REFLECTIVE ESSAY

Post-Truth's Effect on the Brain and the Future Self: A Critical Communication Pedagogy Response

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Post-Truth Messages and the University

The university was designed as a place to examine ideas and seek truth. Throughout most of its history, the university has largely been able to attain this goal. However, seeking truth has become more difficult in the past decades due to the proliferation of post-truth messages. Post-truth refers "to content featuring the style of conventional news intended to deliberately misinform" (Waisbord, 2018, p. 1866). These messages are carefully constructed pieces of disinformation that appeal to people's previously existing beliefs. Although many people are affected by post-truth, students are one group that is especially impacted by these types of messages (Barzilai & Chinn, 2020). Although all students are susceptible to being influenced by post-truth messages, this discussion will focus on traditional college-aged students, the group with which university faculty have the most contact. Hegemonic forces in society recognize that they can have success in crafting messages directed at this particular demographic because students often experience difficulty differentiating between messages grounded in truth and fiction. College-aged students also comprise a group whose brains are still developing and are malleable (Abrams, 2022). While this is a positive trait, young people's developing brains may make them more susceptible to ideas that are not factual.

Additionally, college-aged students are avid users of the internet, social media, and similar outlets. Thus, organizations recognize that they can reach large numbers of young people by producing disinformation on these platforms. Because of this, students are exposed to a vast array of post-truth messages on an unprecedented scale. They are exposed to persuasive messages that hegemonic forces carefully craft to manipulate students and make them believe falsehoods. These messages are communicated in ways that

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appeal to their previously held beliefs, which students hold as sacrosanct. Because neoliberal capitalism has inculcated contemporary learners with the idea that they are all rational consumers of products and information (Kahl, 2018), they falsely believe that they are equipped to make rational decisions regarding the veracity of (post-truth) messages. As a result, "students today favor anecdotal evidence and beliefs over facts and evidence" (Hilton, 2019, p. 3).

Persuasive messages are designed to accomplish many goals. Some of these goals are innocuous, in that they simply are developed and communicated in ways that encourage people to make choices, make purchases, or change/alter their ideologies. These messages are not created with nefarious intent. Rather, they are crafted to encourage people to make changes in their lives, with their minds, or through their economic choices in order to produce benefit for individuals. These messages generally have individuals' well-being in mind. Post-truth messages, however, run counter to the goals of ethical persuasive messages. Post-truth messages are inimical in nature and intent. Post-truth messages are created to mislead individuals so that they will make choices that work against their best interest. Post-truth messages are designed for one purpose—to maintain or to increase power for hegemonic groups in society.

The coal industry represents an example of a group that develops post-truth messages. In an attempt to deny the climate-related dangers of burning its product, the industry produces post-truth messages by utilizing a rhetorical technique called "corporate ventriloquism." Like a ventriloquist, the industry "throws" its voice through front groups in the attempt to make it appear that many organizations support its actions (Schneider et al., 2016). This type of message propagates falsehoods and is often successful in creating doubt in the minds of people who are unsure of the effects of burning coal on the environment. Additionally, the side effect of these types of messages is that other groups become marginalized in the process, such as organizations fighting against climate change. Because of the nefarious ways in which post-truth affects students, examining post-truth and how it is communicated becomes an important area of examination in the classroom. Post-truth messages affect how young people think about ideas, how they respond to critiques of those ideas, and how they analyze messages in an educational environment.

Overview

The following sections will build upon the ways in which post-truth messages are communicated and why they are effective in creating doubt and encouraging disbelief of information that is factual. Specifically, two cognitive phenomena will be presented that explain the reasons that people, especially college students, can have difficulty discerning messages that are inherently false. Finally, the article will present critical communication pedagogy as a means by which instructors and students can dialogue about post-truth messages with the goal of recognition and resistance.

How Post-Truth Is Communicated

Numerous entities construct post-truth messages. Although individuals can create these types of messages, the most destructive messages are created by powerful groups, such as governments, corporations, special interest groups, and religious groups who possess the power, both cultural and economic, to influence large groups of people through their messages. Because of this, these groups have the ability to advance their agendas by communicating in ways that confuse and mislead students

to acquiesce to power's needs and wants. Although not all powerful groups create hegemonic messages, some groups develop wide-ranging post-truth campaigns to gain compliance from the general public. Many of these messages are directed toward young people because of their connectedness to the internet. Specifically, many post-truth messages are directed at post-millennials, who have been digitally connected for their entire lives (Nee, 2019). Thus, a multiplicity of messages on traditional social media platforms such as Facebook and X (formerly Twitter) and also visual and private messaging apps (Anderson & Jiang, 2018) are created to influence this group.

Why Post-Truth Messages Are Effective

All people, including students, are prone to believing and internalizing post-truth messages for various reasons. Two important phenomena exist that prevent them from recognizing and resisting these messages. These reasons impair students from adequately processing and communicating about post-truth messages. Additionally, they prevent young people from thinking too far into the future to consider how making choices about post-truth messages today will affect their future selves. Because of this, students who internalize post-truth messages can become marginalized by them when they adhere to the false ideas they present. These phenomena, cognitive load and temporal discounting, will be discussed in the following sections.

Cognitive Load

Social media, especially when consumed in excess, is cognitively taxing. When people consume social media in excess, they are more likely to be influenced by it than those who have consumed smaller amounts. This phenomenon, called cognitive overload, makes social media users mentally exhausted to the point that they become "easy prey for advertisers" (Pittman, 2023, para. 1). This occurs because the information overload they receive makes students more prone to believe false information because they no longer possess the cognitive energy to fully examine the message for its veracity (Pittman & Haley, 2023). Like advertisers, producers of post-truth attempt to "sell" an idea to weary consumers of information who have been overwhelmed with information and not able to examine it clearly and rationally. When post-truth messages cause learners to exceed their cognitive load, they are more likely to fall victim to them as their capacity for clear and rational thought is decreased. Producers of post-truth messages create cognitive overload to propagate false messages more easily into students' minds. Thus, the technique of message bombardment is quite effective because young people experience a form of cognitive impairment and are more likely to adopt the message or comply with it.

For example, students are bombarded by post-truth messages relating to climate change on some right-leaning news outlets and social media. These messages suggest that no action is necessary to curb carbon emissions and that burning fossil fuels is a harmless procedure. The proliferation of these messages often cloud their minds, making clear dialogue and discernment about the issue difficult in an educational setting. In this case, cognitive overload becomes an important pedagogical problem because careful, well-reasoned critique of ideas becomes much more difficult when learners' minds are overburdened and overtaxed by this type of disinformation. Because of the cognitive load that post-truth places on students, the communicative goal of becoming an effective consumer of communication becomes more difficult to reach. In this way, young people become marginalized by post-truth messages.

Temporal Discounting

Another reason that students experience difficulty resisting post-truth messages is that they often do not think about how these messages will affect them in the future. People are affected by a phenomenon called temporal discounting (Ersner-Hershfield et al., 2009). When students, who are usually young, consider an action that will not affect them until much later in life, they often discount the action because they feel connected to their current self and view their future self as they would a different person. Thus, people are prone to discount what their future self needs in favor of the needs and wants of their current self. Because of this, people actually display a lack of empathy for their future selves—a byproduct of neoliberalism (Kahl, 2023) and its emphasis on post-truth.

Post-truth messages often relate to problems that may not become extremely serious until a future date. For example, although the effects of climate change are currently occurring, many people do not directly see or experience many of them. Thus, they may not view them as deleterious in the current moment. Thus, post-truth messages about climate change are effective for two reasons. First, temporal discounting makes young people more prone to accepting post-truth messages that state that climate change is not real (or not influenced by humans), oil production should continue and grow, electric cars are superfluous or even negative, and liberally minded politicians are working against the common good by limiting the burning of fossil fuels. Because young people feel less connection to their future selves in 50 years versus 5 years (Pronin et al., 2008), they are less likely to desire to make a change that may not affect them for many decades. Therefore, the temporal discounting phenomenon can make college students unable to recognize, or care, how their future selves will be affected by a problem like climate change.

A second, related reason that post-truth messages about climate change are effective is that students, who hold opaque views of how climate change will affect their future selves, are more susceptible to the persuasive strategy of benefits (Kahl, 2012). People are psychologically susceptible to accepting persuasive messages that promise pecuniary (or other non-monetary) gain. The neoliberal society in which they were raised exacerbates this problem. Post-truth messages about climate change often focus on the benefits of not addressing the problem. Instead, they emphasize the short-term benefits of increased oil production. Young people, who often lack financial resources, are likely to be persuaded by messages indicating that they could spend less on gas if production were increased. Harari (2016) explains this process: "When the moment comes to choose between economic growth and ecological stability, politicians, CEOs and voters almost always prefer growth" (p. 20). Post-truth messages purporting monetary gain psychologically influences students to not only make the choice that benefits them, but also crave more (Harari, 2016). Because temporal discounting causes people to "consider the future self as a stranger" (Ersner-Hershfield et al., 2009, p. 85) they tend not to think about how current actions will affect them. Thus, when they do not think of a possible future in which the environment is much worse due to action that could have been taken now, students are more likely to fall victim to post-truth messages today.

As mentioned previously, post-truth communication has pedagogical significance because one of the university's primary goals is to aid students in examining messages, evaluating them, and seeking truth. Post-truth messages, however, hinder the university's goals in doing so. The discipline of communication is well suited to undertake the task of aiding young people in learning to recognize and resist post-truth messages. The discipline's rhetorical tradition, along with its emphasis on message evaluation, allows

it to be on the forefront of resisting post-truth through effective pedagogy. To counter the problem of post-truth, a pedagogical approach is necessary that involves both effective communicative practices that promote dialogue about post-truth/hegemony. The following section will discuss how critical communication pedagogy can function to help students to recognize and resist post-truth messages and the cognitive impairments that they cause.

Resisting Post-Truth Messages Through Critical Communication Pedagogy

Critical communication pedagogy (CCP) is a response to power through instruction. Unlike other forms of pedagogy, it is focused on learning by emphasizing the ways in which knowledge can be used to ameliorate hegemonic relationships in society (Fassett & Warren, 2007). Thus, it works to help students to acquire knowledge and apply that knowledge to reduce marginalization. CCP is situated at the intersections of critiques of power (critical), the meaning of messages that promote hegemony (communication), and sound instructional practices that can be used to resist power (pedagogy) (Kahl, 2021). CCP is predicated on praxis. Thus, it does not simply challenge people to learn about power; it also challenges them to take action to ameliorate its presence. When utilizing CCP, learners engage in dialogic interaction in order to reach understanding and develop action.

Resisting Cognitive Load Through CCP

The proliferation of neoliberally driven post-truth messages causes recipients to become overwhelmed and experience a kind of cognitive fog that prevents them from evaluating these messages clearly. As discussed previously, the myriad post-truth messages crafted by the petroleum industry that claim that burning fossil fuels have little to no impact on the Earth's climate can cause students to temporarily lose their ability to critically evaluate these messages, even though the science overwhelmingly concludes otherwise. Unlike the mental drain that post-truth messages cause, CCP presents a means for learners to approach information with calmness and rationality. CCP challenges students to carefully examine specific post-truth messages and dialogue about them. In doing so, they can (1) evaluate intent of the message, both hidden and overt, (2) discuss the communicative techniques the hegemonic creators of the messages use to exert power by making consumers acquiesce to their desires, and (3) determine ways in which to respond to these messages to reduce their hegemonic power.

Instructors can challenge students to apply CCP in this way by presenting them with a message created by a hegemonic force such as the petroleum industry. Following the three steps outlined above, instructors can begin by asking students to analyze the message in groups, working to determine if the message is an example of post-truth with covert and/or overt intent (step 1). If the message is deemed to be an example of a post-truth message, instructors can ask students to dialogue about the ways in which the creators of the message have falsified information to obfuscate the truth. Further, students can discuss how the communicative techniques employed by the petroleum industry might make consumers of the message take a certain action or take no action (step 2). Finally, instructors can discuss with students about ways that they can resist the message. For example, students might discuss how they can dialogue with others who may have been influenced by such messages. In this way, they embody the Freirean (1970) principle of conscientization/engaged action (step 3). This reflexive process asks students to evaluate post-truth messages calmly and deliberately, such as those related to climate change, in order to counteract the overwhelming and rapid pace with which they are presented with them. Doing so gives them a clear mind which they can then make well-reasoned decisions about the veracity (or lack of) of the messages.

Resisting cognitive load through the process of dialoguing about the post-truth messages and their hegemonic intent, CCP asks learners to "disrupt the expected" (Fassett & Warren, 2007, p. 104). This disruption is a way in which learners can, through dialogic interaction, act rationally by clearing their minds from the cloud created by post-truth messages and examine their "participation in power" (Fassett & Warren, 2007, p. 103) as well as ways to resist it. In this way, CCP acts as a type of communication activism which "provide opportunities for students to exercise (action) within and beyond the classroom" (Golsan & Rudick, 2018, p. 18).

Resisting Temporal Discounting Through CCP

Post-truth messages also cause students to consider only the present and how they can benefit from decisions made about today. Because of this, post-truth messages inculcate them to ignore tomorrow and how today's decisions will impact their future selves. This type of thinking is a hallmark of neoliberalism and its pursuit of immediate monetary gain in the present. Thus, it rewards immediate pecuniary success. Neoliberalism also punishes economic failure, as people cannot profit now from decisions that do not show benefit for decades.

CCP acts as a response to the temporal discounting that neoliberal post-truth messages encourage. Unlike the temporal immediacy that post-truth fosters, CCP challenges learners to "slow down, to subject our experiences to critical examination, to expose life's mundane qualities for how they illustrate our participation in power" (Fassett & Warren, 2007, p. 103). Thus, instructors can employ CCP to challenge students to slow down their thinking about post-truth messages and the concomitant decisions they make because of it. Encouraging young people to dialogue about the long-term benefits of decisions versus the ramifications of short-term, and short-lived, gains allow them to consider the benefits of long-term thinking about themselves, their decisions, and how their communicative actions will affect their future selves. For example, instructors can apply principles of CCP by dialoguing with students about how taking immediate action regarding climate change will affect their future selves encourages longitudinal thinking, rather than myopic thinking that neoliberal post-truth encourages. Instructors can facilitate such conversations by asking students to engage in short reflexive writing in which they compare and contrast a future world in which no action has been taken to ameliorate climate change versus a world in which each person took some action. Then, groups of students can share and dialogue about their visions. This action can result in "applied forward reasoning," an approach to addressing problems today instead of having to look backward when it is too late to do so (Levin et al., 2012, p. 123). Neoliberal post-truth messages ask students to ignore the future in order to mitigate the chances of immediate failure. Alternately, CCP as a form of reflexivity, challenges students to consider how past and current action can affect future action. When they learn to think about future action conducted by their future selves, they can begin to consider sustained action toward change (Fassett & Rudick, 2023) instead of inaction in the present.

Conclusion

Post-truth messages have been present in our society for centuries, but their prevalence has become greatly exacerbated in recent decades due to the ease in which they can be disseminated throughout society. Neoliberal entities carefully craft these messages to accomplish economic goals and employ nefarious tactics when disseminating them. This can result in cognitive overload and temporal discounting for

recipients such as students, a group that is especially susceptible to believing and internalizing these messages. These messages can have harmful effects on the mission of the university because they interfere with the pursuit of truth. However, despite the challenges these messages present, CCP presents a means by which young people can learn to interact with these messages in a calm and reasoned way. Well-reasoned dialogue about these messages can have the effect of better meeting the Communication discipline's goal of utilizing pedagogy that evaluates messages to effectively judge their meaning and veracity. When students learn to overcome the cognitive overload and temporal discounting that post-truth messages create, they can begin to resist them and enact meaningful change in society.

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