

# ***Establishment of Trust Mechanism and Trust Crisis***

## ***--The Influence of Scientific Symbols in Advertisements on Social Trust***

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**Abstract:** Due to the refinement of professional knowledge, individuals have to trust authority in every field in a limited life, and social trust is constituted in this way. Cosmetics merchants add a lot of scientific symbols to advertisements to shape themselves as authorities in order to make people trust their products. However, with the phenomenon of advertising fraud exposed by the news media, scientific symbols in these advertisements have triggered customers' "trust crisis". This paper analyzes the establishment of trust mechanisms and trust crises through the scientific symbols in advertisements from the perspective of knowledge power. In the end, it puts forward three ways to alleviate the crisis of trust and puts forward suggestions from the government, legislature and intellectual elite, respectively. For example, to prevent some brands from attracting consumers by establishing knowledge power, including creating pseudo-scientific concepts, purposefully confounding scientific concepts, inflating product efficacy, and publicizing scientific conclusions that cannot be validated, the government should supervise the advertisements well as the products' quality.

**Keywords:** knowledge-power, scientific symbols, advertisements, trust mechanism, trust crisis

### **1. Introduction**

With the development of the times, society pays more and more attention to science and technology, and people begin to blindly trust and worship these "authorities" of science and experts. Symbols symbolizing science occupy more and more space in advertisements, ranging from "retinol", "nicotinamide", and "arbutin" in various skincare advertisements to "ceramide", " $\alpha$ -oligosaccharide prebiotics" and "essential oil" in shampoo advertisements, and then to "OPO", "NuMMOs" and "A2casein" in infant milk powder advertisements. There are more and more scientific symbols in commercial advertisements, which are usually inscrutable nouns, some technical terms mixed with English and some mysterious pictures. These businesses hope to make people trust brands and buy products by advertising scientific symbols. However, with the rise of social media and gradual transparency of information, some fraudulent scientific symbols in these advertisements have triggered a "trust crisis". However, with the rise of social media and gradual transparency of information, some fraudulent scientific symbols in these advertisements have triggered people's

"trust crisis", and a "post-truth problem" has emerged. This era needs social trust, but it is more difficult to gain social trust, and it is easier to lose social trust. Therefore, from the standpoint of knowledge power, this research examines the establishment of trust mechanisms and trust crises using scientific symbols in commercials. First, there will be a brief theory description and explanation. After that, this study will focus on the analysis and then give some suggestions.

## **2. Knowledge-power and Social Trust**

Power is how individuals or groups can stop others' goals to achieve their own goals, and Foucault extended the idea of power initiated by Marx and Weber. He paid more attention to micro-power and put forward the concept of "knowledge power" through the evolution of criminal law [1]. Foucault believes that power exists not only in state power organs but also in every corner of society, forming a fine power network. Foucault believes that knowledge produces power, and power also produces knowledge. Power and knowledge merge with each other, which is a "symbiotic relationship" and a "power-knowledge" complex. Foucault clearly pointed out that power and knowledge are directly interrelated, and there can be no power relationship without correspondingly constructing a knowledge field, and there can be no knowledge without presupposing and constructing a power relationship at the same time. Both humanities and natural sciences are products of knowledge power mechanism, and the formation of subject knowledge and truth discourse is closely related to the system of transmission, recording, accumulation and replacement of power. In short, Foucault believes that knowledge development is closely related to power, and power will both promote and hinder knowledge development. In Foucault's theory, power moves from macro to micro, from repression to production [2].

Simmel put forward the concept of social trust in Monetary Philosophy. Social trust is an important condition for social cohesion and operation for human survival and development. Simmel believes that interaction constitutes people's relationships, and social trust is the premise of exchange [3]. Social trust is crucial at both individual and social levels. Social trust provides a hypothetical guarantee for actors so that actors can build their actual behavior on this guarantee. Due to the social division of labor and the refinement of professional knowledge, it is impossible for an individual to learn all the professional knowledge in a limited life [4]. Therefore, people have to trust authority in every field. If they do not admit their limited knowledge and do not trust other people's professional knowledge, society cannot function. Social trust is constituted in this way. However, as Giddens sees it, risk and trust are intertwined. Once experts, authorities and other scientific symbols are at risk, people's social trust in scientific symbols will be cracked, resulting in a trust crisis. Social trust crisis frequently occurs, resulting in social conflicts and the deterioration of interpersonal relationships. Advertising trust is an important part, and the manifestation of social trust and the formation mechanism of advertising trust is as complicated as social trust [5].

## **3. Analysis Based on Knowledge Power Theory**

According to the survey, household chemicals, which are defined as scientific and technological chemicals used by people in daily life, are the most frequent types of commercial advertisements containing the most scientific and technological information [6,7]. Therefore, this paper selects cosmetics advertisements as the research object. In the era of TV media, merchants directly advertise on radio or TV to directly promote the brand; In today's social media era, there are not only brand advertisements that merchants put directly on the media but also advertisements that merchants put through we-media bloggers. Therefore, advertisements for skin care products are divided into two categories; one is advertisements directly put by merchants, including videos, broadcasts, and leaflets, and the other is advertisements implanted from media bloggers' videos. The

scientific symbols contained in these two types of advertisements are different from the social trust crisis they bring.

First of all, some typical scientific symbols are extracted from the content analysis of merchant advertisements. These symbols include microscopes, whitecoats, molecular formulas, mind maps, chemical equipment, cell charts, numbers, English words, huge and serious music and calm dubbing. All these advertisements give people a hint that these products are authoritative because these companies have the knowledge and scientific research technology. In the process of establishing an authoritative image, advertisements tend to use various deception methods, for example, creating pseudo-scientific concepts, deliberately confusing scientific concepts, exaggerating product efficacy and publishing some scientific conclusions that cannot be tested and more.

There was a time in 2021 when merchants liked to advertise their products as "anhydrous formula". TASANO, a Japanese skincare brand, claims that its products adopt "anhydrous formula", which opens a new era of "anhydrous formula". The brand claims in the advertisement that the "anhydrous formula" focuses on efficient skin care, regardless of cost, with better penetration and absorption ability, and the skin care effect far exceeds that of the same kind. In a video of "Technician Star", who claimed to be an eighteen-year formulator, they have popularized the pseudo-scientific concept of "anhydrous formula" in business advertisements. The so-called "anhydrous formula" actually replaces the ingredient "water" with ingredients such as "Schizoyeast filtrate", "aloe extract", and "birch juice", which still contains much water in essence. In addition to such pseudo-scientific concepts, there are also some merchants who deliberately induce and confuse concepts in advertisements. The addition of preservatives is an important topic in skin care products. Some brands claim that their products do not contain preservatives and label them as green, mild, harmless and natural. It seems that products containing preservatives are harmful, irritating and polluting. This confusing advertising concept makes some consumers blindly spend high prices to pursue "preservative-free" products. However, according to a popular science video officially released by Guangxi Drug Administration, skin care products will have greater safety risks if preservatives are not added; The safe dosage of preservatives can inhibit the growth of flora in skin care products. In more cases, merchants exaggerate the efficacy of products in product advertisements, and some advertisements on the website of the Market Supervision Bureau are fined for exaggerating words. Estee Lauder was severely fined for using the absolute terms "best" and "wrinkle removal" in publicity, but if these words were replaced by "good" and "wrinkle removal", there would be no problem [8]. There are also some advertisements that publish some scientific conclusions that cannot be tested[9]. Many cosmetic brands claim that their products contain bird's nest ingredients, which are beneficial to skin whitening. However, according to China National Knowledge Infrastructure, there are no more than five articles about the effect of bird's nests on the skin, and all of them are about the effects of bird's nest food on the skin. According to some authoritative bloggers from the media, the proportion of bird's nest extract in the formula is basically less than 1%, and the proportion of effective whitening ingredient sialic acid contained in it is probably not more than 0.3 parts per million. Therefore, the statement of bird's nest whitening is basically a scientific assertion that cannot be tested. These four deceptive means are commonly used in cosmetic advertisements to establish an authoritative image, and there are many other means, but the essence of these advertisements is to deceive consumers.

As some scholars have said, the purpose of introducing the image of scientists into advertisements is to make consumers associate advertisements with "science" and label advertisements as authoritative [9]. According to the survey, the more scientific and technological information there is in the commercial advertisements of daily chemical products, the higher the trust of the audience [10]. This reflects a phenomenon. For people, scientific symbols symbolize authority, and authority is trustworthy. Scientific symbols in commercial advertisements form a

kind of knowledge power through the construction of a knowledge and discourse system, and power shapes the public's attitude towards science and technology through discourse. At this time, knowledge becomes a kind of control--in the past, people were dominated by death, while in modern society, people are dominated by living better. The purpose of commercial advertisements for skin care products is to build themselves into authority through scientific symbols in order to make people trust the advertised products more. The public, who does not possess the knowledge, can easily be deceived by the pseudo-scientific concept of "anhydrous formula" marketed by merchants. Knowledge power is monopolized by professional elites, and it is difficult for ordinary people to have access to information about the "anhydrous formula", so it is difficult for the public to distinguish between true and false. Even people who have doubts about this concept find it difficult to master the right to speak because they are not authorities and have no evidence to question. The same is true of the "preservative-free" incident. Merchants take advantage of consumers' distrust of preservatives as chemical products and deliberately confuse the concept of "preservative addition" so that consumers are willing to pay high money for their claimed "preservative-free" skin care products. Absolute language and unverifiable scientific judgment in advertisements are deceptive means used by merchants to create an authoritative image for brands. These means are all acts of deceiving consumers by taking advantage of people's trust in science. With the globalization of information and the development of mass media, brand lies are exposed under the attack of other we-media "authorities", and the crisis of trust begins to appear, making it difficult for consumers to trust the authority and scientific concepts in advertisements. The appearance and vigorous development of cosmetic evaluation bloggers and popular science videos of cosmetic raw materials reflect the public's distrust of the cosmetic market--If someone trusts the scientific concepts in these commercial advertisements, the public will not need to watch the videos of bloggers. However, when consumers intend to choose products based on popular science videos from authoritative bloggers, they will fall into a deeper crisis of trust.

If the commercial advertisement is directly placed by the brand, then another form of advertisement--merchants placing advertisements from we-media bloggers is more hidden. When we-media bloggers have a certain number of fans, merchants usually cooperate with we-media bloggers, and we-media bloggers implant merchant advertisements in videos, and merchants provide rewards. Different types and professional levels of we-media bloggers have different influences. According to the professional level, these we-media bloggers can be divided into ordinary bloggers who usually share life videos and create short videos, product evaluation bloggers and popular science evaluation bloggers. Ordinary bloggers have a low degree of professionalism, and the implanted advertisements are usually obvious. Consumers generally buy skin care products recommended in advertisements out of the psychology of trusting bloggers or supporting bloggers. Consumers who buy products recommended by this type of blogger have lower expectations for the products and have a greater power of discourse about the quality of the products. Many times, it is not the product itself that makes them spend money but the emotional value brought by bloggers. Therefore, when the product recommended by this type of blogger is ineffective, consumers will only be disappointed with this blogger and this product. Evaluation bloggers have a certain professional level, and they usually put several brands together for evaluation and comparison. For example, when evaluating water emulsion, bloggers usually compare it according to the moisturizing effect, skin feeling, oil control effect, formula raw materials, price and more. This type of blogger usually evaluates products from two perspectives: their own impression and the effectiveness of formula ingredients, but they will place emphasis on their own experience. In the video, bloggers usually share their feelings and occasionally comment on whether the formula of skin care products contains risk components. Their analysis of the formula and ingredients is superficial and simple, but they will use the method of controlling variables to strengthen their

credibility when discussing the use of feelings. One blogger used the method of partition daubing on his back to compare the sunscreen strength of various sunscreen products. Generally speaking, their videos contain scientific symbols, but they are not authoritative. Therefore, although fans are not as professional as bloggers, they still hold the power of discourse. However, compared with ordinary bloggers, once consumers who evaluate bloggers find that the products are ineffective, the crisis of trust will be stronger. Consumers have a stronger purpose for buying products by watching the videos of evaluation bloggers, and when they watch videos to make product choices, they think that the choice is in their own hands. So once they are deceived, it will be even more unbearable. They will doubt themselves and the professionalism of the evaluation, so they intend to seek assistance by watching those popular science videos of cosmetic formulas. The bloggers of popular science evaluation are the most professional, and the video content also contains quite a lot of scientific symbols-conceptual popular science, the production process of products, the action mechanism of formula raw materials, advantages and disadvantages, element concentration and more. These bloggers are cosmetic brand entrepreneurs, raw material ingredients practitioners, formulators and Researchers of the Chinese Academy of Sciences, namely, authorities. The style of these bloggers can be that some popular science knowledge is mixed in the evaluation videos, and their evaluation is usually aimed at the concentration, adding effect and stability of certain elements in various brand products. However, in this field, the competition between bloggers is the fiercest, and some typical cases will be selected for analysis. The first case, "Mr. Wang talks about skincare", a blogger who claims to be engaged in the raw material industry of skincare products for 20 years claims that the laboratory "Technician Star" sent for inspection when testing the blue copper peptide concentration of the product is her own private laboratory. He said in the video, "When I was engaged in the raw materials industry, you were still wearing open-backed pants. I know a lot more than you ... You got it tested in your own laboratory ... Your report was not stamped with the official seal, and there was no tester. " In the second case, "Ahuai", who has been engaged in the beauty industry for 20 years, claims that the researcher "Macromolecular Laboratory" of the Chinese Academy of Sciences maliciously confuses the scientific concept between the concentration and utility of some ingredients to recommend their products secretly. In the third case, "Ahuai", a popular science blogger who was once a hit, Ahuai was revealed to have copied other people's popular science videos and once sold fakes. Even her 20-year experience in the beauty industry may be false. As Foucault said, expert discourses established by those with power or authority can often be countered only by competing expert discourses [11]. In these cases, consumers are always silent, and they are just communicators in these cases.

Compared with commercial advertisements, the crisis of trust brought by these media authorities is more serious. If consumers only doubt the scientific symbols in products and advertisements when facing commercial advertisements, these we-media authorities will make consumers doubt the scientific symbols themselves--doubt authority, doubt scientific institutions, doubt scientists and even doubt scientific knowledge. In court, people usually have to provide evidence or proof. The organization that provides the report is generally considered as a neutral third party. However, in the first case, consumers will have a serious crisis of trust in the so-called scientific institutions: Are these neutral third-party testing institutions really neutral? Is it possible for the boss of an organization to be friends or partners with some product vendors? Will these institutions accept bribes from merchants? Is the report provided by the organization true? Is the report provided by the organization valid? These endless details make it difficult for consumers to deliver trust. Some helpless consumers can only choose "passive trust"; that is, although consumers have low trust in institutions, they have to choose trust. In addition, analyzing the discourse expression of " Mr. Wang talks about skincare ", it will be found that their videos and business advertisements have the same effect. They are constantly telling the public that he is authoritative and trustworthy. He raised

his position through "20 years" and "knowing more" and used "open pants" to belittle the other side to convince consumers that he is the authority, and the other side is not the authority or is not as authoritative as him. There is a kind of logic behind this kind of behavior, authority is trustworthy, and the public is untrustworthy; Authority is qualified to master the right to speak, and the public is not qualified to have the right to speak; Authority is right, and the public is wrong; Only authority holds the truth. Power works through discourse to shape popular attitudes toward science and technology. Knowledge becomes a force of control [11]. However, many counterexamples tell the public that authority will be wrong. Therefore, this lie will be quickly debunked, and the rebound of the crisis of confidence will be more intense. People will be disgusted with technology, science and knowledge in the mouth of authority. In the second case, a highly educated scientist, in the eyes of the public, intends to use his identity and influence to disguise his scientific knowledge package for profit, which reflects the vulnerability of knowledge and the fragility of authority. When knowledge and money are linked, knowledge is a kind of power, and knowledge is endowed with the attribute of "untrusted". These authorities, like merchants, aim to make profits. Merchants promote their own products in advertisements, while these authorities promote the products of those merchants who give money to advertise in advertisements. Therefore, it is difficult for the public to know whether the popular science knowledge mentioned by these bloggers is true knowledge or misleading, false knowledge for advertising. The purpose of bloggers sending popular science videos is to become an authority in the eyes of the public to attract fans who are eager to know about cosmetics. When there are enough fans who believe in themselves, they will start advertising to make money, so it is hard to believe whether what they say is always trustworthy. The case of "Ahuai" is the most ridiculous irony, and an ordinary person successfully plays a false authority. The meaning of the existence of authority seems to have been dissolved. In this era full of falsehood and lies, everyone can play the role of authorities because authorities will only decorate themselves with scientific symbols. In this era, knowledge is fan flow, and knowledge is money. Moreover, the most ridiculous thing is that the final result of the contest between these bloggers is usually nothing--no one knows which blogger is erroneous, and consumers who should be the most informed cannot participate because they do not have the knowledge power. At this time, the right to speak of consumers and bloggers is not equal, and it is difficult for the public to have the right to speak in the professional field of bloggers. The trust crisis caused by this lack of knowledge power is difficult to resolve. In the cosmetics market, consumers who really should have the right to know and information are fooled, and the competition between the authorities of merchants and bloggers excludes consumers.

#### 4. Suggestion

There are three ways to alleviate the crisis of trust. First of all, the government needs to do strict advertising supervision and product quality inspection to combat the chaos in the cosmetics market. This practice is actually a way for the public to replace the trust mechanism of the cosmetics industry facing collapse through the established relatively stable trust mechanism of the government authorities. At present, the public still has some trust in the authority of the government. Secondly, the legislature should amend the Advertising Law in time. At the moment, companies and advertisers are continually altering their discourse and marketing strategies to attract customers, and the lagging Advertising Law may not be able to govern the industry in time for its healthy development. Finally, the intellectual elite needs to break the knowledge power and popularize some scientific concepts. Many evaluation bloggers are actually doing this, but they still focus more on promoting products and evaluation. Moreover, the more the influx of intellectual elites, the more transparent the knowledge of some industries will become. This is a way to stabilize the current trust mechanism.

## 5. Conclusion

Starting with the phenomenon that scientific symbols are abused in advertisements at present, this paper analyzes that the purpose of using scientific symbols in advertisements is to establish an authoritative image for brands and make consumers trust, but it has triggered a greater crisis of social trust. Advertisements try to cancel consumers' right to speak through authoritative images, but in the struggle for the right to speak between we-media authority and brand advertising and we-media authority, consumers' right to speak is further dissolved. In the struggle for intellectual power, consumers who should have taken the initiative are the uninformed and silent side. Therefore, the huge risk brought by trust makes consumers hesitate. In the end, this paper puts forward three ways to alleviate the trust crisis from the government, legislature, and intellectual elite to alleviate the crisis of trust, and puts forward suggestions from the government, legislature and intellectual elite, respectively. To fight the instability in the cosmetics sector, the government must first implement tight advertising regulations and product quality monitoring. Next, the legislature must modify the Advertising Law as soon as possible. At last, intellectual elites must undermine intellectual power by popularizing scientific conceptions.

Theoretically, this study reflects on the contemporary phenomena of discursive hegemony in the cosmetics business through abusing authority symbols, which has specific practical implications. Unfortunately, significant data are missing from this work, and several sections may require additional research. Future studies may consider statistical analysis, combining qualitative and quantitative methodologies.

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