**Analyzing the operating mechanism and response of cognitive manipulation**

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Author: Xu Minghua and Wei Ziyao

Editor: Zong Yue

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As the main battlefield for the collision of ideas and cultures and the confrontation of ideologies, online media is easily engulfed by cognitive manipulation with the intention of cultural expansion. Cognitive manipulation means that the manipulator follows the cognitive characteristics of the target audience and uses various methods to influence the cognitive process of the target audience, so that their thoughts, psychology and behavior develop and change in the direction expected by the manipulator. An analysis of 1.1 million political tweets on Twitter related to China shows that 30% of the tweets were concentratedly posted by the top 100 accounts in terms of the number of posts. Not only did none of these accounts support China, but half of them even held a clear anti-China stance; at least 71 accounts relied on automated platforms to post, making it difficult for the international public to form an objective understanding of China. In China, more and more rumors and fake news disguised as "rationalists" have appeared on various social platforms, secretly and continuously influencing people's thoughts and attitudes. With the transformation and upgrading of digital intelligence integration, cognitive manipulation has developed a rather typical set of operating logic and practical methods. Analyzing and deconstructing the mechanism of cognitive manipulation will help to effectively respond to public opinion crises and is of great significance to the improvement of national security capabilities.

**Creating information fog to attack cognitive black holes**

　　The social cognition constructed by individuals based on real-life experience is usually limited. As an important supplementary source, media narratives are also difficult to objectively reflect the full picture of reality. The cognitive bias in this gives manipulators an opportunity to take advantage. Manipulators usually use personalized data analysis to lock in the cognitive "black holes" of different audiences, and then produce manipulative information according to preset directions and audience preferences, so as to accurately shape the audience's attitudes and positions on specific issues, and finally use algorithmic distribution to quickly complete the implantation of values. Exploring the underlying logic of this operation, it can be found that the manipulation methods of attacking cognitive black holes include "double-standard narratives" and "falsehoods", and the information "fog" created will have a profound impact on the attitudes and behaviors of the target audience.

　　Habitual use of double-standard narratives. In order to promote the superiority of their own culture and system, some Western media are accustomed to using "double standards" and selectively reporting events in different countries. While using negative reports to belittle and stigmatize competitors, they focus on promoting positive events in their own country and avoid talking about the "dark side". In particular, some media advocate the "end of the epidemic" and criticize my country's "dynamic zero" policy. Taking the American Twitter platform as an example, its deliberate restriction of my country's positive propaganda and blocking of negative news from the United States is a typical example of "double-standard narratives". After the local audience is repeatedly exposed to manipulated information that is inconsistent with their cognition, their existing value beliefs will be gradually subverted in a cycle of self-questioning. The resulting rift in political trust and the shaking of the mass base have become a potential threat to social stability.

　　Creating false and real information. Misleading information is a mixture of true and false information that intentionally distorts, conceals, and reinforces prejudice. Reports fabricated by manipulators in violation of the principle of authenticity usually retain partial rationality, confuse the audience in areas where their cognition is weak, and increase the deviation between the audience's cognition and social facts. For example, some foreign media platforms have tampered with Chinese historical facts and slandered national heroes with historical nihilism, used lens language and malicious editing to distort the truth, and used deep fake technology to tamper with synthetic audio and video. These are all examples of applications of false and real information. Once misleading information is received, the audience's wrong cognition will continue to be solidified in the "filter bubble" created by the recommendation algorithm. At this point, the separation of cognition and truth makes it difficult for the people to maintain their political beliefs, and it is very easy to cause them to doubt their understanding of the country's institutional path.

**Penetrate psychological gaps and break down emotional barriers**

　　At a time when useful information is scarce and cognitive resources are limited, situational ambiguity has become the norm. Especially when social crises occur and reliable information is blocked, cognitive uncertainty will trigger emotional anxiety among the people. When social emotions urgently need an outlet for venting, manipulators will take advantage of the situation and use methods such as "constructing opposition" and "inciting emotions" to provoke relations among the people and between the people and the government. By monitoring and tracking the emotions of hot topics, manipulators can predict the critical point of the outbreak of negative emotions among the people and take the opportunity to spread rumors that exaggerate the harm and change the subject. These "groundless" negative cognitions can easily trigger a resonant cycle of emotions such as fear and anger, widening the psychological gap between the people and the government, and constantly shaking social consensus and value recognition.

　　First, the construction of opposition. Some reports and speeches have been manipulated to strengthen the binary narrative of either this or that. While blaming the problems on the social elites, this kind of discourse emphasizes the identity opposition between the common people and the elites, stimulating populism. The psychological gap and sense of deprivation of the people are awakened in social comparison, and under the logic of manipulation, the self-perception of the weak identity is constantly strengthened. The irrational resistance discourse driven by populism continues to squeeze the spread of positive energy in cyberspace and dissolve social tolerance and consensus cohesion.

　　The second is to incite emotions. In the absence of rational thinking, the audience is very likely to be infected by emotional information and resonate with emotions, but ignore the judgment of the authenticity of the information and the rationality of the emotions. Manipulators seize this weakness to fabricate and spread sensational or indignant reports. The negative emotions incited by this type of risk discourse can cater to the anxiety brought about by uncertainty. In the color revolutions instigated by the West, emotional fake news is an important fuse for gathering violent actions. Manipulators use negative emotions to attract people's attention, and by questioning and criticizing the government's ability to govern, they continue to erode people's recognition and trust in the government.

**Deeply embedded belief systems interfere with interpretive frameworks**

　　In addition to misleading cognition and mobilizing emotions, manipulators will also "erode" the audience's existing belief system with a specific explanatory framework, exerting influence on the basis of reshaping thinking logic. Typical methods of intervening in the explanatory framework include "imposing causality" and "herd induction". Some false propositions and erroneous logic may become self-consistent after narrative packaging, guiding the audience to interpret and attribute, that is, the manipulator frames the audience's "thinking". In order to maintain the audience's certainty in the explanatory framework, the manipulator will release consistent information in conjunction with it, and use a seemingly consensus opinion climate to drive the audience to believe that "they should think this way". Once the framework shaped by the manipulator is formed, it will be difficult for the public to detect and crack the subsequent logical traps, and instead they will firmly believe in the rationality of the manipulated content.

　　The first is to impose causality. Faced with complex social problems, fragmented information exposure makes it difficult for individuals to use complete and coherent thinking logic to judge things. Extreme views or unique insights can simplify complex problems. Manipulators use this cognitive inertia to hide the interpretation framework in the manipulated information, so that the target audience processes the information according to the manipulator's thinking logic. Practices such as taking multiple policies out of context and then linking them together for one-sided distortion and forging complex clues of catastrophic events are typical applications of this method. After being domesticated by the manipulator's thinking logic, the original ideological construction of the people will dissolve and disintegrate, and it will be difficult to form a social consensus.

　　The second is herd mentality. Internet trolls, represented by social robots, can use large-scale concurrent actions to create a false collective identity. Driven by herd mentality, the target audience will be more convinced of the rationality of these consensus logics, move closer to the "majority opinion" and update the cognitive schema. The interactive clustering of human and machine users has led to a further leap in the scale of false consensus, raising the cognitive threshold for resisting "herd mentality". The atmosphere of false consensus will intensify the polarization trend of irrational opinions, and the anti-intellectual speech caused by it will challenge mainstream values.

**Accelerate strategic deployment to defend against cognitive manipulation**

　　In real-life scenarios, different manipulation techniques are often used in combination to disturb the target audience's cognition, emotions, and thinking from shallow to deep. In order to fully resist the dissolution of value consensus caused by cognitive manipulation, my country urgently needs to carry out strategic deployment of cognitive defense lines, take multiple measures, and coordinate and cooperate to maintain national security and social stability.

　　Strengthen communication security. Digital footprints throughout the Internet provide support for the targeting and precise implementation of cognitive manipulation. Manipulators use the advantages of network communications to retrieve data records of people from various countries, build user portraits, and produce and push manipulative information in a personalized manner to achieve the purpose of "precision strikes." At present, my country is still in a passive situation in terms of network sovereignty, and it is urgent to maintain the security of people's communication data through the independent construction of network information infrastructure. By cutting off the data input of hostile forces at the source, the "lethality" of precise cognitive manipulation can be effectively weakened.

　　Winning the technical confrontation. Fake news and rumors are the "protective umbrella" for the hidden disguise of manipulative forces. Coupled with the "human-like" momentum of social robots, the existing audit and filtering mechanisms fail to detect and the effectiveness of rumor-refuting information decreases. By exploring the underlying technical logic and giving full play to the advantages of intelligent technology algorithms in identifying fake information and social robots, it is expected to form powerful technical countermeasures. At the same time, the interpretability of the algorithm model can be used to expose the manipulation ideas with more convincing arguments and enhance the public's awareness of prevention.

　　Upgrade public opinion monitoring. The trend of secretive and professional operation of cognitive manipulation is becoming more prominent. Public opinion monitoring focusing on topics and emotions can no longer meet the early warning function of cognitive manipulation crises. Building a position analysis model based on the characteristics of individual opinion expression can help trace the propagation path of cognitive manipulation and locate the source of information. In terms of improving the pertinence and foresight of risk plans, we can develop an attack and defense drill system to simulate the enemy-game process of cognitive manipulation, thereby summarizing effective anti-manipulation strategies and gaining an advantage in the competition of cognitive frameworks.

　　Implement literacy education. The open and interconnected network media environment has made people encounter manipulative information more and more frequently, and the forwarding and liking behaviors stimulated by this will also expand the dissemination influence of manipulative information. In order to defend the last line of defense, it is urgent to carry out information literacy education with a focus on cognitive manipulation. By popularizing the information characteristics and typical methods of cognitive manipulation, and using the "acquired immunity" mechanism, we can effectively improve people's ability to distinguish and critical thinking. At the same time, we encourage people to report suspicious manipulative information, gather the wisdom and strength of the general public, and comprehensively resist the intrusion of cognitive manipulation on the mainstream value consensus.

**(Author’s unit: School of Journalism and Communication, Huazhong University of Science and Technology)**