Creativity is Collective

Personal experiences and character traits alone
may not be enough to produce a prodigy.
It takes a village

*By S. Alexander Haslam,
Inmaculada Adarves-Yorno and
Tom Postmes*

Illustration by Daniel Hertzberg

IN BRIEF

Groups play an essential role in creativity—not only in shaping novel products themselves but also in ensuring their appreciation and impact.

A sense of shared social identity provides the motivation for people to stick to a creative project and see it to completion.

People's perceptions of creativity depend on whether the creator is "one of us" or "one of them."

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HE BEST ACTORS, DIRECTORS AND SCREENWRITERS RECEIVE OSCARS; the top scientists, Nobel Prizes. Society doles out a multitude of awards every year to celebrate the creative achievements of individuals. Such events feed a popular conception that creativity is a gift only certain people possess and constitutes the apotheosis of individuality. Albert Einstein once observed, "Everything that is really great and inspiring is created by the individual who can labor in freedom." In these terms, the straitjacket of groups and of mainstream society is often thought to spell death for creativity. Many see the notion of group creativity as an oxymoron.

But let us think creatively here and challenge the basic assumption that the individual creator is the only critical component of the creative process. Indeed, let us consider the possibility that groups play an essential role in creativity—not only in generating and shaping novel products but also in ensuring their appreciation and impact. Although this idea might seem preposterous, it has garnered significant scientific support. The three of us, with our colleague Lise Jans, published a review of much of the accumulated data in an article summarizing the current thinking about groups and creativity. We concluded that it is problematic and unhelpful to separate the creativity of individual minds from the communities in which they flourish.

SOCIAL IDENTITIES

DESPITE THE ROMANTIC NOTION that innovation is the province of rugged individuals slaving away in splendid isolation, a scientific focus on individual personality has not yet yielded accurate forecasts of creative behavior. Scholars have scoured the biographies of creative geniuses to find experiences and character traits likely to have contributed to their greatness. Yet they have failed to identify characteristics that powerfully predict which young people will go on to become creative geniuses.

These efforts lack predictive power because they do not take into account the important role that social context plays. The nature and significance of innovation depend on the interaction between an individual's ideas and the time and culture in which he or she lives. If Bruce Springsteen had been born in 1749 rather than 1949, we would have been unlikely ever to hear *Born to Run.* Likewise, if Italian composer Domenico Cimarosa had been born in 1949 rather than 1749, his nearly 80 operas, including the masterpiece *Il matrimonio segreto,* probably would not have seen the light of day.

Such examples speak more generally to the influence that groups exert on creativity. In the 1970s psychologists Henri Tajfel and John Turner of the University of Bristol in England developed the concept of social identity, observing that across a range of contexts, people understand themselves not only as individuals but also as members of the groups to which they belong. So a cubist painter—we'll call him "Pablo"—may sometimes think of himself in terms of his personal identity (Pablo), but on other occasions he will understand himself as a cubist, his social identity. In yet other situations, his social identity might be defined with reference to his nationality, gender or religion or to his role in a specific team, club or organization.

Tajfel and Turner argued that when a particular social identity is psychologically salient, such that it determines a person's sense of who he or she is, the group that is the basis for that identity will exert a profound influence on that individual's

behavior. Furthermore, the way in which that person evaluates an action, regardless of whether it is his or her own, will reflect shared understandings of that group. This idea also applies to creative behavior and its evaluation. For example, as a cubist, Pablo is more likely to be interested in and to appreciate abstract representations of objects, and he will be more likely to paint in accordance with cubist guidelines and preferences.

Social identities also grant people a shared perspective, as well as the ability and motivation to engage in mutual social influence. But when people act in terms of their unique personal identity, they are likely to display creativity by deviating from the norm. In an experiment published in 2007, the three of us asked some college students, who were working in groups, to create posters about "reasons for going to university" and other groups of students to make posters about "fashion at university." With these instructions, we implicitly led the students toward certain group norms. Those told to focus on "reasons" naturally made posters dominated by words, and those directed toward "fashion" created posters populated largely by images.

In a second phase of the study, which came three hours later, we asked the same participants to create a leaflet to advertise the university, a task that could be accomplished equally well with words as with pictures. This time some of the students worked in groups, whereas others made the leaflet on their own. Here we were interested in whether this creative task would be shaped by the group norm that had been established in the earlier phase. It was. We found that when working in a group, participants' creations were generally in line with the group norm established during the poster-making project, whether it centered on images or words. When working individually, however, participants typically departed from the norm of the group they had previously belonged to. Such findings, and those of similar studies, support the claim that the nature of people's creative activity depends on group norms.

MUSICAL GROUPS—such as the Beatles (*above*)—as well as groups of writers, scientists and others, can fuel creativity when group members receive encouragement and constructive feedback from one another.

EVEN RADICAL EFFORTS to depart from the mainstream, such as those that were promulgated by punk rock band the Sex Pistols (*above*), get much of their momentum from the culture they reject.

COLLABORATIVE SPIRIT

EVIDENCE THAT SOCIAL IDENTIFICATION shapes creativity might suggest that groups simply stimulate convergent thinking and conformity. Indeed, back in the 1970s, Irving Janis of Yale University proposed that a desire to conform to the group leads to a lack of critical thinking and faulty decision-making—a phenomenon called groupthink that he considered the antithesis of creativity. But although group dynamics can sometimes be

stifling (or worse), they do not inevitably produce irrational choices or blind support of the group's ideas.

For one thing, group standards shape only one facet of an individual's creativity. Cubist painters, for instance, may use abstract geometric figures in line with the customs of cubism, but their artwork is likely to diverge on other dimensions—for example, in its use of certain colors or themes—that are not restrained by the cubist style.

In addition, far from repressing new ideas, collaborative discussions with friends, colleagues or peers can foster them. As the late psychologist Vera John-Steiner of the University of New Mexico noted in her 2000 book *Creative Collaboration,* small groups—the Beatles, Bauhaus or the Bloomsbury Group, for instance—routinely spearhead innovation by bouncing ideas off one another as they look for new ways to tackle artistic, theoretical and practical problems.

What is more, solidarity and conformity are essential for creative movements to progress because they allow individuals to cohere around a shared enterprise. In a study published in 2006, we explored this idea by asking small groups of college students to participate in a mock planning process directed at the building of an innovative municipal child care center. Prior to the study, some of the groups went through a procedure that instilled a strong sense of shared social identity, whereas other groups were encouraged to think of themselves as individuals. The groups then met three times over an hour and a half to discuss the fictitious project, which encountered mounting difficulties. First, labor costs increased, and then an environmental impact study was needed. Next, they learned that the children's sandbox had traces of toxic elements, parents were threatening to sue, and officials were holding up building approval.

We found that the groups that had initially developed a shared social identity stayed upbeat about the project and continued to support it even as it ran into trouble. On the other hand, those coaxed to see themselves as individuals lost their enthusiasm for the child care center and increasingly argued to abort the project as time went on. In other words, social—but not personal—identity bolstered enthusiasm and encouraged people to stay with the creative task in the face of challenges. More generally, people seem to need a sense of shared social identity to stick to their creative guns and see revolutionary projects—whether in science, industry, the arts or politics—to completion.

Being solidly committed to the group does not make a person blind to its faults, either. Sometimes the opposite appears to be the case. When norms are harmful for a group, it is actually the members who feel most connected to the group who are the

EVEN THE MOST creative people need followers. The art of painter Vincent van Gogh (*self-portrait above*) received widespread recognition only after his death, when it inspired a burgeoning group of artists, the Postimpressionists.

most motivated to debate and renegotiate those norms. In research published in 2012, psychologists Dominic J. Packer of Lehigh University and Christopher T. H. Miners of Queen's University in Ontario asked students to write an opening statement before a meeting in which they were going to discuss alcohol use with their peers, among whom a tendency to party was the norm. The researchers found that the more the participants identified with the group, the more their statements involved creative challenges to that group norm, possibly because those high identifiers felt the greatest responsibility to the group or the most able to effect a transformation. Either way, the research shows that engagement with groups can help stimulate creative ideas for change.

GETTING ATTENTION

GROUPS ALSO PLAY a vital role in the appreciation of groundbreaking achievements. Without tapping into group identity, innovative artists, writers and scientists may well go unrecognized. In his lifetime, Vincent van Gogh could find hardly anyone to buy his unusual paintings. His work garnered attention only when, after his death, a circle of artists, the Postimpressionists, saw his paintings as indicative of a distinctive style that they wanted to emulate in their own work. Similarly, in 1961 the computational models of then graduate student Yoshisuke Ueda were initially barred from publication by his supervisor at Kyoto University because they were seen to be too avant-garde. Once a community of scientists had formed who appreciated Ueda's work, however, his theories transformed the newly emerging field of chaos theory.

Indeed, people are far more likely to support a creative project or endeavor if its instigator is a member of their group. Such insider status helps to dispel the uncertainty that new products introduce by disrupting the status quo. Insiders in organizations are typically antagonistic toward outsiders' contributions, and people often display ethnocentric bias when judging artistic creativity as well. In the performing arts, judges may preferentially bestow accolades on citizens of their own country.

For example, both the U.S. Oscars and the British Academy of Film and Television Arts (BAFTA) awards are meant to judge the objective quality of films. But in an archival study published in 2017 in the *British Journal of Psychology,* psychologist Niklas Steffens and his colleagues at the University of Queensland in Australia found that since 1968, U.S. actors and actresses have received about 80 percent of the Oscars for best actor and best actress but less than half of the BAFTA awards for the same categories. At the same time, British performers have received nearly half the BAFTA awards for best actor or actress but just over 10 percent of the corresponding Oscars.

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Experiments confirm that people's perceptions of creativity depend on whether the creator is "one of us" or "one of them." In one study published in 2008, the three of us asked 50 people from the U.K. to evaluate suggestions about the future format of a television show that we said had come from a British Web site. We told another 50 participants that the same ideas had come from a Dutch Web site. In part two of the study, we asked 125 British students to evaluate works of art that we attributed to either British or Dutch college students. In both cases, participants who thought their fellow Brits, the in-group, had authored the products in question judged them to be significantly more creative than did those told that Dutch citizens had generated the same items.

What people actually mean by creativity—and hence how they measure and reward it—also depends on cultural identity. In work published in 2008, psychologists Susannah Paletz, now at the University of Maryland, and Kaiping Peng of the University of California, Berkeley, conducted a survey that included more than 300 students from China and the U.S. to find out what they thought made certain products creative. They tested two very different types of products: a course textbook and a meal cooked by a friend. They found that American students' judgments of creativity were swayed more by the perceived appropriateness of a product (whether it was, in some sense, good), whereas the judgments of Chinese students were based more on whether the product was something they personally desired. The Americans thus saw creativity more as a matter of taste, and the Chinese saw it more as a matter of appetite.

The tendency for creativity judgments to reflect our social identities also explains some gender bias. In a 2006 paper, psychologist Thomas Morton and his colleagues at the University of Exeter in England reported that male scientists viewed theories explaining how men were superior to women to be better and more creative than those arguing that women were superior to men. This pattern was reversed for female scientists. Both groups also believed that the creative research that supported their own identity-based preferences was deserving of more research funding.

For their part, good creators have a strong sense of their audience and gear their solutions or products to the perceived needs and values of a particular group. Even when work is inspired by the need to separate from a group, a successful creator is familiar with the group from which he or she wishes to deviate.

For example, in the 1970s punk rock bands such as the Sex Pistols wanted to break away from mainstream popular music. Sid Vicious, the Sex Pistols's bassist, called on people to "undermine [the establishment's] pompous authority, reject their moral standards, make anarchy and disorder your trademarks." Ironically, then, the musical establishment of the time gave his band a particular creative force (the desire to rebel), as well as a specific trajectory (something specific to move away from) and appeal (for those disaffected with mainstream popular music). Accord-

PABLO PICASSO (*above*) likely thought of himself as a cubist painter as well as an antifascist and a Spaniard. Depending on the context, different social identities will influence our behavior.

ingly, as with other successful creative efforts, the Sex Pistols's attempts to break the mold were not quite so random and anarchic as their progenitors would have us believe.

TRANSFORMING COMMUNITIES

AS MEMBERS OF GROUPS, our creative behavior and evaluations of others' innovations reflect a desire to extend the values of those groups and to challenge the values of outsiders. To be celebrated rather than vilified, innovators need to know the norms they are departing from. Eventually they also need an audience willing to embrace the new ways of seeing or behaving made possible by their work. To meet with success, therefore, creative endeavors must transform communities. These newly formed audiences then drive the cultural change that novel endeavors spark.

Popular thinking on this topic, however, hews closer to Pablo Picasso's. "Disciples be damned," he once said. "It's only the masters that matter. Those who create." Yet as the curators of a major exhibition at London's National Gallery noted in 2009, Picasso's own work owed much to earlier modes of painting that he eventually rejected, and without admirers his work would have had little influence on society. His work was therefore not about laboring on his own to create everything anew. Rather as Welsh painter Osi Rhys Osmond, who died in 2015, put it in a review of the exhibition, it was a collaborative exercise in "reinventing the familiar."

We should still study and celebrate the creative genius of individuals. Nevertheless, we need to recognize that the psychology of creativity also involves the groups in which creators develop their work, whose boundaries they seek to extend and through which they have their sway. "I did it my way" may be an appealing anthem for great creators, but as with Frank Sinatra, their success generally also requires promoters, producers and an approving public. SA

S. Alexander Haslam is a professor of psychology and Australian Laureate Fellow at the University of Queensland in Australia.

Inmaculada Adarves-Yorno is a senior lecturer in leadership studies at the University of Exeter in England.

Tom Postmes is a professor of social psychology at the University of Groningen in the Netherlands.

MORE TO EXPLORE

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