nking—that is, expending effort to slowly form and reflect on impressions as they develop (Wen et al., 2020). One example of such analytical thinking is calculating an *algebraic impression*, which we consider next.

CALCULATING ALGEBRAIC IMPRESSIONS

A second way we form interpersonal impressions is to develop **algebraic impressions** by carefully evaluating each new thing we learn about a person (Anderson, 1981). Algebraic impressions involve comparing and assessing the positive and negative things we learn about a person in order to calculate an overall impression, then modifying this impression as we learn new information. It's similar to solving an algebraic equation, in which we add and subtract different values from each side to compute a final result.

Consider how you might form an algebraic impression of Ted Bundy from our earlier example. At the outset, his warmth, humor, and ability to chat easily strike you as "friendly" and "extraverted." These traits, when added together, lead you to calculate a positive impression: friendly + extraverted = positive impression. But when you accompany Bundy to the parking lot and realize his boat isn't there, you perceive this information as deceptive. This new information—Ted is a liar—immediately causes you to revise your computation: friendly + extraverted + potential liar = negative impression.

skills practice

Algebraic Impressions

Strengthening your ability to use algebraic impressions

1. When you next meet a new acquaintance, resist forming a general positive or negative Gestalt.
2. Instead, observe and learn everything you can about the person.

3. Then make a list of their positive and negative traits, and weigh each trait's importance.
4. Form an algebraic impression based on your assessment, keeping in mind that this impression may change over time.
5. Across future interactions, flexibly adapt your impression as you learn new information.

When we form algebraic impressions, we don't place an equal value on every piece of information in the equation. Instead, we weigh some pieces of information more heavily than others, depending on the information's *importance* and its *positivity* or *negativity*. For example, your perception of potential romantic partners' physical attractiveness, intelligence, and personal values likely will carry more weight when calculating your impression than their favorite color or breakfast cereal.

As this discussion illustrates, algebraic impressions are more flexible and accurate than Gestalts. For encounters in which we have the time and energy to ponder someone's traits and how they add up, algebraic impressions offer us the opportunity to form refined impressions of people. We can also flexibly change them every time we receive new information about people. But since algebraic impressions require a fair amount of mental effort, they aren't as efficient as Gestalts. In unexpected encounters or casual conversations, such mental calculations are unnecessary and may even work to our disadvantage, especially if we need to render rapid judgments and act on them.

STEREOTYPING

A final way we form impressions is to categorize people into social groups and then evaluate them based on information we have in our schemata related to these groups (Bodenhausen et al., 1999). This is known as **stereotyping**, a term first coined by journalist Walter Lippmann (1922) to describe overly simplistic interpersonal impressions. When we stereotype others, we replace the subtle complexities that make people unique with blanket assumptions based solely on their social group affiliation.

People stereotype because doing so streamlines the perception process. Once we've categorized a person as a member of a particular group, we can apply all the information we have about that group to form a quick impression (Bodenhausen et al., 1999). For example, suppose a friend introduces you to Steve, but all they tell you is that "Steve is Buddhist." Once you perceive Steve as "Buddhist," stereotypes about Buddhists might come to mind: perhaps you assume that Buddhists are quiet and contemplative; that they rarely laugh or joke; or that they speak in slow, solemn, and profound ways. In fact, Steve speaks quickly, laughs frequently, and loves horror movies and emo music. Similarly, say that your friend introduces you to Kelly, but all you're told is that she is a "feminist professor." Depending on your prior views, you might be surprised to discover that she was a marketing rep in industrial sales, loves the Chicago Cubs, and is a group fitness instructor.

As these examples suggest, stereotyping leads us to form flawed impressions of others—impressions that can lead to discriminatory behavior. One study of workplace perception found that male supervisors who stereotyped women as "the weaker sex" perceived female employees' work performance as deficient and gave women low job evaluations, regardless of the women's actual job performance (Cleveland et al., 2000). A separate study examining college students' perceptions of professors found a similar biasing effect for ethnic stereotypes. White students who stereotyped Hispanic people as "laid-back" and "relaxed" perceived Hispanic professors who set high expectations for classroom performance as "colder" and "more unprofessional" than white professors who set identical standards (Smith & Anderson, 2005).

Stereotyping is challenging to overcome, for at least three reasons. First, researchers have documented that categorizing people in terms of their social group affiliation is the most common way we form impressions, more common than either Gestalts or algebraic impressions (Bodenhausen et al., 1999). Why? Social group categories such as race and gender are among the first characteristics we notice about people upon meeting them. As a consequence, we often perceive people in terms of their social group membership before any other impression is even possible (Devine, 1989). The internet provides no escape from this tendency.

Without many of the nonverbal cues and additional information that can distinguish a person as a unique individual, people communicating online are even more likely than those communicating face-to-face to form stereotypical impressions when meeting others for the first time (Spears et al., 2001).

Second, most of us presume that our beliefs are valid. As a consequence, we have a high degree of confidence in the legitimacy of our stereotypical impressions, despite the fact that such impressions are flawed (Brewer, 1993). We also continue to believe in stereotypes even when members of a stereotyped group repeatedly behave in ways that contradict the stereotype. In fact, contradictory behavior may actually *strengthen* stereotypes. For example, if you think of yoga instructors as soft-spoken and gentle and you meet a loud and funny yoga teacher, you may dismiss their behavior as atypical. You'll then actively seek examples of behavior that confirm the stereotype to compensate for the uncertainty that the unexpected behavior aroused (Seta & Seta, 1993). As a result, the stereotype is reinforced.

self-reflection

Think of an instance in which you perceived someone stereotypically based on the information the person posted online (photos, profile information, tweets). How did the information affect your overall impression of them? Your communication with the person? What stereotypes might others form of you, based on *your* online postings?

Third, we're often consciously unaware that we even possess such beliefs, especially when the beliefs are negative. Instances in which people possess unrecognized attitudes and stereotypes that are discriminatory are known as *implicit biases* (Greenwald & Banaji, 1995), and such biases have been documented related to a range of issues and identities, including ethnicity, obesity, gender, and sexual orientation (Greenwald et al., 2009).

Knowing these challenges, how can we overcome stereotyping others? Given the speed with which inaccurate stereotypic labeling can occur, perhaps the most important step we can take is to *pause our perceptual process*. Rather than quickly

labeling someone based on cursory assessments of outward appearance, stop and ask yourself, “Am I placing this person in a group that prevents me from seeing them as a person?” Then put your self-reflection skills to work. Start by critically assessing your beliefs, reflecting on both the foundation of particular beliefs and your reasons for endorsing these beliefs, as well as what you think it would take to challenge these beliefs. Next, do your homework. Read a variety of materials, from a variety of sources, to increase your knowledge base—using this new, broader knowledge to reexamine your beliefs, rendering the unfamiliar more familiar, and reducing any uncertainty you may have. Finally, when interacting with others, keep in mind that a group is simply a larger collection of individual people, each with unique and varying attitudes, beliefs, and behaviors. Strive to see other people how *you* would like to be seen—as the unique individual you are.

AGE Fotostock

Think of a “banjo-playing bluegrass musician.” What image comes to mind? A white musician from Appalachia? Or Rhiannon Giddens (pictured), a multiracial MacArthur Genius Grant recipient who studied opera in college? (See the Focus on Culture feature: Intersectional Stereotyping and U.S. Folk Music for more information about her.)

focus on CULTURE

Intersectional Stereotyping and U.S. Folk Music

Rhiannon Giddens has made it her mission to shatter stereotypes, both about herself and about the roots of U.S. folk music.[2] Growing up in North Carolina, Giddens was stereotyped by peers confused by her interests and by her multiracial background (her father is white; her mother Black and Native American). In middle school, her Black peers labeled her a "hippie" because she was more interested in books than fashion, but she was dubbed "a Black nerd" by white girls when she enrolled in the School of Science and Math. Both groups called her "Pocahontas" when she joined Akwe:kon, a group dedicated to Native American music and dance.

As scholars Christopher Petsko and Galen Bodenhausen (2020) note, people commonly use such stereotypes when perceiving others. But because individuals typically belong to multiple groups simultaneously, the challenge of *intersectional stereotyping*—perceptually labeling complex people in simple ways—often is resolved by perceivers focusing on just one identity or intersection of identities. What determines which identity they focus on? Prominent markers of distinction are based on personal and situational cues. So Rhiannon Giddens was "a hippie" to Black peers because of her white identity and lack of fashion interest; a "Black nerd" to white peers because of her Black identity and love of math; and "Pocahontas" to both Black *and* white peers because of her Native American ancestry and Akwe:kon membership.

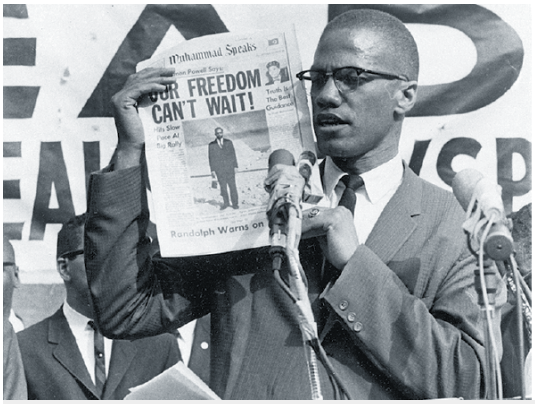
Giddens's lived experience of intersectional stereotyping has helped fuel her passion for correcting musical myths. People often misjudge folk music as "white," despite its Black roots in the United States. Even the banjo—Giddens's favorite instrument—is stereotyped as "white," despite the fact that its origin can be traced, at least in part, to Africa. As Giddens describes, "I grew up thinking the banjo was invented in the mountains, that string band music and square dances were a strictly white preserve and history—that while Black folk were singing spirituals, white folk were do-si-do'ing and fiddling up a storm, which led me to feeling like an alien in what I found is my own cultural tradition." Her career has thus served as a corrective: simultaneously shattering stereotypes about folk music, and reclaiming and transforming what it means to be a bluegrass musician.

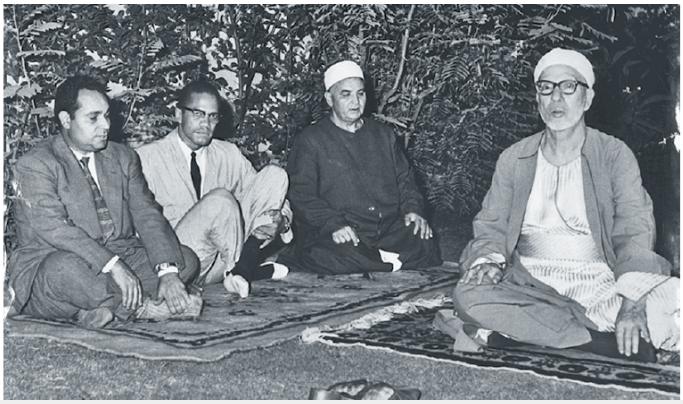
discussion questions

- What intersection of identities do you experience? Do you find that people tend to latch onto a specific one of your identities when they perceive you?
- Think of an instance in which you engaged in intersectional stereotyping. How did your narrow perception of the person impact your communication toward them? What could you have done differently to avoid this?

Improving Your Perception

> Explore empathy, world-mindedness, and perception-checking





Left: AP Photo; right: Bettmann/Getty Images

Malcolm X's perception changed after 1964, as revealed in this quote: "I believe in recognizing every human being as a human being, neither white, black, brown, nor red—when you are dealing with humanity as one family, it's just one human being marrying another human being, or one human being living around or with another human being."

Malcolm X is remembered for his fiery rhetoric denouncing white racism and his rejection of nonviolent protest as a means for dealing with oppression. Less well known is the marked change in his perception and communication that occurred following his visit to Saudi Arabia. He traveled to Mecca for a traditional Muslim hajj, or pilgrimage. During his visit, he worshipped, ate, socialized, and slept in the same room with white Muslims. In doing so, he was shocked to discover that despite their differences in skin color, they all shared similar degrees of religious devotion. The experience was a revelation and led him to reassess his long-standing belief in an unbridgeable racial divide between white and Black people. As he explained in a letter home: "On this pilgrimage, what I have seen and experienced has forced me to rearrange my thought-patterns and toss aside some of my previous conclusions" (Malcolm X, 1964).

Malcolm's transformation suggests important lessons for everyone interested in improving perception and communication. He came to appreciate others' perspectives and feel a strong emotional kinship with those he previously disparaged based on skin color. He also freely called into question his own perceptual accuracy by critically assessing his prior judgments and correcting those found to deviate from "the reality of life." These changes reveal two ways we can improve our perception and interpersonal communication: offering empathy and checking our perception.

OFFERING EMPATHY

Empathy is one of our most valuable tools for communicating competently with others (Campbell & Babrow, 2004). The word *empathy* comes from the Greek word *empatheia*, meaning "feeling into." When we experience **empathy**, we "feel into" others' thoughts and emotions, making an attempt to both understand their perspectives and be aware of their feelings in order to identify with them (Kuhn, 2001).

self-QUIZ

Test Your Empathy

Read these statements, marking the ones with which you agree. Total up your check marks, and interpret your score below.

To take this quiz online, visit LaunchPad: **launchpadworks.com**

Perspective-Taking

_____ Before I criticize a person, I try to imagine how I would view the situation in their place.
_____ I believe there are two sides to every question, and I try to look at both sides.
_____ I find it easy to see things from another person's point of view.
_____ I try to look at everybody's side of a disagreement before I make a decision.
_____ When I am upset with someone, I usually try to put myself in their shoes for a while.

Empathic Concern

_____ When I see a person being taken advantage of, I feel protective toward them.
_____ I often have tender, concerned feelings for people who seem less fortunate than I.
_____ I would describe myself as a fairly softhearted person.
_____ Other people's misfortunes disturb me a great deal.
_____ I am often touched by the things that I see happen to people around me.

Quiz adapted from James B. Stiff, James Price Dillard, Lilnabeth Somera, Hyun Kim, and Carra Sleight (1988). "Empathy, communication and prosocial behavior," Communication Monographs, 55(2). Copyright © 1988.

skills practice

Enhancing Empathy

Improving your ability to experience and express empathy

1. Identify a challenging interpersonal encounter.
2. As the encounter unfolds, consider how the other person is viewing you and the interaction.
3. Think about the emotions they are feeling.
4. Communicate perspective-taking, avoiding "I know" messages.
5. Express empathic concern, letting the person know you value their feelings.
6. Disclose your own feelings.

Empathy consists of two components. The first is *perspective-taking*—the ability to see things from someone else's vantage point without necessarily experiencing that person's emotions (Duan & Hill, 1996). The second is *empathic concern*—becoming aware of how the other person is feeling, experiencing a sense of compassion regarding the other person's emotional state, and perhaps even experiencing some of their emotions yourself (Stiff et al., 1988).

We often think of empathy as an automatic process beyond our control, something we either feel or don't feel. Consequently, we excuse ourselves from being empathic toward outgroupers or people we dislike. But research suggests that whether we feel empathy toward others depends largely on our **empathy mindset**—our beliefs about whether empathy is something that can be developed and controlled (Schumann et al., 2014). People who view empathy as developable and controllable are capable of feeling empathy for a broad range of others—even within

interpersonally challenging contexts, such as during conflicts, when arguing about political beliefs, or when asked to listen to a story of tragic loss told by an outgroup member. Those who believe empathy is an uncontrollable, natural response have difficulty experiencing empathy within such challenging encounters.

But experiencing empathy isn't sufficient in itself to improve your interpersonal communication and relationships. You also must convey your empathy to others. To competently communicate the perspe