science.¹⁴ But it actually provides a much-needed historical perspective on how power and money shape knowledge. Consider, for instance, the opening of Joel Isaac’s article *Tangled Loops*, on Cold War social science:

During the first two decades of the Cold War, a new kind of academic figure became prominent in American public life: the credentialed social scientist or expert in the sciences of administration who was also, to use the parlance of the time, a ‘man of affairs.’ Some were academic high-fliers conscripted into government roles in which their intellectual and organizational talents could be exploited. McGeorge Bundy, Walt Rostow, and Robert McNamara are the archetypes of such persons. An overlapping group of scholars became policymakers and political advisers on issues ranging from social welfare provision to nation-building in emerging postcolonial states.

¹¹ Audio recording: The Digitization of Science: Reproducibility and Interdisciplinary Knowledge Transfer, held at the AAAS Annual Meeting (Feb. 19, 2011), <http://web.stanford.edu/~vcs/AAAS2011/>.

¹² Frank Pasquale, *Is Big Data Overhyped?*, TECH. ACADEMICS POL’Y (Aug. 6, 2013), http://www.techpolicy.com/Pasquale_IsBigDataOverhyped.aspx.

¹³ Reed Albergotti, *Facebook Experiments Had Few Limits*, WALL ST. J. (July 2, 2014, 7:39 PM), <http://online.wsj.com/articles/facebook-experiments-had-few-limits-1404344378>.

¹⁴ Abby Rapoport, *Take That, Political Science!*, AM. PROSPECT (Mar. 22, 2013), <http://prospect.org/article/take-political-science>.

*Postwar leaders of the social and administrative sciences such as Talcott Parsons and Herbert Simon were skilled scientific brokers of just this sort: good ‘committee men,’ grant-getters, proponents of interdisciplinary inquiry, and institution-builders. This hard-nosed, suit-wearing, business-like persona was connected to new, technologically refined forms of social science. . . . Antediluvian ‘social science’ was eschewed in favour of mathematical, behavioural, and systems-based approaches to “human relations” such as operations research, behavioral science, game theory, systems theory, and cognitive science.*¹⁵

One of Isaac’s major contributions in that piece is to interpret the social science coming out of the academy (and entities like RAND) as acultural practice: “Insofar as theories involve certain forms of practice, they are caught up in worldly, quotidian matters: performances, comportments, training regimes, and so on.”¹⁶ Government leveraged funding to mobilize research to specific ends. To maintain university patronage systems and research centers, leaders had to be on good terms with the grantors. The common goal of strengthening the US economy (and defeating the communist threat) cemented an ideological alliance.

Government still exerts influence in American social and behavioral sciences. But private industry controls critical data sets for the most glamorous, data-driven research. In the Cold War era, “grant getting” may have been the key to economic security, and to securing one’s voice in the university. Today, “exit” options are more important than voice, and what better place to exit to than an internet platform? Thus academic/corporate “flexians” shuttle between the two worlds.¹⁷ Their research cannot be too venal, lest the academy disdain it. But neither can it indulge in, say, critical theory (what would nonprofit social networks look like), just as Cold War

¹⁵ Joel Isaac, *Tangled Loops: Theory, History, and the Human Sciences in Modern America*, 6 MOD. INTELL. HIST. 397, 397-98 (2009) (citations omitted).

¹⁶ *Id.* at 416.

¹⁷ Lisa Margonelli, *Meet the Flexians*, PAC. STANDARD (Sept. 09, 2013, 6:00 AM), <http://www.psmag.com/navigation/politics-and-law/meet-flexians-government-business-media-money-power-wall-street-65029/>.

social scientists were ill-advised to, say, develop Myrdal's or Leontief's theories.¹⁸ There was a lot more money available for the Friedmanite direction economics would, eventually, take.¹⁹

Intensifying academic precarity also makes the blandishments of corporate data science an "offer one can't refuse." Tenured jobs are growing scarcer. As MOOC mongers aspire to deskill and commoditize the academy, industry's benefits and flexibility grow ever more alluring.²⁰ Academic IRBs can impose a heavy bureaucratic burden;²¹ the corporate world is far more flexible. (Consider all the defenses of the Facebook authored last week which emphasized how little review corporate research has to go through:²² satisfy the boss, and you're basically done, no matter how troubling your aims or methods may be in a purely academic context.²³

Creating Kinds

So why does all this matter, other than to the quantitatively gifted individuals at the cutting edge of data science? It matters because, in Isaac's words:

Theories and classifications in the human sciences do not 'discover' an independently existing reality; they help, in part, to create it. Much of this comes down to the publicity of knowledge. Insofar as scientific descriptions of people are

¹⁸ *Alva Myrdal – Biographical*, NOBEL PRIZE, http://www.nobelprize.org/nobel_prizes/peace/laureates/1982/myrdal-bio.html (last visited July 21, 2014); *Wassily Leontief – Biographical*, NOBEL PRIZE, http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1973/leontief-bio.html (last visited July 21, 2014).

¹⁹ MILTON FRIEDMAN, *ESSAYS IN POSITIVE ECONOMICS* (1953).

²⁰ Christopher Newfield, *Christensen's Disruptive Innovation After the Lepore Critique*, REMAKING THE U. (June 22, 2014), <http://utotherescue.blogspot.com/2014/06/christensens-disruptive-innovation.html>.

²¹ *Institutional Review Boards*, ZACHARY M. SCHRAG, <http://zacharyschrag.com/irbs/> (last visited July 21, 2014).

²² Richard Chirgwin, *Trick-Cyclists Defend Facebook Emoto-Furling Experiment*, REGISTER (July 2, 2014), http://www.theregister.co.uk/2014/07/02/psych_researchers_link_arms_with_facebook/.

²³ Jay Rosen, *Facebook's Controversial Study Is Business as Usual for Tech Companies but Corrosive for Universities*, WASH. POST (July 3, 2014), <http://www.washingtonpost.com/posteverything/wp/2014/07/03/dont-blame-facebook-for-screwing-with-your-mood-blame-academia/>.

*made available to the public, they may ‘change how we can think of ourselves, [and] change our sense of self-worth, even how we remember our own past.’*²⁴

It is very hard to develop categories and kinds for internet firms, because they are so secretive about most of their operations. (And make no mistake about the current PR kerfuffle for Facebook: it will lead the company to become ever more secretive about its data science, just as Target started camouflaging its pregnancy-related ads and not talking to reporters after people appeared creeped out by the uncanny accuracy of its natal predictions.) But the data collection of the firms is creating whole new kinds of people—for marketers, for the NSA, and for anyone with the money or connections to access the information.²⁵

More likely than not, encoded in Facebook’s database is some new, milder DSM, with categories like the slightly stingy (who need to be induced to buy more); the profligate, who need frugality prompts;²⁶ the creepy, who need to be hidden in newsfeeds lest they bum out the cool. Our new “Science Mart” creates these new human kinds, but also alters them, as “new sorting and theorizing induces changes in self-conception and in behavior of the people classified.”²⁷ Perhaps in the future, upon being classified as ‘slightly depressed’ by Facebook, users will see more happy posts. Perhaps the hypomanic will be brought down a bit. Or, perhaps if their state is better for business, it will be cultivated and promoted.

You may think that last possibility unfair, or a mischaracterization of the power of Facebook. But shouldn’t children have been excluded from its emotion experiment? Shouldn’t those whom it suspects may be clinically depressed? Shouldn’t some independent reviewer have asked about those possibilities? Journalists try to reassure us that Facebook is better now than it was two years ago. But the power imbalances in social science remain as funding cuts threaten researchers’ autonomy. Until research in general is properly valued, we can expect more psychologists, anthropologists, and data scientists to attune themselves to corporate research

²⁴ Isaac, *supra* note 15, at 416 (citation omitted).

²⁵ *Prizm Reports*, NIELSEN, <http://www.claritas.com/sitereports/reports/prizm-demographics-reports.jsp> (last visited July 21, 2014).

²⁶ *Experian*, TWITTER (July 4, 2014, 8:00 AM), <https://twitter.com/Experian/status/485075621257949184>.

²⁷ PHILIP MIROWSKI, *SCIENCE-MART: PRIVATIZING AMERICAN SCIENCE* (2011); Ian Hacking, *The Looping Effects of Human Kind*, in *CAUSAL COGNITION: MULTIDISCIPLINARY DEBATE* 351, 370 (Dan Sperber et al. eds., 1996).

agendas, rather than questioning why data about users is so much more available than data about company practices.²⁸

²⁸ FRANK PASQUALE, *THE BLACK BOX SOCIETY* (2015).