

RESEARCH ARTICLE

The evolution of artificial intelligence interface design form

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Abstract: The digital network interface design has an incomparable form and function than the traditional material interface, and its own high-tech content provides infinite convenience for human life. Artificial intelligence interface design is facing deeper intelligence, multi-technology integration and innovation of design concept, using the wings of big data and machine learning, customize the experience more suitable to personal taste; by enhancing the interactivity, enhance user immersion, become a breakthrough for researchers and practitioners to find inspiration in this field, and need time to establish a new aesthetic evaluation standard in the practice area.

Keywords: Intelligent web interface; Design thinking; User immersion; Intelligent interaction; Data empowerment and progress; Design form

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1 Introduction

The computer age is the most revolutionary, the most brilliant and the highest scientific and technological content in the history of human development. Its trajectory is full of dramatic color, is different from any other technology movement, from a simple manipulator to form large tube long period did not attract the attention of ordinary people, most people think it is just a distant strange high-tech monster, but when it to establish the network and a large number of software mature put into use, in the moment of human history concept quickly into life, and encroach on every space and details, the combination of perfect and close, in recent years as the digital tsunami show, to focus on the eyes of the people. The communication mode between human and virtual space is undergoing a profound transformation. The application scope of interface design has become very mature, and the market continues to pour into homogenized XR, VR, MR and other works. The intervention of artificial intelligence has unlocked a

new perspective for the interface design, going beyond the traditional aesthetic and functionality, and moving towards a personalized intelligent experience.

2 Key dimensions of the AI interface

The two key dimensions of the interface commonly used on traditional computers; one is that AI use big data and machine learning, predict user expectations and workflow, customize more consistent with each different interface, and respect the individual experience and differences, rather than find a compromise effect, more professional and more efficient. Second, the interface no longer relies on computer equipment alone. With the emergence of light and diverse mobile devices, such as mobile phones, watches, glasses, etc., the interface design pays more attention to the spatial, three-dimensional and immersive characteristics of the devices.

There are about four stages from the change of media transmission channels: the first is the oral stage, the second is the text stage, the third is the electronic stage, and the fourth

is the Internet stage. The progression of each stage leads to the precipitous innovation of human culture. McLuhan once proposed that "a medium is a message", he believed: " any influence of any media (that is, any extension of man) on the individual and society is due to new scales." [1]

Around 2010, With the update and iteration of chips, cloud computing, the Internet of Things and other technologies, Man's ability to collect and process big data has greatly dramatically, The technological revolution has begun to incubate, breed, and grow, Deep learning is currently the mainstream method to realize artificial intelligence, Large models are the AI network models based on deep learning, Cloud computing is the basic computing platform for artificial intelligence, Help artificial intelligence to realize the application landing, The reverse direction further enriches the upgrade of cloud computing, Make it more consistent with the needs of the business scenario, The result of this mutual promotion further liberates manpower, And generate multiple new forms of application, Such as AI painting, AI writing, AI video, and AI generation in various fields, It has made artificial intelligence open up a more complex and diverse extension in language, image, action and other technological means.

Interface design includes five characteristics: digitalization, space-time movement, interaction, integration of network and multimedia, and uncontrollable form. It is the product of high unity of technology and life in traditional interface design such as newspapers and TV. In the construction of information architecture, the first consideration is the user needs. By analyzing the user's usage scenarios, search habits and goals, and even the future neural network system, the information architecture that meets the user's cognition can be designed.

3 Change of artificial intelligence interface form

The function, expression skill and artistic level of the traditional design form cannot get rid of the material fetters. Information transmission is limited by time and space, and the information load code in the transmission is affected by misleading and attenuation, which makes

the designer and the audience to the global grasp of the information form error. With the conversion of digital media "bits" and "atomic" substances, and the laying of the network, users can more timely, accurately and comprehensively understand and capture information. With the rapid development of artificial intelligence technology, the interface interaction design is gradually evolving to the direction of pure intelligence. The first important leap forward is the intelligent voice interaction technology, which is an important means to realize the natural interaction of artificial intelligence interface. Through speech recognition and speech synthesis technology, voice commands and digital interface interaction, realize information input and output, the application of the technology makes the interface can independently to the user feedback emotion analysis, understand the user's emotional tendency, according to the context of the user habit to provide personalized services, using generated artificial intelligence algorithm such as against network, by training the neural network model, automatically adjust the layout and style of the interface elements, provide more in line with user expected interface experience. [2] The interface in the future is a new dimension world created by human beings. The form of interface design will be integrated into every corner of human life, making the traditional human nature, personality and aesthetic appreciation tend to be more homogenized."The so-called computational thinking of artificial intelligence, from the definition of artificial intelligence, its research goal and method of artificial intelligence is to simulate the construction or cognition of the human brain, and for such a definition has a preset assumption that what the computer can do is what the human brain can do."Currently, AI can show independent behavior patterns. With the emergence of diversified mobile devices and lightweight power supply system, the life of human users can seamlessly switch between different devices, realize the real-time information sharing and synchronization, the viscosity between human and machines, even confused those are real, who are virtual agents, artificial life with life in nature, in the

external environment in the interaction of development and evolution.^[3]

4 The revolutionary form of ai interface design

In the background of artificial intelligence, does the traditional design form still have the value and significance of existence, and what is its aesthetic standard? Under the promotion of new technology, modern design is showing a state of accelerated development. Design takes user satisfaction as the purpose of design has always been the goal of design behavior, and AI design behavior cannot get rid of this normative principle. The interface design pattern in the network period has formed the sub-mainstream cultural phenomenon in less than a decade, During this period, artists and designers use traditional design tools, Combined with software technology with automatic generation skills, And form the reformed workflow and the new authoritative evaluation criteria, Our design process using the dematerialization tools operating at higher latitudes, Revolutionary changes in the non-network period, The concept of art has also made great progress, But this design period still permeates the design, But some of these links are deeply involved in AI, To be precise is that human-machine cooperation is completed, Can be called the quasi-AI design phase, It has made a good landing platform for artificial intelligence design. Artificial intelligence interface design practice both on the creative means, materials and methods on exactly the same, is no longer the referee, machine and digital media is not only the continuation of human thinking, artificial intelligence burst system with certain autonomy to realize the art, the design activities is more like communication with another life rather than command, artificial intelligence is a tool of artistic creation,

is also the subject, but more follow the user requirements, it is the user's feedback body, various interface design communication platform into more diverse inanimate intelligence and life integrated platform.

More and more of the display of subject concept and free will, this revolution has touched on many levels in various fields of society, politics, economy and culture. The AI interface improves user experience, promotes innovation in interaction design, improves efficiency and accuracy, and supports complex applications. At the same time, it also brings issues such as privacy and security, dependence and exclusion, ethical and social impact, technology and open limitations. With the closest contact with the artificial intelligence young generation have strong and keen feedback, the essence of the humanities, humanity is the core connotation, make people enjoy its convenience and accept the page effect is not ready for psychological, and under the network flood burst, caused many cultural psychological aspects of dislocation, fracture and conflict. It is urgent to establish a complete design standard, function scope and aesthetic evaluation system of the corresponding academic circles.

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