

# "Gaydar": The Perception of Sexual Orientation From Subtle Cues

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#### **Abstract**

Though many of people's impressions about each other stem from qualities that are obvious or apparent, social perceptions also rely on a variety of subtle cues that guide judgment and behavior. For example, emerging work has increasingly elucidated the conditions and means by which individuals' accuracy in judging others' sexual orientation is better than chance. We discuss these here, focusing on four domains from which people draw cues to accurately perceive sexual orientation: how people adorn themselves (adornment), how they move (actions), how they sound (acoustics), and how they look (appearance). Moreover, we describe how certain factors, such as one's own sexual orientation, can constrain or facilitate this accuracy and describe the various negative social and occupational consequences that may result from cues that someone is gay or straight.

## **Keywords**

appearance, behavior, person perception, sexual orientation, voices

Perhaps the most frequent encounters that one has with others are fleeting and relatively anonymous. For instance, while walking down the street in a city or town, one might exchange glances with many strangers and even say "hello" to a few of them. Though seemingly unsubstantial, these interactions can reveal remarkable insight into the complexity of how the mind makes sense of other people and help to explain how people act toward each other. Indeed, a rich literature shows that people perceive and respond to others based on impressions made within a fraction of a second (Re & Rule, 2015). Here, we specifically discuss how subtle and minimal nonverbal information leads people to draw conclusions about others' sexual orientation, document the accuracy of these impressions, and explain the impact that this information can have on subsequent thoughts and behaviors.

Whereas some social groups brandish clear markers (e.g., age, race, and sex; Macrae & Bodenhausen, 2000), most of the groups to which people belong lack direct cues (e.g., sexual orientation). Still, an emerging literature has found evidence in support of the popular notion of "gaydar"—the purported ability of people to judge others' sexual orientation based on indirect cues in appearance and behavior. Though far from perfect, perceivers judge sexual orientation better than chance by relying on four basic channels of information: adornment (how

people adorn themselves), actions (how people move), acoustics (how people sound), and appearance (how people look). Of course, these cues appear simultaneously in real-world social interactions and, moreover, are sometimes inseparable (e.g., hairstyle is both an adornment cue and an appearance cue). Still, scientists have effectively examined the individual contributions of these cues to better understand how gaydar operates, correspondingly shedding light on the processes that underlie social judgments in general.

### Adornment

Overt signaling aside (e.g., wearing a T-shirt with a gaypride rainbow), people's volitional adornments can signal their sexual orientation indirectly. For instance, many women pointedly masculinize their appearance after coming out as lesbian by cutting their hair short, changing their style of clothing, using fewer cosmetics, and displaying less concern about their body weight (e.g., Krakauer & Rose, 2002). Whereas some gay men may seek to

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feminize their appearance by having thinner bodies than straight men (Conron, Mimiaga, & Landers, 2010), other gay men might distinguish themselves by adopting the clothing and grooming habits of distinct "tribes," or subcultures, within gay culture (e.g., "leathermen" and "bears"; see Hennen, 2008). Moreover, gay men typically spend more money on their presentation (including cosmetics, such as fragrances) than do straight men, often resulting in a more "refined" look (Rudd, 1996).

Indeed, this "gender inversion," in which gay men present as more feminine than straight men and lesbian women present as more masculine than straight women, occurs consistently across the cues that people use to perceive sexual orientation and represents one of the earliest and most pervasive theories about homosexuality (e.g., Ulrichs, 1870/1997). Moreover, even though sexual orientation and gender both fall on continua, perceivers do not distinguish bisexual men from gay men or bisexual women from lesbian women (Ding & Rule, 2012; but see also Lick, Johnson, & Rule, 2015). Thus, an apparent rejection of traditional gender norms conveys the impression that one is gay or lesbian.

## **Actions**

Indeed, gay men and lesbians' gender inversion is most apparent in their actions. For instance, perceivers accurately judge sexual orientation by detecting expressive, dynamic cues of gender inversion in brief video clips (no longer than 10 seconds) expunged of static appearance information (Ambady, Hallahan, & Conner, 1999; Rieger, Linsenmeier, Gygax, Garcia, & Bailey, 2010). Similarly, gay men and straight women sway their hips more when they walk, whereas straight men and lesbians swagger their shoulders more (Johnson, Gill, Reichman, & Tassinary, 2007). Fascinatingly, these cues to gender inversion appear as early as childhood (Rieger, Linsenmeier, Gygax, & Bailey, 2008), suggesting that gay men and lesbians' gender inversion may be deeply ingrained. Indeed, not only is sexual orientation detectable even when people attempt to conceal it (Sylva, Rieger, Linsenmeier, & Bailey, 2010), but gay men and lesbians differ from straight people in their uncontrollable physiological responses (e.g., pupil dilation while viewing sexual stimuli; Rieger, Savin-Williams, Chivers, & Bailey, 2016). Subsequent work has thus attempted to discern how basic some of the cues to sexual orientation might be.

## Acoustics

Numerous studies have dissected the nonverbal speech markers that distinguish gay and lesbian from straight people across multiple languages (e.g., Sulpizio et al., 2015), including their production of consonants and vowels as well as their overall pitch, among others (see Munson & Babel, 2007, for review). The most consistent finding is that people largely believe that gay men lisp more than straight men do (e.g., Mack & Munson, 2012) and one study found evidence to support this stereotype (Van Borsel et al., 2009; but also see Munson, 2010). More generally, people possess strong stereotypes that gays and lesbians sound different from straight people, even if these beliefs are not always accurate (e.g., Smyth, Jacobs, & Rogers, 2003). Beyond mere consensual opinions about how gay/lesbian and straight people sound, studies have suggested that they actually do speak differently (e.g., Linville, 1998), and a recent analysis aggregating previous findings showed that speech-based judgments of sexual orientation tend to be accurate (Tskhay & Rule, 2013). Thus, although more research is needed to clarify the exact nature of these speech differences, including whether they are innately present or adopted over time (Pierrehumbert, Bent, Munson, Bradlow, & Bailey, 2004), the extant research suggests that speech signals conveying sexual orientation do exist.

# **Appearance**

Most of what people convey nonverbally comes from their faces (see Re & Rule, 2015, for review). In one test of this, Rule and Ambady (2008) showed study participants photos of the faces of gay and straight men for either one-tenth, one-twentieth, or one-thirtieth of a second, at their own pace (about 1.5 seconds, on average), or for 6.5 seconds or 10 seconds, and then asked them to categorize each one as gay or straight based on their "gut instinct." Results showed that the participants categorized the faces better than chance in all conditions except that in which the face presentation was subliminal (i.e., onethirtieth of a second). Importantly, the faces did not significantly differ in their emotional expressions, and participants made the judgments accurately when the men's hairstyles were cropped out, suggesting that they relied on static aspects of facial appearance when making their judgments. Moreover, participants' accuracy did not significantly change or improve with additional viewing time. Thus, people's judgments of sexual orientation were similarly accurate regardless of whether they saw a man's face for 50 milliseconds or for as long as they liked.

## Automatic processing

The speed with which individuals accurately judge strangers' sexual orientation suggests that people may evaluate sexual orientation automatically (i.e., without awareness, intention, or control), similar to how people instantly process obvious group differences (e.g., age, race, and sex). To test this, Rule, Ambady, and Hallett (2009) asked participants to deliberate about their decisions before rendering their categorizations. Similar to

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the way in which consciously thinking about where to place one's feet can undermine the ability to dance smoothly, deliberation can also disrupt automatic perceptions. Rule et al. (2009) found that participants who thought carefully about their judgments categorized sexual orientation from faces no better than chance guessing, whereas those who judged based on their intuition performed significantly better. This interference suggests that people may judge sexual orientation automatically. Further research supported this by showing that people processed targets' sexual orientation from their faces without intention or control (i.e., when sexual orientation was never explicitly mentioned or required in the experimental task; e.g., Rule, Ambady, Adams, & Macrae, 2007).

# Facial features

Consistent with the idea that sexual-orientation judgments may be automatic, participants in many of these tasks expressed low confidence in their accuracy despite performing significantly better than chance. Researchers thus investigated the facial features that underlie peoples' accurate judgments to find out what cues might explain the perceivers' lack of insight about their accuracy. Rule, Ambady, Adams, and Macrae (2008) cropped photos of gay and straight men's faces to show only their eyes, mouths, or hairstyles and asked participants to judge the targets' sexual orientations and rate how accurate they thought their judgments were. Participants' accuracy exceeded chance guessing for all of these features but was most accurate for judgments of hairstyles. Moreover, participants were attuned to their accuracy only when judging orientation based on the men's hairstyles, not when judging based on their eyes, mouths, or even full faces. This suggests that people may knowingly employ some cues when judging sexual orientation (e.g., stylistic and volitional cues actively used by individuals to express their sexual orientation) but unknowingly extract information from other cues that are not malleable (e.g., cues in the eyes, mouth, and facial structure), again demonstrating automaticity in sexual-orientation judgments.

Supporting beliefs about gender inversion, subsequent research has shown that gay men have more feminine facial structures than straight men do (e.g., Skorska, Geniole, Vrysen, McCormick, & Bogaert, 2015). These differences may manifest across a variety of facial features. For instance, gay men seem to have shorter noses with smaller nostrils (similar to straight women), and lesbian women seem to have thick mouths and underbites (similar to straight men; Skorska et al., 2015). Yet the cues to sexual orientation go beyond static facial structure. Supporting stereotypes that link gayness to happiness and positive facial expressions to femininity, people accurately judge men with happier baseline facial expressions as gay (Tskhay & Rule, 2015). Moreover, people judge neutral

faces of gay men who have greater levels of internalized homophobia less accurately than neutral faces of gay men who have accepted their sexual orientation (Tskhay & Rule, 2015) and judge the orientation of younger adults more accurately than that of older adults (Tskhay, Krendl, & Rule, 2016). Thus, in addition to static differences between the faces of gay and lesbian versus straight individuals, facial cues to sexual orientation also involve expressive cues that are chronically displayed (e.g., gay men smiling more frequently) and cues in facial appearance that may change over time (e.g., through aging).

## **Differences Between Perceivers**

The target is only one-half of the equation that leads to a sexual-orientation judgment, however. A series of studies has therefore focused alternatively on identifying how different people systematically vary in their accuracy when judging sexual orientation. For example, individuals higher in anti-gay prejudice are less accurate (Rule et al., 2015), people more familiar with gay men are more accurate (but less confident about their judgments; Brambilla, Riva, & Rule, 2013), and gay and lesbian individuals often achieve higher rates of accuracy (though this varies depending on the cue; see Ambady et al., 1999; Rieger et al., 2010; Rule et al., 2007). Heterosexual women also judge men's sexual orientation more accurately when motivated to mate (Rule, Rosen, Slepian, & Ambady, 2011), suggesting that individuals' states influence their accuracy, too. Finally, studies have shown that people of different races and cultures judge sexual orientation relatively similarly for individuals from diverse cultural and racial groups, though this can vary somewhat depending on the information available (e.g., static faces vs. dynamic video clips; Rule, 2011; Rule, Ishii, Ambady, Rosen, & Hallett, 2011; Valentova, Rieger, Havlíček, Linsenmeier, & Bailey, 2011; see also Johnson & Ghavami, 2011). Overall, then, people showing a greater history of approach motivations toward gay and lesbian individuals (e.g., greater familiarity, less prejudice) tend to be the most accurate, but future research may discover that other differences between perceivers and targets also matter (e.g., personality, social class).

## Consequences

Perhaps more valuable than knowing that people *can* infer sexual orientation is understanding what they *do* with the information. Naturally, coming out as gay or lesbian can make one vulnerable to stereotyping, homophobia, and anti-gay prejudice (Buck & Plant, 2011; Lick et al., 2015). Yet attempting to conceal one's sexuality can impede functioning (Everly, Shih, & Ho, 2011). Even worse, concealment attempts are usually ineffective (Sylva et al., 2010), and perceivers encode sexual orientation without conscious knowledge or intent (e.g., Rule

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et al., 2007). Even when sexual orientation is never explicitly mentioned, experienced human resources professionals may confine individuals' employment opportunities to professions that match the stereotypes of their sexual orientation (e.g., gay men as nurses and straight men as engineers; Rule, Bjornsdottir, Tskhay, & Ambady, 2016). In other words, the current research suggests a troubling dilemma: One can honestly reveal a gay or lesbian identity and risk nearly certain negative social consequences, or bear the stress of attempting to constantly control the sexual-orientation cues that might leak out.

#### **Conclusions**

Here, we have reviewed some of the accumulated evidence demonstrating that straight, gay, and lesbian individuals differ in their adornment, actions, acoustics, and appearance in ways that reveal their sexual orientation. Data from a recent analysis of research in this area indicated that sexual-orientation judgments made on the basis of actions (M = 64%, SD = 8%), acoustics (M = 63%, SD = 18%), and appearance (M = 62%, SD = 9%) show similar levels of accuracy that significantly exceed chance guessing (i.e., 50%; Tskhay & Rule, 2013). These rates are especially noteworthy when considering how impoverished the stimuli used in these tasks have been (e.g., cropped photos of targets' eyes). Thus, accuracy may be even higher in real-world interactions where all of these cues are simultaneously available. Moreover, the realworld consequences of these judgments can impact the social interactions and life outcomes of people of all sexual orientations in various ways. Thus, although the public does not typically consider sexual orientation to define a "visible minority," the bulk of scientific evidence suggests that people can detect subtle cues that reveal sexual orientation and that they often do so without realizing it.

#### **Recommended Reading**

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- Ambady, N., Hallahan, M., & Conner, B. (1999). (See References). The seminal article showing evidence that people can accurately perceive sexual orientation from subtle and minimal nonverbal information.
- Rule, N. O. (in press). Perceptions of sexual orientation from minimal cues. Archives of Sexual Behavior. Advance online publication. doi:10.1007/s10508-016-0779-2. An extended and more technical discussion of how adornment, actions, acoustics, and appearance support perceptions of sexual

- orientation that addresses relevant controversies about the measurement of accuracy in judging sexual orientation.
- Tskhay, K. O., & Rule, N. O. (2013). (See References). An analysis and summary of all published and unpublished studies conducted before 2013 on the accuracy of judgments of sexual orientation (and other perceptually ambiguous traits) across a variety of channels of nonverbal information.
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## **Declaration of Conflicting Interests**

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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