Contents lists available at ScienceDirect

## Cognition

journal homepage: www.elsevier.com/locate/COGNIT

## Why did this happen to me? Religious believers' and non-believers' teleological reasoning about life events

### Konika Banerjee<sup>\*</sup>, Paul Bloom<sup>1</sup>

Yale University, Department of Psychology, 2 Hillhouse Avenue, New Haven, CT 06520, USA

#### ARTICLE INFO

Article history: Received 11 June 2013 Revised 18 June 2014 Accepted 30 June 2014

Keywords: Teleological reasoning Fate Religion Life events Theory of mind Cognitive biases

#### ABSTRACT

People often believe that significant life events happen for a reason. In three studies, we examined evidence for the view that teleological beliefs reflect a general cognitive bias to view the world in terms of agency, purpose, and design. Consistent with this hypothesis, we found that individual differences in mentalizing ability predicted both the tendency to believe in fate (Study 1) and to infer purposeful causes of one's own life events (Study 2). In addition, people's perception of purpose in life events was correlated with their teleological beliefs about nature, but this relationship was driven primarily by individuals' explicit religious and paranormal beliefs (Study 3). Across all three studies, we found that while people who believe in God hold stronger teleological beliefs than those who do not, there is none-theless evidence of teleological beliefs among non-believers, confirming that the perception of purpose in life events does not rely on theistic belief. These findings suggest that the tendency to perceive design and purpose in life events—while moderated by theistic belief—is not solely a consequence of culturally transmitted religious ideas. Rather, this teleological bias has its roots in certain more general social propensities.

© 2014 Elsevier B.V. All rights reserved.

#### 1. Introduction

The ancient Greeks believed that human destiny was guided by the hands of the Moirai, the three personified goddesses of fate tasked with overseeing the course and outcome of each individual's life. The goddesses were said to spin a person's thread of life at birth, and then to direct the unfolding of that thread, meting out punishments and rewards throughout the person's life, before ultimately cutting the thread at death. Although belief in the Moirai has gone out of fashion, the perception that human life is guided by unseen intentional forces remains ubiquitous today (e.g., Banerjee & Bloom, in press; Bering, 2002, 2003, 2006, 2011; Gray & Wegner, 2010; Heywood, 2010; Heywood & Bering, 2013; Norenzayan & Lee, 2010; Pepitone & Saffiotti, 1997;

<sup>1</sup> Tel.: +1 203 432 4619.

http://dx.doi.org/10.1016/j.cognition.2014.06.017 0010-0277/© 2014 Elsevier B.V. All rights reserved. Svedholm, Lindeman, & Lipsanen, 2010; Weeks & Lupfer, 2000; Young & Morris, 2004). In their everyday lives, people often perceive design and purpose embedded in significant and anomalous life events. For example, natural disasters are interpreted as divine warnings or admonitions to a sinful society. Personal tragedies, like the death of a loved one, are seen as deliberate punishment for prior wrongdoings. And unexpected good fortune, such as a sudden recovery from serious illness, is viewed as an intended reward for living virtuously.

The belief that life events have a deeper meaning and that they happen for a reason is plainly related to religious belief (e.g., Bering, 2002, 2003, 2006, 2011; Heywood, 2010; Heywood & Bering, 2013; Stephens, Fryberg, Markus, & Hamedani, 2013; Willard & Norenzayan, 2013). People often turn to God to explain significant life events, particularly when those events are difficult to explain in terms of material causes (Gray & Wegner, 2010; Pepitone & Saffiotti, 1997; Weeks & Lupfer, 2000). For example, Gray and Wegner







<sup>\*</sup> Corresponding author. Tel.: +1 203 436 1547.

*E-mail addresses:* konika.banerjee@yale.edu (K. Banerjee), paul.bloom@yale.edu (P. Bloom).

(2010) found that people were more likely to believe that God was responsible for a freak flood that killed an entire family when no human cause was mentioned than when a malevolent human perpetrator was explicitly blamed. They apparently had the intuition that an unexpected tragedy of such magnitude could not have occurred by chance alone—it must have been part of God's divine plan.

But even when an event's material cause is obvious, people often explain the same event simultaneously as due to both natural non-teleological processes and supernatural goal-based influences (Legare, Evans, Rosengren, & Harris, 2012; Legare & Gelman, 2008; Legare & Visala, 2011; Lupfer, Brock, & DePaola, 1992; Lupfer, De Paola, Brock, & Clement, 1994; Lupfer, Tolliver, & Jackson, 1996; Weeks & Lupfer, 2000; Woolley, Cornelius, & Lacy, 2011). For example, in a study on beliefs about the causes of AIDS in South Africa, Legare and Gelman (2008) found that both children and adults simultaneously endorsed proximal, natural explanations of disease acquisition (e.g., a biological disease model of virus transmission) as well as distal, supernatural teleological explanations (e.g., AIDS is spread by witchcraft as punishment for one's misdeeds). Thus, the perception of supernatural purpose embedded in a life event need not conflict with naturalistic explanations of that same event, but rather often provides a complementary level of causal explanation (Legare & Gelman, 2008; Legare & Visala, 2011; Legare et al., 2012; Weeks & Lupfer, 2000; Woolley et al., 2011).

# 1.1. Cultural and cognitive underpinnings of teleological reasoning about life events

Why do people tend to think that things happen for a reason? One possibility is that this tendency is the product of cultural experience. People in societies such as ours come to believe in divine beings who have goals, and come to learn about the more amorphous notions of fate, karma, or destiny. They then interpret certain events in light of this culturally-transmitted knowledge. This learning account is supported by the observation that young children rarely spontaneously generate supernatural teleological explanations of unusual events (e.g., Bering & Parker, 2006; Woolley et al., 2011). For instance, Bering and Parker (2006) found that 7–9-year old children spontaneously attributed an unexpected event to an invisible supernatural being who was trying to send them a message when they were explicitly primed to expect this being to communicate with them in some way-but younger children did not.

An alternative view, which we explore here, is that the tendency to develop teleological beliefs about life events is a byproduct of certain universal social-cognitive biases (Banerjee & Bloom, in press; Evans & Wellman, 2006; Willard & Norenzayan, 2013). In general, it has been argued that such biases make people highly receptive to particular cultural religious ideas, including belief in souls, divine creation, and the afterlife. These ideas are hypothesized to be especially seductive because they successfully capitalize on humans' evolved social-cognitive biases (e.g., Banerjee & Bloom, 2013; Bloom, 2004, 2007; Boyer, 2001; Gervais, Willard, Norenzayan, & Henrich, 2011; Waytz, Gray, Epley, & Wegner, 2010; Willard & Norenzayan, 2013).

Along these lines, teleological reasoning about life events might be a cognitive byproduct of humans' natural tendency to view the world in terms of agency, purpose, and design.<sup>2</sup> As a species, humans are remarkably attuned to the presence of other agents in the environment (Boyer, 2001; Guthrie, 1993), and from infancy, we are uniquely adept at deciphering these agents' goals, intentions, and beliefs (Gergely, Nádasdy, Csibra, & Bíró, 1995; Kovács, Téglás, & Endress, 2010; Wellman & Gelman, 1992; Woodward, 1998). This capacity to infer the mental states of other agents is a core feature of human's intuitive psychology, sometimes known as "mentalizing" or "theory of mind". While this mentalizing tendency is highly useful for explaining and predicting other agents' behavior, it sometimes leads to error, as when we believe that there are social entities and forces when none, in fact, exist. People are prone to perceive illusory faces-in the clouds and in their food, for instance (Boyer, 2001; Guthrie, 1993; Riekki, Lindeman, Aleneff, Halme, & Nuortimo, 2013), to infer that ambiguous events have agentic causes (Gray & Wegner, 2010; Pepitone & Saffiotti, 1997; Weeks & Lupfer, 2000; Woolley et al., 2011), and to assume that the physical and biological worlds are the product of intended design (Bloom & Weisberg, 2007; Evans, 2000, 2001; Kelemen, 2004).

In addition, children and adults also exhibit a broad, implicit "intentionality bias"-a rapid, default tendency to infer intention in other peoples' behavior (Bègue, Bushman, Giancola, Subra, & Rosset, 2010; Rosset, 2008; Rosset & Rottman, 2014). While the ability to link others' behavior to their underlying intentions is generally useful, this bias also drives an over-reliance on unwarranted intentional explanations. This is particularly true under conditions of cognitive load, when individuals' ability to inhibit automatic judgments of intentionality is impaired (Bègue et al., 2010; Rosset, 2008). As a result, this intentionality bias sometimes causes errors in people's ability to recognize truly non-intentional, accidental behavior. In an analogous way, a fast, implicit cognitive bias to assume intention in the social domain may also promote an underappreciation of chance and an overreliance on inferences of purpose and intention when reasoning about non-social phenomena-such as the creation of natural kinds, and potentially also life events.

#### 1.2. A domain-general promiscuous teleology?

The manifestation of these social-cognitive biases that is most relevant for the current paper is what Kelemen (1999a, 1999b) has dubbed "promiscuous teleology": a propensity to believe that entities exist for a purpose. Young children favor teleological explanations for other people's behavior and for manmade artifacts—which is appropriate, since behavior is often motivated by goals, and because artifacts are typically created for a purpose. But they also favor such explanations for the existence of

<sup>&</sup>lt;sup>2</sup> This byproduct view is different from the adaptationist position advanced by Bering (2002, 2003, 2006, 2011), who argues that teleological reasoning about personal experiences is the product of a specialized cognitive module, called "existential theory of mind," evolved specifically for the purpose of deciphering symbolic meaning in the domain of life events.

Download English Version:

https://daneshyari.com/en/article/10457739

Download Persian Version:

https://daneshyari.com/article/10457739

Daneshyari.com