Bits of Bias

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Version 0.2

June 23, 2011

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forthcoming Implicit Bias Across the Law (Justin Levinson, Ed.
Cambridge University Press 2012)
Abstract: In this chapter, Prof. Jerry Kang examines how the mass media and computer mediated communications contribute to implicit bias. In particular, it diagnoses how "vicarious experiences" with other social groups, mediated through electronic communications, can create negative attitudes and stereotypes against those groups. This diagnosis discusses not only the implicit social cognitive mechanisms but also those legal and economic policies, such as the FCC’s "public interest" doctrine, that encourage particular types of content to be shown in various media channels. Finally, the chapter examines the possibility that electronic communications can counter implicit bias by exposure to debiasing content and by facilitating intergroup contact in ways that decrease prejudice.
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INTRODUCTION

Scientists have demonstrated that implicit biases are pervasive, large in magnitude, and have real-world consequences. What can we do about them? One principal strategy is to decrease the implicit bias in our minds (the other is to disrupt their causal link to behavior). In order to decrease bias, we should understand where they come from in the first place. Put crudely, is it nature or nurture? I argue that it’s mostly nurture, and of a specific sort – via vicarious experiences with outgroups mediated by electronic media. These vicarious interactions, fed to us via entertainment, news, social media, and computer-mediated-communities, strengthen particular mental associations. If these vicarious experiences are indeed a substantial source of implicit bias, what might policymakers do, in the shadow of the First Amendment?

I. WHERE DOES IMPLICIT BIAS COME FROM?

A. Nature

Perhaps implicit biases are "hardwired" into our DNA and into our brains, as a product of evolution. In support of some such position, one might cite to research revealing that certain biases are shared by other primates. Consider, for example, the recent work by Neha Mahajan, Mahzarin Banaji, and colleagues, who studied intergroup biases of rhesus macaques, a primate species that diverged from our evolutionary line between 25 and 30 million years ago. Deploying an ingenious variation of the Implicit Association Test, the researchers discovered that these monkeys distinguished between photographs of ingroup and outgroup members automatically and stared longer at outgroup monkeys (M=10.83s versus 6.58s; p = .004). This behavior was consistent with the hypothesis that greater threats would prompt longer stares. Moreover, this longer span of attention could not be explained by unfamiliarity. Even “familiar” monkeys (monkeys who at adolescence had recently exited the ingroup to join an outgroup) prompted longer stares. In addition, the male monkeys (although not females) showed an implicit attitudinal preference in favor of the ingroup: They associated ingroup members more with favorable items (i.e. fruits) and outgroup members more with less favorable items (i.e. spiders) (F(5,185) = 3.06, p = .011).
Such findings are fascinating. As the authors explain, this is the “first systematic evidence that [intergroup] interactions are likely to be subserved by nearly identical cognitive mechanisms in human and nonhuman primates.” At the same time, these findings should not be overread. The general fact that ingroup preference might be “natural” in primates doesn’t say much about the particularities of how human ingroups are constructed and which ingroups are made socially salient. In other words, even if it’s “natural” for us to like ourselves and dislike others generally, that psychology doesn’t tell us which specific groups to like, for what reasons, and with what intensity. That’s provided instead by our history, culture, and politics.

The upshot here is that even if broad cognitive tendencies are given to us by “nature” – e.g., to categorize human beings into groups and to prefer ingroups – something else fills in the particular details of where to draw the boundaries and with what content. To provide some concrete examples, in the early 1900s, in Asia, a person of Japanese descent did not view a person of Korean descent as an ingroup member. By contrast, in the 2010s, in the United States, both Japanese and Korean Americans might view themselves as sharing an ingroup identity of Asian American. In the early 1900s, in California, the stereotype associated with a Chinese face might be that of an illegal immigrant. By contrast, in the early 1980s, the stereotype might be that of the model minority. These various differences could not have been produced by natural selection.

This understanding of cultural contingency is entirely consistent with evidence that implicit biases are highly reactive to the environment. For example, Nilanjana Dasgupta and Anthony Greenwald found that implicit attitudes could be altered simply through exposure to countertypical exemplars. Participants were given a “general knowledge” questionnaire that were either pro-Black, pro-White, or control. The pro-Black condition exposed participants to people like Martin Luther King, Jr. (“good”) and Charles Manson, the serial killer (“bad”). For the pro-White condition group, the valences were flipped (e.g., Louis Farrakhan as “bad”, and John F. Kennedy as “good”). Those participants who had answered the pro-Black questionnaire decreased their IAT race bias scores by more than 50% as compared to the control (IAT effect M = 78ms versus 174ms, p = .01) for over twenty-four hours.

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5 Id. at 401.
It’s not just famous countertypical people that can change our implicit biases. It’s also the context in which we see ordinary folk. For example, Bernd Wittenbrink, Charles Judd, and Bernadette Park have demonstrated that exposure to a positive depiction of Blacks (a movie segment of an outdoor barbeque from the film Poetic Justice) decreases implicit bias scores more than exposure to a negative depiction (a clip of the film Black & White & Red All Over showing Black characters arguing over a gang-related incident). Similarly, racial attitudes were less biased on a priming procedure when Black faces were viewed in a “church” context than an “urban street corner” context.

In sum, even if nature provides the broad cognitive canvas, nurture paints the detailed pictures – regarding who is inside and outside, what attributes they have, and who counts as friend or foe. The task now is to determine where do these pictures come from?

B. Nurture

A first hypothesis is that these mental pictures originate from direct social interactions with other human beings. In other words, what we think about, say, American Indians might come from actual, face-to-face interactions with American Indians. This would, however, require that such direct encounters actually take place. My focus is on race and ethnicity, and the truth is that notwithstanding substantial improvements, American residential neighborhoods remain racially segregated. Accordingly, direct interracial experiences may not be all that common for many of us. Far more frequent may be indirect, or vicarious experiences, with other social groups delivered through the media. In other words, we learn about others by being told stories about them, through movies, news, music, and electronically mediated communications.

1. Entertainment

A vast literature in media studies has documented how entertainment media trades on stereotypes, in both fiction and reality-based genres. Over-
the-top stereotypes have been Hollywood mainstays for decades, and consuming such content influences our attitudes and stereotypes.\textsuperscript{12}

Even if you believe that outlandish portrayals have largely disappeared, biases can still be transmitted through more subtle vectors. For example, Max Weisbuch and colleagues examined how race bias could be transmitted via nonverbal behavior on television shows.\textsuperscript{13} By coding up the body language of characters in eleven popular TV shows (while removing audio and cropping out the target character), they discovered that Black target characters received more negative body language than White target characters of equivalent social status ($M = 0.16$ versus $-0.04$; $p < 0.047$). Interestingly, the transcript of the show’s dialogue showed no discernible bias. Moreover, when asked explicitly, reviewers familiar with the shows did not rate the Black and White target characters differently in their perceived attractiveness, sociability, kindness, and intelligence.

More disturbing is the potential impact of these TV shows on viewers. Weisbuch et al. found a correlation between exposure to nonverbal race bias via these TV shows and the viewers’ race Implicit Association Test (IAT) score ($r(51) = 0.28$, $p = 0.047$).\textsuperscript{14} To probe for causation and not merely correlation, the researchers explored whether a specific “treatment” of a video clip (with either pro-Black or pro-White body language) could alter IAT scores in viewers in an experimental setting. They discovered that those participants exposed to the pro-White treatment displayed higher IAT scores (in other words, displayed more pro-White attitude) than those who were exposed to the pro-Black treatment (IAT $M = .70$ vs. $.43$, $p = .05$).\textsuperscript{15} Disconcertingly, the biased behavior within these “treatment” videos was invisible. A group of participants were explicitly tasked to determine whether a particular treatment video was either pro-Black or pro-White. Their accuracy was no better than chance.

2. News

Well, even if entertainment media might transmit bias explicitly and implicitly, perhaps news programs do a better job. Unfortunately, local news

\textsuperscript{12} See id. at 111-12 Thls. 1 & 2 (showing correlations between “perceived stereotypes on television” and personally held stereotypical beliefs and prejudicial feelings). Personally held biases also correlated negatively with self-reported support for affirmative action policies.

\textsuperscript{13} See Max Weisbuch, et al., The Subtle Transmission of Race Bias Via Televised Nonverbal Behavior, 326 SCIENCE 1711 (2009).

\textsuperscript{14} See id. at 1712.

\textsuperscript{15} See id. at 1713 and Supporting Online Material at 7-8 (available at www.sciencemag.org/cgi/content/full/326/5960/1711/DC1)
programs often showcase violent and sensational crime stories. For example, the Pew Project for Excellence in Journalism’ annual study of local news programming consistently finds that local newscasts spend approximately 25% of their time on crime stories. As often said, “if it bleeds, it leads.” Violent crime news stories frequently involve racial minorities, especially African Americans in part because racial minorities are arrested for violent crimes more frequently on a per capita basis than Whites.

Even holding arrest rates constant, certain minorities appear to be overrepresented as perpetrators and underrepresented as victims on television news. Travis Dixon and Daniel Linz examined local news broadcasts in Los Angeles and Orange Counties, and computed differentials between television rates and real-world rates. They found, for example, that Blacks were portrayed as victims of homicide only 23% of the time whereas their victimization rate is 28%. Whites were portrayed as victims 43% of the time on the news although their actual victimization rate was 13%. On the perpetrator side, TV news portrayed Blacks as perpetrators 36% of the time although actual arrest rate percentage for Blacks was 21%.

This steady diet of stories and images has predictable consequences. For example, in one study, Travis Dixon and Keith Maddox examined the relationship between skin color of the perpetrator in a crime news clip and emotional discomfort. They found generally that participants who saw a dark-skinned Black perpetrator registered higher emotional concern about the crime.
story than those participants who saw a White perpetrator (M = 3.84 vs. 2.91; p < .05). Interestingly, a significant interaction between skin tone and news consumption was found. Heavy news viewers (as defined by a median split) responded more emotionally to the dark-skinned perpetrator as compared to the White perpetrator (M = 4.51 v. 2.67; p < .01); light news viewers showed no difference between the two.\footnote{23}

Consistent with such findings are studies that show potential political and voting consequences. In one study, political scientists Frank Gilliam and Shanto Iyengar created variations of a local newscast: a control version with no crime story, a crime story with a Black-suspect mugshot, and a crime story with a White-suspect mugshot.\footnote{24} The Black and White suspects were represented by the same morphed photograph that differed only in skin hue. In the 10 minute newscast, the suspect appeared for only five seconds. If exposed to the Black suspect, White participants showed 6% more support for punitive remedies than did the control group, which saw no crime story. There was no statistically significant difference in support when participants saw the White suspect.

3. Virtual Worlds

In contrast to television entertainment or news, Internet enthusiasts might have more utopian hopes for the new media -- the brave new virtual worlds of online gaming and social interaction. But the evidence prompts skepticism. It turns out that in virtual spaces, both race and racism persist. First, when individuals play human (indeed anthropomorphic) characters, these characters are racialized. In other words, these avatars reveal those features that we culturally employ to map individuals into racial categories.\footnote{25}

Second, the racial politics of the real world -- including resentment of racialized “others” who invade an ingroup’s “territory” -- bleed into cyberspace. Black avatars have been subject to hate speech.\footnote{26} A hijab wearing character was pushed into the sea and thus “killed” by a character dressed as a

\footnote{23} Id. at 1562.


\footnote{25} A virtual census of characters in 150 videogames on 9 platforms conducted in 2005-2006 found overrepresentation of males (85.23% in games versus 50.9% in actual population) and Whites (80.5% versus 75.1%). See Williams et al., “The Virtual Census: Representations of Gender, Race and Age in Video Games,” 11 News Media and Society 815, 825-26 (2009).

\footnote{26} See, e.g., Jerry Kang, Cyber-race, 113 HARV. L. REV. 1130, 1133-34 (2000) (showing transcript of attack, which involved racial epithets).
policeman. Sometimes violence gets more pogrom-like. Lisa Nakamura has commented thoughtfully about the racist (virtual) violence committed in World of Warcraft against Chinese players who work as “gold” farmers, who produce virtual online goods sold on eBay for “real” dollars.

If we focus more on implicit bias, virtual media researchers have collected evidence of online discrimination as a function of an avatar’s skin color – notwithstanding everyone’s conscious recognition that the avatar is a complete fabrication. For example, Paul Eastwick and Wendi Gardner studied whether certain “social influence” tactics that work in the real world would work also in a virtual world. The persuasion literature has documented the efficacy of both “foot-in-the-door” (FITD) and the “door-in-the-face” (DITF) techniques. FITD asks someone for a small favor, then follows up with a larger ask. The effectiveness of this technique turns on the desire for consistency on the part of the target (the person who was solicited). By saying yes to the small favor, she has affirmed the trait of helpfulness. In order to remain consistent, she is more likely to agree to the larger favor.

The DITF technique works in the opposite direction: The first request is intentionally designed to overreach; after rejection, the second, smaller ask is more likely to be granted. This technique trades not on consistency but on reciprocity. The second, more reasonable request is viewed as a concession from the original demand, for which there ought to be reciprocity from the target. But this motive to reciprocate is an affiliative phenomenon, driven by some sense of obligation to the requester. Thus, the qualities of the requester, such as his attractiveness, has been shown to moderate DITF’s effectiveness.

Eastwick and Gardner attempted both techniques in the virtual world, but did so using two different avatars, one with the lightest skin possible (“milk”) in the virtual world There.com, the other with the darkest skin possible (“espresso”). The FITD technique (which turns on self-perception) worked, as in the real world, regardless of race. But the DITF technique (which turns on reciprocity) only worked for the White avatar. Consider what this means. It seems unlikely that anyone (besides a fringe) would explicitly predict that she would respond differently to a request for a favor in a virtual world simply because of that avatar’s “race.” Yet, this is precisely what was found.

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28 Lisa Nakamura, Don’t Hate the Player, Hate the Game: The Racialization of Labor in World of Warcraft, 26 CRITICAL STUDIES IN MEDIA COMMUNICATION 128 (2009)
We have reached a sobering assessment. First, even if certain basic cognitive tendencies drive us to prefer the ingroup, the specific details of how such tendencies play out in the real world are socially constructed. Second, the specific content of implicit biases comes from environmental experiences, which are substantially vicarious and electronically mediated. Of course, the precise percentage of implicit biases that can be attributed to vicarious electronic media as opposed to all other sources cannot be determined. In particular, one can’t deny the potency of real world interactions that teach us implicitly, daily, who occupies the higher rungs of power and influence. That said, the research described gives us reason to think that vicarious experiences remain significant influences.

II. SOLUTIONS

Suppose that we as a society become persuaded that vicarious experiences are a substantial source of implicit bias. Private parties can voluntarily respond in whatever ways they think appropriate. Unfortunately, there’s reason to be skeptical of radical change in a field like entertainment. Just as sex and violence sell, so do comforting schemas. A much harder question is whether the state can do anything, by force of law. Or would the First Amendment block any official attempt to decrease implicit biases?

A. Broadcast: Do No Harm

If any legal intervention is constitutionally plausible, it would be within the communications medium of broadcast, which has historically tolerated the most regulation. As the Communications Act of 1934 makes clear, the electromagnetic spectrum that broadcasters use is not private property. Instead, it is government property held in the public trust. The United States licenses that spectrum to private parties who use the spectrum for private gain but in exchange must also at least pay lip-service to the “public interest.”

In part because of this government subsidy, as well as spectrum scarcity and broadcast’s pervasiveness, broadcast ownership, structure, and content have been substantially regulated. In its history, the Federal Communications Commission (FCC) has promulgated (and the courts have enforced) regulations that restrict the broadcast of content deemed “bad,” such as obscenity.
indecency,\textsuperscript{35} and excessive commercialization.\textsuperscript{36} Specific to antiracism, the FCC, at the instruction of the courts, has revoked the broadcast licenses of stations that favored segregation and aired anti-Black racial epithets.\textsuperscript{37} Conversely, the FCC has also promulgated regulations that promote content deemed “good” through informational programming guidelines,\textsuperscript{38} community ascertainment requirements,\textsuperscript{39} and children’s educational television guidelines.\textsuperscript{40} Specific to questions of race, the FCC has also tried to promote “good” and diverse content by increasing minority ownership of stations through affirmative action. The point of this partial inventory is not to defend each regulation on its merits. Instead, it is to demonstrate how much we regulate broadcast content notwithstanding the First Amendment.

\textsuperscript{[25]} \textit{Redefining the Public Interest}. To repeat, the touchstone for governmental management of broadcast is the “public interest” standard. This vague standard has been further decomposed into three constituent parts: diversity, competition, and localism. What’s important for purposes of this discussion is to recognize that the FCC has practically operationalized large chunks of both “diversity” and “localism” in terms of local news. In an important Order revising mass media ownership policy, the Commission wrote this about diversity:

> Although all content in visual and aural media have the potential to express viewpoints, we find that viewpoint diversity is \textit{most easily measured} through news and public affairs programming. Not only is news programming \textit{more easily measured} than other types of content containing viewpoints, but it relates most directly to the Commission's core policy objective of facilitating robust democratic discourse in the media. Accordingly, we have sought in this proceeding to measure how certain ownership structures affect news output.\textsuperscript{41}

\textsuperscript{[26]} As for localism, the Commission focused again on “programming responsive to local needs and interests, and \textit{local news quantity and quality}.”\textsuperscript{42}

\begin{footnotesize}
\textsuperscript{35} See, e.g., 18 U.S.C. § 1464; see also Pacifica, 438 U.S. at 748-51.
\textsuperscript{38} Until the broadcast deregulation of the early 1980s, broadcast stations were required to show at least 5% local programming, 5% informational programming (news and public affairs), or 10% total non-entertainment programming. See The Revision of Programming and Commercialization Policies, Ascertainment Requirements, and Program Log Requirements for Commercial Television Stations, 98 F.C.C.2d 1076, 1078 (1984).
\textsuperscript{39} See id. at 1097 (describing then-existing ascertainment requirements).
\textsuperscript{40} Congress passed the Children’s Television Act (CTA) of 1990. See Pub. L. No. 101-437, 104 Stat. 996 (codified as amended at 47 U.S.C. § § 303(a), 303(b), 394 (2000)).
\textsuperscript{41} Id. Media Ownership Order, supra note 7, at 13,631.
\textsuperscript{42} Id. (emphasis added).
\end{footnotesize}
The regulatory history on how we ended up here is less important than the final destination. The end result is that "local news" has become a critical component of the FCC's "public interest" analysis, at least in the media ownership context. It is only a slight exaggeration to say that one pursues the "public interest" by airing local news.

[27] But what's on local news? As we already learned, crime stories. And we have seen what consumption of these stories might do. Indeed, it is not too much of a stretch to analogize local news programs, dense with images of racial minorities committing violent crimes in one's own community, to Trojan Horse viruses. Local news provides useful information that we seek. We invite it into our homes, in through the gates of our minds, and accept it at face value, as an accurate representation of newsworthy events. But something lurks within those newscasts that increases implicit bias.

[28] If this is empirically demonstrable, then the FCC should follow the Hippocratic Oath and "do no harm." Concretely, the FCC should break the operational linkage between the "public interest" standard and the number of hours of local news aired. The argument here is not to suppress local news. Instead, it is simply to stop fetishizing it, as currently conceived. There are better metrics. Here are two concrete suggestions.

[29] First, the FCC could measure the number of bona fide investigative journalists that the broadcast station employs. Increasing the numbers of such journalists would promote the values of diversity and localism better than simply counting hours of local news. As we enter a media environment where repackaging, aggregating, and opining replace actual news gathering, it makes even more sense to encourage investigative journalist "boots" on the ground. What we need and want are trained professionals digging up sources and facts.

[30] Second, the FCC should more directly credit substantive content, in the form of debiasing public service announcements ("d-PSAs") as contributing to the public interest. These announcements could strive to communicate messages that in substance and form fight against prejudice and stereotyping. The malleability studies discussed above provide design suggestions.

[31] If this approach seems inconsistent with government "neutrality," we should recognize that modern broadcast policy is anything but neutral. In terms of suppressing "bad" content, think again about indecency policy. In terms of promoting "good" content, think about the Corporation for Public Broadcasting (CPB), which subsidizes PBS and NPR. Congress explicitly charged the CPB to "address the needs of racial and ethnic minorities, new immigrant populations, people for whom English is a second language, and adults who

43 See generally Trojan Horses of Race.
lack basic reading skills.” In addition, Congress made clear that “it is in the public interest to encourage the development of programming that involves creative risks and that addresses the needs of unserved and underserved audiences, particularly children and minorities.” Another analogy is to children's educational television programming rules, which strongly encourage broadcasters to show three hours of such programming per week.

B. Integration: Promote Social Contact

Let's now switch to new media, including the virtual online worlds accessible through the Internet. In sharp contrast to broadcast, the Internet is given full First Amendment respect, no weaker than print. Accordingly, the plausible interventions here cannot be about direct government regulation. Instead, the appeal is to programmers, designers, entrepreneurs, and corporations voluntarily to create virtual worlds that help decrease racial bias. How might this be done? One way is to promote intergroup social contact.

In a recent meta-analysis of the social contact hypothesis, Thomas Pettigrew and Linda Tropp reviewed 515 studies using 713 independent samples that encompassed a quarter million people from 38 nations. They found that intergroup contact correlates negatively with prejudice (average \( r = -0.215; p < .0001 \)). To check whether the causal sequence might be operating in reverse, i.e., whether less prejudiced people sought out greater intergroup contact, the researchers distinguished studies by the degree of choice that people had in engaging in such contact. They saw no significant correlation between “choice” to interact and the magnitude of decrease in prejudice \( (r = .005, p = .89) \). The bottom line, then, is that social integration does decrease intergroup bias. Can the Internet be leveraged to promote such social integration?

Arguably, cyberspace has the potential both to increase the quantity and to improve the quality of interracial contact. As for quantity, cyberspace makes geographical proximity less relevant. This partially lifts residential segregation’s choke-hold on interracial social contact. In addition, cyberspace also makes talking with strangers easier because individuals are less fearful. One strategy that virtual community operators could explicitly follow is

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44 47 U.S.C. § 396(m)(1);
45 47 U.S.C. §396(a)(6)
47 US v. Reno
49 See id.
50 The following borrows substantially from Cyber-race.
promoting chance encounters with other people. Consider the following two possible interfaces for a graphical world: In World 1, one can move instantly between locations by clicking on a menu of available rooms; by contrast, in World 2, the only way to move from room to room is by walking your avatar (even if quickly) through intervening hallways and public spaces. World 2 is a superior integration space because walking increases the number of common spaces regularly traversed. Along the way, we might encounter interesting people and unexpected places to explore — something less likely to happen if we simply “teleport” from location to location. For similar reasons, many people in real space prefer walkable cities to those that require driving.

As for quality, social psychologists have identified the following environmental attributes as especially valuable in decreasing biases: (i) exposure to disconfirming data, (ii) interaction among people of equal status, (iii) cooperation, (iv) non-superficial contact, and (v) equality norms. These discoveries provide guidance for smart design of virtual spaces. One concrete strategy is to encourage team games in which groups compete against each other for prizes, virtual or real. What is essential here is that the teams form somewhat randomly, so that individuals do not stick only to those players they already know. The hope is that by repeatedly playing these games in teams, with individuals of other races, we might alter — even if slightly — racial attitudes and stereotypes for the better.

If this sounds farfetched, consider online game such as World of Warcraft (WoW) or EverQuest. As incredible as it may seem, there are millions of players across the globe, who spend dozens of hours per week in this virtual online environment. The relationships made within these games are not trivial; in one survey, 60% of men and 75% of women regard the friendships that they have made in EverQuest to be a significant as those in real life. Various scholars have tried to theorize why relationships mediated through avatars online might feel even more intense than relationship in real life. It might be because online participants engage in greater self-disclosure because of anonymity and safety. In addition, they can ignore the constraints of real-life physical appearance and focus more on the substantive content of messages.

User interface designers are well aware that the underlying "social architecture" of an online community must be engineered. In real life, for

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[36] See also Yair Amichai-Hamburger & Katelyn Y. A. McKenna, The Contact Hypothesis Reconsidered: Interacting via the Internet, 11 J. Computer-Mediated Comm. 825 (2006) (discussing ways in which the Internet can promote those conditions necessary to decrease intergroup hostility).
[38] See Walther; McKenna & Bargh. Hamburger at 836 (discussing greater self-disclosure on line)
example, the human voice carries only so far. However, online, the "spatial" reach of "speech" is a function of how a game or virtual world is designed. For instance, EverQuest allows various chat channels, including the ability to communicate to everyone within one's zone or guild. By contrast, in another online world, Dark Age of Camelot, there is no easy way to communicate with such a large number of players. As another example of social engineering, EverQuest forces cooperation among players because each type of character has peculiar strengths and weaknesses, which must be complemented by other characters with different strengths and weaknesses. In addition, as Nick Yee describes, EverQuest makes possible and arguably encourages certain acts of altruism. Thus, we see how one virtual world has created some of those very conditions likely to help decrease intergroup hostility. As anecdotal evidence, consider the following statement by one EverQuest player:

In EQ [EverQuest], we engage in difficult, sometimes dangerous and often life-threatening struggles. Even though it isn't RL [real-life]- you learn a lot about the character of the person playing the game. Some are selfish and greedy in EQ and you figure they are similar in RL - others are eager to help and think of others over themselves - and I have found them to be the same in RL. The difference between these friendships and RL is the ability to watch someone in action before allowing them into your life. Also, the fact that we are all unable to see our real faces prior to becoming friends - we can't prejudge someone on the basis of their looks. [F, 45]

What is interesting is that because online interaction is computer mediated, certain aspects of that interaction can be tweaked in ways that are impossible in real life. For instance, as the above quotation demonstrates, there can be a selective delay in real-life social category disclosure. In other words, it might take a while before you find out that I am a member of a particular race. As has been discussed, there is troubling evidence that, notwithstanding good intentions, stereotypes are triggered simply by exposure to the object of the stereotype. So, even though integration requires participants eventually to reveal their real-life social categories, a strategic delay of such information could allow for different sorts of social interactions to both take place online.

Even more interesting tweaks are identified by Yee. For instance, there is evidence that eye contact influences social interactions. The game Star Wars Galaxies automatically maintains eye contact between relevant characters. Also, in the real world, one can maintain eye contact practically with only one person at a time. However, in the virtual world, no such physical constraint

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56 Id.
exists. If one avatar is speaking to an audience of five other players, the scene can be painted slightly differently on each person’s computer screen such that the avatar maintains eye contact with each member of the audience. Those interested in changing laws and policies to promote racial equality have often been called "social engineers" (sometimes derisively). Here is another sort of social engineering that is less metaphorical.

[40] Again, many readers might be skeptical that such interactions in cyberspace could influence what happens in the real world. But there is increasing evidence that virtual experience can influence real-life behavior. In one experiment, Nick Yee and Jeremy Bailenson explored whether participants’ embodiment (through an immersive 3D virtual world technology) in either an attractive or unattractive avatar would influence social behavior in the real world. They discovered that participants embodied in attractive avatars subsequently behaved differently on a dating website. If embodied in an attractive figure, they subsequently exaggerated less about their own height (M = 0.17 versus 1.17 inches, p = .05) and selected more attractive partners as potential dates (M = 10.47 versus 9.43, with M representing sum of two partners selected on a 1-7 attractiveness scale; p=.01) on the dating site.

CONCLUSION

[41] We have more than circumstantial evidence to believe that implicit biases come significantly from the media we consume. That media provides to us vicarious experience with the other that reinforces often negative attitudes of the outgroup and strengthens particular stereotypes. Recognition of this phenomena, especially if it can be measured through scientific instruments, could prompt change. Much of this would have to be voluntary, on the part of those who produce entertainment and news. Intriguingly, those who create the social architecture of virtual worlds might be able to create debiasing environments that promote the type of social contact that decreases intergroup hostility. In the meantime, the law should not encourage content that exacerbates implicit biases, such as equating the “public interest” in broadcast to more “local news.”