

Attribution and Argumentation  
Origins and Maladaptive Consequences

Drawing from attribution theory and argumentative theory, this article will examine explanations for both evolutionary and cultural processes that not only possibly direct, but also may constrain cognition in a maladaptive modern-day outcome. In the past, cognitive adaptive processes, as well as culturally acquired norms, beliefs, or representations, may have provided certain advantages. However, if left unchecked in the context of modern society, these same processes may, to a certain extent, lead to maladaptive negative consequences such as unnecessary forms of excessive social conflict and the neglecting of efforts which can produce longer-lasting positive results for society (Sherman & Cohen, 2002). In the social sciences, attribution theory is primarily regarded as the study of the ways that humans implicitly and explicitly attribute the causes of the behaviour of others (Hewstone, 1989; Jones, 1971). With regards to social attribution theory, this article will examine the asymmetric attributional tendency when determining the cause of the negative behaviour of in-group versus out-group members (Jones & Nisbett, 1971; Pettigrew, 1979; Ross, 1977). In the social sciences, argumentative theory is primarily regarded as the study of the ways that humans implicitly and explicitly strive to advantageously navigate social communication (Mercier & Sperber, 2011). With regards to social argumentative theory, this article will examine the asymmetric argumentative tendency to apply significantly more effort in challenging the knowledge and explanations of reality from out-group members while applying less effort to the knowledge and explanations for the in-group (Sperber, 2010). This article will conclude with a summary and some potential strategies for mitigating the maladaptive impact.

### **Attribution Theory**

Fritz Heider (1944; 1958) was one of the first to document how an observer will sometimes use the internal characteristics of others, such as dispositional or personality traits, as heuristic mental shortcuts when attempting to attribute the cause of their behaviour: “As a dispositional property, a personality characteristic enables one to grasp an unlimited variety of behavioural manifestations by a single concept. A description of a manifold of interpersonal relations becomes far more systematically simple by reference to such enduring characteristics” (1958, p. 30). In other words, if an out-group member engages in a perceived negative behaviour, such as reckless driving, then it may be quicker and easier to blame the negative behaviour on proximate internal characteristics of the individual, such as self-centeredness, instead of attempting to determine more ultimate source causes of that behaviour, such as a difficult childhood, peer pressure, or a lack of education. Humans may

possess an asymmetric tendency to rely on this heuristic of attributing cause to the proximate internal characteristics of out-group members, for negative behaviour, while also naturally applying more effort to determine more ultimate external causes for in-group members (Jones & Nisbett, 1971; Pettigrew, 1979; Ross, 1977).

### **Attribution Evolution**

From an evolutionary perspective, the heuristic side of asymmetric attributional tendency (blaming out-group negative behaviour on proximate internal out-group member characteristics) may have developed as a direct adaptation as result of the need for advantages when navigating complex social environments. Error management theory (EMT; Haselton & Buss, 2000) suggests that we may have evolved many tendencies or biases due to the survival advantages these tendencies brought us in our past. EMT basically employs the “better safe than sorry” idea to significant recurring social interactions and scenarios throughout human history. For instance, it may be safer, in an ambiguous social interaction, to make the error of believing a harmless individual is dangerous than to believe a dangerous individual is harmless.

Haselton and Nettle (2006) suggest that EMT can help to explain multiple judgment errors involving social interaction and attribution such as an attention bias toward negative traits and behaviour, a tendency to assume negative behaviour in ambiguous scenarios, a tendency to assume intentionality in ambiguous scenarios, a tendency to assume negative dispositional traits when negative behaviour is present, and a tendency to assume that negative dispositional traits are ingrained. All of these possible evolved tendencies concerning attribution may have given our ancestors an adaptive advantage to avoid or counter potentially detrimental individuals at the expense of the smaller cost of mistaking beneficial individuals as being detrimental. Unfortunately, these possible survival adaptations may also lead to a neglect of more ultimate source causes of the negative behaviour of others.

The illusory-causation phenomenon provides another direct adaptation explanation for the asymmetric attributional tendency. This phenomenon is the idea that attributions are often made using the most available or attention-grabbing stimuli (Lassiter et al., 2002; Taylor & Fiske, 1975). Attempting to determine the more ultimate causes for the negative behaviour of out-group members, likely requires additional time, energy, and cognitive capacity. An exhausted individual with limited resources may not be able to spare time, energy, and capacity when encountering a potential aggressor. It may be safer to quickly blame and avoid, counter, or punish an individual acting aggressively or inappropriately than to reason over

possible ultimate causes for that behaviour. In the group scenario, quick punishment versus long-term rehabilitation for counter-productive behaviour may have been more efficient as it may have often quickly eliminated the negative behaviour without requiring the precious time and resources of determining the more ultimate causes.

Haselton and Nettle (2006) also discuss how the illusion of control may be an evolved tendency which provided adaptive advantages to our ancestors. The illusion of control or illusion of freedom is the tendency to overestimate the degree to which an individual has influence over any given outcome (Kelley, 1973; Langer, 1975; Thompson, 1999). Similarly, the illusion of intentionality is the tendency to overestimate the degree to which behaviour is intentional (Gopnik, 1993). These tendencies may function as adaptive cognitive coping mechanisms in order to handle the potential stress and anxiety that can arise from the complexity and uncertainty of reality (Alloy & Clements, 1992; Brosschot et al., 2016). Maintaining a strong sense of autonomy or internal locus of control, may help with reducing the stress and anxiety of uncertainty (Brosschot et al., 2016). These tendencies may naturally support a relatively strong perception of autonomy in humans and a subsequent reinforcement of the focus on proximate internal characteristics and blame when attributing the cause of the negative behaviour of others.

### **Attribution Cultural**

From a cultural perspective, there may be popular norms, beliefs, or shared representations that feed off of, as well as reinforce, the asymmetric attributional tendency. One of these representations may be the just world hypothesis (Lerner, 1971; Lerner & Miller, 1978), or just world belief (Halabi et al., 2015; Loseman et al., 2012). For the most part, the just world hypothesis is the belief that individuals eventually receive rewards for positive behaviour and punishment for negative behaviour. If an individual believes that humans are inevitably punished or rewarded for their behaviour, then this belief may automatically reinforce a strong belief in individual autonomy with regards to individual behaviour. Consequently, if a person believes another person will eventually be punished for reckless driving, then blame or fault must lie with the reckless driver and not with external influences.

Additionally, Furnham and Gunter (1984) found that certain religious and political representations were associated with just world beliefs and more internally-focused attributions. Moreover, free will and a relatively strong belief in individual autonomy is known to play an important role in numerous religions (Baumeister, Bauer, & Lloyd, 2010).

Retributive justice (which will be discussed further in the next section) is a form of criminal justice that emphasizes punishment and relies on a relatively strong concept of individual autonomy (Hermann, 2017). In a sort of feedback loop, these cultural beliefs and representations may feed off of and reinforce the attributional asymmetric tendency.

### **Potential Maladaptive Attributional Consequences**

In the past, an asymmetric attributional tendency may have provided certain adaptive advantages. However, in modern society, ignoring more ultimate source causes for negative behaviour may sometimes work maladaptively as resources are wasted on short-term efforts instead of long-term solutions. A direct maladaptive example may be the negative societal consequences in America of a strong belief in retributive justice (the criminal justice emphasis on perpetrator punishment instead of perpetrator, victim, and community healing; Hermann, 2017; Tyler, 2016; Wenzel et al., 2008). Hermann (2017) writes about the role of retributive justice in the American criminal justice system:

“The offender should be punished because he or she deserves to be punished for choosing to violate an official rule of behavior ... Retributive punishment is based on human autonomy and respect for the individual as a rational actor obligated to conform to the law ... When the offender chooses to do “x,” he is actually choosing to be “punished by penalty y.” The basic principle is simple: when an offender has violated rules or laws, the offender deserves to be punished because it is necessary for justice to be re-established” (p. 88).

This emphasis on a relatively strong concept of individual autonomy and punishment, rather than victim, offender, and community healing, may contribute to a neglect of more ultimate causes for the negative behaviour, a neglect of preventative measures from lessons learned, and an increase in the potential negative outcomes such as mass incarceration (Hermann, 2017; Tyler, 2016). In the past, quick punishment versus long-term rehabilitation for counter-productive behaviour may have been more efficient as it may have often quickly eliminated the negative behaviour without requiring the precious time and resources of determining the more ultimate causes. Modern society, with greater access to resources, may be able to afford the cost of addressing the more ultimate causes of negative behaviour, thereby reaping the benefits of long-term preventative measures.

## **Argumentative Theory**

A close examination of a significant proportion of human conversation reveals the prominent role of argumentation. Whether to improve the quality of incoming information or to persuade or manipulate others, humans often implicitly and explicitly challenge this incoming information when communicating with others. Additionally, there may be an asymmetric balance when comparing the high degree to which we challenge the knowledge and explanations of others compared to the lower degree to which we challenge our own knowledge and explanations of reality. Argumentative theory acknowledges the frequently significant role of argumentation and its asymmetry when attempting to improve information or position during human to human communication (Mercier, 2016). There are different plausible evolutionary and cultural explanations for the prominent role and asymmetry of argumentation. This section of the essay will examine these explanations for how argumentation drives cognition as well as its potentially maladaptive constraints in modern-day society.

## **Argumentative Evolution**

The prominent role and asymmetry of argumentation in human to human communication may have evolved in the past due to the need for “coherence checking” (Sperber, 2001) or “epistemic vigilance” (Sperber et al., 2010) in order to avoid deception or manipulation. Similar to previously discussed explanations for attribution, the error management theory (Haselton & Buss, 2000) may also be applied to argumentation. In an evolutionary past better-safe-than-sorry scenario, possessing a tendency for argumentative asymmetry may have allowed individuals or groups to avoid the more detrimental possibility of being deceived by a potential adversary at the less costly risk of offending a non-threatening individual or group (Sperber, 2001).

As discussed with attributional asymmetry, argumentative asymmetry may be explained by a need to avoid anxiety and stress that come with uncertainty (Brosschot et al., 2016). We may have developed an adaptive defensive coping mechanism against out-group knowledge and explanations of reality because the differing explanations present a challenge to our already established explanations. The challenge to our understanding of reality may produce new uncertainty and subsequent anxiety. Similarly, Sherman and Cohen (2002) discussed how “to the extent that information threatens self-worth, or is presented in a manner that threatens self-worth, people may dismiss, deny, or distort it in a fashion that serves to sustain their personal feelings of adaptiveness and integrity” (p. 120). Sperber et al.

(2010) also discussed how argumentation may have provided an evolutionary adaptive benefit as it can increase the ability to advance agenda or position through manipulation. Therefore, the ability to challenge the knowledge and explanations of others may have provided a force-multiplying benefit of security and knowledge enhancement through the screening of incoming information while strengthening outgoing justification for individual or group agenda.

### **Argumentative Cultural**

Whether or not humans possess a biological innate argumentation asymmetry, certain cultural beliefs or practices may influence the degree to which individuals challenge the explanations and knowledge of out-group members. A study by Martin and Anderson (1997) found that the argumentativeness of children correlated with the level of the mother but not the father. Although not controlled for in the study, the researchers suggested more time spent with the mother may account for the argumentation findings. Studies from Croucher, Oommen et al. (2010) and Croucher, Otten et al. (2013) suggested that cultures which are more collectivistic may be more likely to avoid argumentation. Mercier et al. (2015) also suggested certain collectivistic cultures may be more prone to social harmony instead of argumentation. They also suggested that Westerners may be more accepting of public debate and contradicting dialogue. Sherman and Cohen (2002) suggested that individuals in collectivistic cultures may be more defensive against out-group knowledge and explanations if the explanations challenge group-level affirmations of self-worth instead of individual-level affirmations (e.g. personal values).

### **Potential Maladaptive Argumentative Consequences**

In the past, the asymmetric argumentative tendency may have provided certain adaptive advantages. However, in modern-society, this asymmetry may sometimes lead to certain maladaptive negative consequences. Sherman and Cohen (2002) state, “Defensive biases have an adaptive function for maintaining self-worth, but maladaptive consequences for promoting change and reducing social conflict” (p. 119). The confirmation bias is the tendency to be drawn to information which reaffirms current knowledge and explanations concerning reality while opposing or avoiding explanations which contradict currently held beliefs (Nickerson, 1998). Argumentation asymmetry and the confirmation bias may naturally reinforce each other (Mercier & Sperber, 2011). Additionally, these tendencies may contribute to group polarization when in-group knowledge and explanations are strengthened

and intergroup division is increased (Isenberg & Reis, 1986; Sunstein, 2002) A direct example can be seen in the varying success of the Russia disinformation campaign to increase political polarization in America through social media (Barbera et al., 2018). Furthermore, preference filtering algorithms on social media platforms may increase the polarizing impact of the confirmation bias and argumentation asymmetry (Spohr, 2017).

## **Conclusion**

The traditionally-contextualized evolutionary and cultural explanations examined in this article reveal how biological innate adaptations and culturally constructed norms, beliefs, and representations can potentially direct and constrain cognition. The attributional and argumentative asymmetric tendencies demonstrate how intertwined evolutionary and cultural processes can potentially produce a combined influence on cognition. Additionally, this article shows how the strength and outcome of influences upon cognition may vary depending upon the contextual environment. The impact of different cognitive processes, such as attributional and argumentative asymmetry, may shift from advantages of the past to maladaptive negative consequences in the modern-day environment. However, certain strategies may be effective at reducing the maladaptive impact.

The attributional asymmetric tendency may maladaptively detract from efforts to determine and correct the more ultimate causes of negative behaviour. Correcting the more ultimate causes of negative behaviour may produce longer-lasting positive results, produce prevention techniques from lessons learned, and ultimately help to avoid many negative consequences such as mass incarceration and increased social conflict. Multiple perspective-taking style techniques have demonstrated their effectiveness at reducing the degree to which the attributional asymmetry is displayed (Becker et al., 2011; Bilali et al., 2012; Hooper et al., 2015). Additionally, as an alternative to the representation of retributive justice, Wenzel et al. (2008) suggested a transition to the concept of restorative justice, which focuses more on the benefits of healing the victim, perpetrator, and community.

The argumentative asymmetric tendency may maladaptively lead to group polarization and a hardening of the intergroup divided such as in protracted social conflict. However, Sherman and Cohen (2002) suggested that conscious efforts, and even unconscious priming, which highlight the importance of in-group concepts of security, which are unrelated to the ensuing intergroup debate, may help the in-group to be more receptive to out-group knowledge and explanations:

“Affirmations of alternative sources of self-worth, however, can sharply attenuate defensive biases, and encourage attitude and behavior change in potentially threatening or contentious domains. Such self-affirmations, it seems, allow people to evaluate evidence on the basis of its merits rather than its correspondence with their beliefs, desires, and vested interests” (p. 122).

Finally, Hernandez and Preston (2013) demonstrated how structuring arguments and debates in a manner that reduces cognitive strain and stress can actually decrease the degree to which individuals commit the confirmation bias.

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