The Psychology of the Illusion of Truth

Formation Mechanisms and Impact on Perception

Liana Spytska

Logos Verlag Berlin

Author details:

Liana Spytska
PhD in Law
Doctor of Psychological Sciences
Professor at Kyiv International University
dr.liana.spytska@gmail.com

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available on the Internet at http://dnb.d-nb.de .

© Copyright Logos Verlag Berlin GmbH 2025
All rights reserved.
ISBN 978-3-8325-6009-6

Printed on Lessebo Design Natural, 90 g/qm,
one of the most climate friendly paper qualities in the world.
Cradle to Cradle Certified® at Gold level.

Logos Verlag Berlin GmbH
Georg-Knorr-Str. 4, Geb. 10,
12681 Berlin, Germany

Tel.: +49 (0)30 / 42 85 10 90
Fax: +49 (0)30 / 42 85 10 92
https://www.logos-verlag.com

CONTENT

Introduction

In modern society, where instantaneous news, opinions, and impressions permeate people's daily lives, the question of the veracity of the data stream becomes increasingly relevant. The rapid development of information technologies introduces new dimensions and challenges in defining “truth.” For instance, the dynamism and diversity of information sources shape human perception, potentially fostering illusory beliefs and images. In this context, the process of forming the illusion of truth and its impact on personal perceptions has become the subject of in-depth research by psychological science, which examines internal thinking mechanisms that contribute to information distortion. At the same time, external stimuli, such as social networks, media, and personal interactions, allow individuals to shape their reality. However, this reality does not always align with objective truth. Therefore, it is necessary to consider the illusion of truth through the lens of a person's cognitive perception of reality.

The rise of scientific interest in studying the illusion of truth stems from several factors. Firstly, the challenges of the digital age have increased opportunities for data creation and dissemination. The development of technology and greater access to information are shaping new perspectives, where social media algorithms, recommendation systems, and other technologies influence the information people see and how they filter their interests on social media. Secondly, the growth of information flow necessitates determining how people engage with vast amounts of information and how their beliefs are formed in the digital environment. This highlights the need to study how individuals perceive information noise, identify factors that shape critical thinking, and examine their active participation in the online environment. Thirdly, the increasing interest in the illusion of truth is also tied to its relevance in political and social contexts. In particular, examining the psychological factors contributing to the illusion of truth aids the study of human interaction in society and reveals how social dynamics shape individuals' beliefs and influence decision-making in groups and society.

In reviewing the phenomenon of the illusion of truth in scientific literature, it is evident that it relies on the tendency to perceive and accept information as true due to its repeated appearance. Key factors of human perception reflect cognitive and socio-cultural aspects, including prior beliefs, existing prejudices, stereotypes, and socio-cultural norms, as well as the influence of media and the Internet. These processes can predict behaviour, influence relationships, and shape beliefs. Therefore, developing media literacy and critical thinking skills becomes essential for each citizen. This, in turn, necessitates revisiting social norms and cultural values that influence perceptions, where group dynamics and social pressure may lead individuals to accept illusory ideas.

The problem of the illusion of truth was studied in various scientific fields. For instance, philosophical and information sciences, as well as sociology and linguistics, consider this issue in the context of the use and dissemination of information

through social structures, language elements, cognitive theory and mass media. At the same time, the mechanisms of spreading the illusion of truth, as influenced by external social, cultural and psychological factors, with foundational contributions from scholars such as A.T. Beck [1], A. Ellis and W. Dryden [2], D. Kahneman and A. Tversky [3], E.F. Loftus [4], D. Tannen [5].

At the same time, psychological sciences analyse the illusion of truth in depth in the context of individual and collective perception. Thus, cognitive psychology studies how the brain perceives and processes information, with key insights from D. Kahneman and A. Tversky [3], E.F. Loftus [4]. Social psychology examines how social factors, including group dynamics and social support, shape beliefs and the acceptance of information as true, highlighted by the works of P. Zimbardo [6], D.T. Gilbert [7]. Neuroscience investigates brain activity and structures responsible for information processing and decision-making, informed by research from L.F. Barrett [8], D.H. Hubel and T.N. Wiesel [9].

The problem of the illusion of truth has been studied across various scientific fields. For example, philosophical and information sciences, sociology, and linguistics examine it in the context of information dissemination through social structures, language elements, cognitive theory, and mass media. At the same time, the mechanisms behind the illusion's spread, influenced by external social, cultural, and psychological factors, have been foundationally explored by scholars such as A.T. Beck [1], A. Ellis and W. Dryden [2], D. Kahneman and A. Tversky [3], E.F. Loftus [4], and D. Tannen [5].

Psychological sciences delve into the illusion of truth within individual and collective perception. Cognitive psychology explores how the brain perceives and processes information, with insights from D. Kahneman and A. Tversky [3], and E.F. Loftus [4]. Social psychology investigates how group dynamics and social support shape beliefs and the acceptance of information as true, highlighted by the works of P. Zimbardo [6] and D.T. Gilbert [7]. Neuroscience focuses on brain activity and structures involved in information processing and decision-making, drawing from research by L.F. Barrett [8], D.H. Hubel, and T.N. Wiesel [9].

The intersection of these areas provides a comprehensive view of the illusion of truth's nature and formation mechanisms. Despite considerable interest in this phenomenon, its definition remains varied. It is often reduced to interpreting it as a set of characteristics framed by psychological, philosophical, social, cultural, and political views. However, most scholars focus on cognitive aspects (beliefs, biases, emotional state) and their effect on perception, as they ensure the ability to recognize, evaluate, and process information.

Thus, the problem of the illusion of truth remains under-researched in theoretical terms, especially as society and technology continue to evolve. The growing need to define patterns of influence from technology on information perception (artificial intelligence, social networks, media platforms, virtual and augmented reality), interactive media, and cultural diversity (across different groups and societies) amplifies this gap. At the applied level, understanding the illusion of truth

is crucial due to a lack of awareness of the mutual influence of internal and external factors on perception. This growing interest in developing information literacy and combating disinformation is essential for individual and national information security.

Moreover, perception and assessment of information truthfulness are subjective and depend on the social context (society, group, cultural characteristics). Cognitive distortions and biases affect how people process information and make decisions. Ethical issues and trust in social research also impact the perception of results, and the dynamics of the information environment shape beliefs. Despite these challenges, advancing research in this area is vital for developing modern information management strategies.

Studying the illusion of truth and determining strategies for correcting perception issues remains a crucial topic for everyone. Significant achievements in psychological science provide the foundation for understanding the illusion's key aspects, such as its formation mechanisms and effects on perception. Therefore, this book focuses on a systematic approach to analyzing the illusion of truth formation, presenting it as a dynamic phenomenon rather than a linear process. The aim is to demonstrate how the illusion becomes an integral part of human worldview and influences thinking, decisions, relationships, and societal positioning.

This book examines primary psychological aspects of the illusion of truth and its key concepts related to its formation mechanisms, including external and internal stimuli that distort reality perception. It also identifies methods for avoiding cognitive distortions and correcting illusory perceptions. The approach follows the logic of scientific knowledge, as outlined in the structure below.

The first chapter discusses cognitive processes and identifies key aspects of the illusion of truth's formation, including information processing mechanisms, belief distortion, and the impact of cognitive distortions and emotions on perception.

The second chapter examines human social interactions and their role in forming the illusion of truth, including social norms, group dynamics, and the media’s influence on modifying individual perceptions and beliefs.

The third chapter addresses the influence of lies on the creation and maintenance of illusory beliefs, focusing on the psychological mechanisms involved.

The fourth chapter explores how stress, instability, and unexpected situations impact perception and the formation of illusions, as well as how these factors affect decision-making and behaviour in society.

The fifth chapter outlines the psychological aspects of information perception and their influence on forming the illusion of truth. It also explores the factors affecting how the brain filters and processes information, and how this shapes beliefs.

The sixth chapter discusses psychological approaches and methods for correcting illusory perceptions, highlighting tools for addressing distortions in perception and transforming beliefs. It also examines models for developing psychological strategies to manage personal cognitive processes.

Chapter 1.

Cognitive mechanisms of the illusion of truth

1.1. Fundamentals of cognitive perception

The study of human illusory perceptions is becoming increasingly relevant, particularly in analysing cognitive processes and mental functioning. This issue is especially significant in the context of psychological and cognitive sciences, as well as decision-making mechanisms and the formation of personal beliefs. A key element in understanding delusions is developing the notion of cognitive biases and distortions in human perception. The human brain can make biased decisions and form illusions during information processing that do not always align with objective reality. These cognitive distortions affect event perception, fact interpretation, and belief formation. Therefore, informed decision-making is practically important in situations of uncertainty, where the right choice can impact personal and professional life.

In modern scientific research, studying illusory beliefs has become relevant for determining and predicting human behaviour in various life spheres. It is also essential to consider illusory beliefs that arise not only in individual perception but also in large social groups, which significantly impact socio-cultural and economic processes. The dynamic nature of information contributes to human vulnerability to disinformation, fakes, and manipulations. This necessitates studying cognitive perception and creating targeted educational programs, user interfaces, technologies, and cognitive therapies to help individuals objectively analyse information, enhance information literacy, and resist cognitive illusions.

Cognitive perception plays a key role in information processing and interpretation. It encompasses several aspects determining world perception. Attention directs mental resources, with perception helping interpret and render information meaningful. Language and speech define how a person expresses thoughts and perceives others' thoughts, while memory stores and provides access to information. Cognitive perception significantly influences human behaviour and emotions. Scientists also face challenges in understanding how these processes interact and shape cognition. Uncovering these relationships provides insights into how the brain processes information and influences perception.

Most research on cognitive perception focuses on personal qualities. Intellectual ability [3, 4] is one such key characteristic, showing how intelligence affects cognitive functioning, information comprehension, and the efficiency of information processing tasks. In addition to intelligence, risk attitude and decision-making are significant personality elements [1]. Some people are more open to new things and willing to take risks, while others are more cautious. Emotional

intelligence and the ability to recognize and regulate personal emotions, as well as comprehend others' emotional states, are also vital in cognitive perception. Recognizing individual differences, including unique experiences, mental characteristics, and information-processing methods, explains why people perceive the same situations or information differently.

The development of representation and cognition theory owes much to contributions from various scientists. G.T. Fechner [10] was among the first to explore the cognitive aspects of the psyche, analysing the relationship between physical stimuli and sensations. This laid the groundwork for experimental psychology and the study of cognition. W.M. Wundt [11] furthered this theory, founding the first psychological laboratory in Leipzig and studying perception, attention, and other cognitive functions. In the early 20th century, Gestalt psychologists, such as M. Wertheimer, W. Köhler, and K. Koffka, advanced the understanding of how humans organize information into holistic structures and perceive objects in context. Their theory emphasized perception as a structured interaction of individual stimuli.

The real breakthrough in studying cognitive perception came with the development of cognitive psychology in the mid-20th century. J. Piaget [13] studied cognitive development in children, identifying stages of cognitive formation and concluding that intrinsic motivations guide this development, with cognition progressing from physical actions to mental operations. A key idea in cognitive psychology is the active participation of humans in perceiving and comprehending information. L.S. Vygotsky's [14] concept of "proximal development" suggested that human development occurs through interaction with others [15]. J. Bruner [16] introduced "schemas" (internal structures) that shape personal experience and information interpretation, becoming a key factor in cognitive psychology research.

During this period, cognitive science emerged to study internal mental processes. G.A. Miller [17] examined mental processes, particularly memory limitations, perception, and attention. He studied how much information a person can retain at a given time. A. Newell and H.A. Simon [18] developed "procedural models" to study mental operations in decision-making, including how a person allocates resources to achieve goals. In the 1960s and 1970s, the work of A.T. Beck [1], A. Ellis, and W. Dryden [2], who focused on the cognitive aspects of psychotherapy, gained importance. Beck's study of mental disorders, including anxiety and depression, popularized the cognitive approach in psychotherapy, viewing mental problems through cognitive processes and beliefs. Ellis and Dryden’s [2] concept emphasized the relationship between irrational beliefs and emotional responses, leading to the development of rational-emotive therapy.

At the current stage, cognitive perception is being studied through an interdisciplinary approach that describes cognitive processes and new methods for their analysis. New perspectives in the study of reality perception and human interaction with information in complex systems can identify various aspects of their

impact on cognitive function development. With the advent of modern technology and neuroscience, cognitive perception research has gained new momentum. Using imaginative thinking methods and functional magnetic resonance imaging, it is now possible to study brain activity during perception tasks. This approach reveals the brain areas activated during cognitive functions and identifies the connections between these areas in forming the illusion of truth [8, 9].

The development of social cognitive science, which explores the influence of social factors on human cognitive processes, greatly expands our understanding of how the social environment impacts behaviour, decision-making, and individual interactions within social groups. Perceiving and processing information is an interactive process rather than one occurring in isolation. The study of social recognition, stereotypes, prejudices, and cultural factors highlights how they shape individual perceptions and cognitive schemes [4; 19]. Social cognitive science also has practical applications for fostering effective social interaction, tolerance, and improved communication across different cultural and social contexts. It also explores the individual and collective aspects of social consciousness and perception development within various population groups.

Cognitive linguistics further illuminates the nature of human cognitive perception by studying the interaction between speech processes and cognitive functions. This field examines how language structures reflect cognitive concepts and categories, and how language influences the activation of specific cognitive schemes. This approach explores both theoretical and experimental aspects of how language interacts with human cognitive structures. A fundamental aspect of cognitive perception is analysing the mathematical relationships between external stimuli and their perception. Psychophysics focuses on the theoretical foundations underlying the perception of stimuli such as colour, sound, and temperature. The goal of psychophysics is to study the quantitative parameters of stimuli, such as frequency and intensity. Using mathematical models to explain these relationships helps clarify and predict how changes in stimuli affect perception [6].

For a person to analyse information and avoid cognitive errors, it is essential to develop critical thinking, information literacy, emotional stability, self-control, and awareness of personal cognitive biases. Achieving this requires understanding how humans comprehend and interact with the surrounding world [20]. Therefore, the fundamental problem in the psychology of the truth illusion lies in comprehending the internal mechanisms behind the formation of a person’s perception of the world, along with the interaction of these mechanisms with external factors and individual characteristics.

Defining the essence of the process that forms the illusion of truth requires clarifying the concepts of "perception" and "interpretation." The term "truth illusion" is not commonly used, and its essence remains underexplored in modern psychological literature. In interdisciplinary fields, the more common term is "cognitive distortions." Thus, the progression of scientific thought in this ap-