

Speculating Backwards: How is Speculative Design Transferred into East Asia?

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Abstract

Speculative design has been well-known since the publication of the book *Speculative Everything* (MIT) in 2013, advocating design as a medium for promoting people's social dreams. This paper intends to take 'speculative design' as the research object with China as an example to explore the possibility of the cultural dream.

Speculative design advocates the use of fictional and technological speculation for thought experiments. The 'future cone' from the field of future studies is an important basis supporting the timeline of speculative design. Speculative design is often closely linked with science and technology. However, this paper takes culture as its focal point, trying to develop a new dimension of speculative design and broaden the context of speculative design for social dreams. From the future cone often used in the design process, it extends backwards to the past. This is highly consistent with the idea of 'recognising the past and knowing the present' in terms of Chinese thought and culture from ancient China. Possible world theory and the Chinese approach to the speculation method are generalised. In addition, this paper categorises the creation-time logic of the time span and subdivides it into insinuation and reconstruction of ancient scenes, etc. This speculating backwards method takes the past cone as the main direction, exploring its unknown possibility and making reasonable speculations using speculative design. In terms of the medium application of a cultural carrier, it also expands the ways of cultural transmission.

Keywords: *Speculative design, Critical design, Possible world, Social dream, Cultural dream*

Essence of Speculative Design

Critical design (proposed in 1999) and speculative design (proposed in 2013) originated from the same system: 'Asking a question rather than solving a problem through design (1)', and they were proposed by Anthony Dunne (1964-) and Fiona Raby (1963-), then professors at the Royal College of Art (2005-2015). Speculative design focuses on developing a debate platform for ideological experiments with 'the construction of future context'. Design is no longer just 'solving' problems, but rather 'putting forward' questions and new perspectives to influence the present society, which broadens the potential value of design itself. Different from designing an object under the concept of designing various commodities in the market, speculative design does not mean speculating design itself but designs a speculation for the audience to speculate, which is a thought experiment that promotes social dreams through design (2).

Speculative design often open up the discussion of present social issue through science and technology and fictional scenarios. Dr. James Auger, a speculative design scholar, starts from the factor of technological development and discusses how speculative design has been adjusted and applied to different degrees for engaging with our present world and exerting certain influence in the future (see Fig. 1)(3).

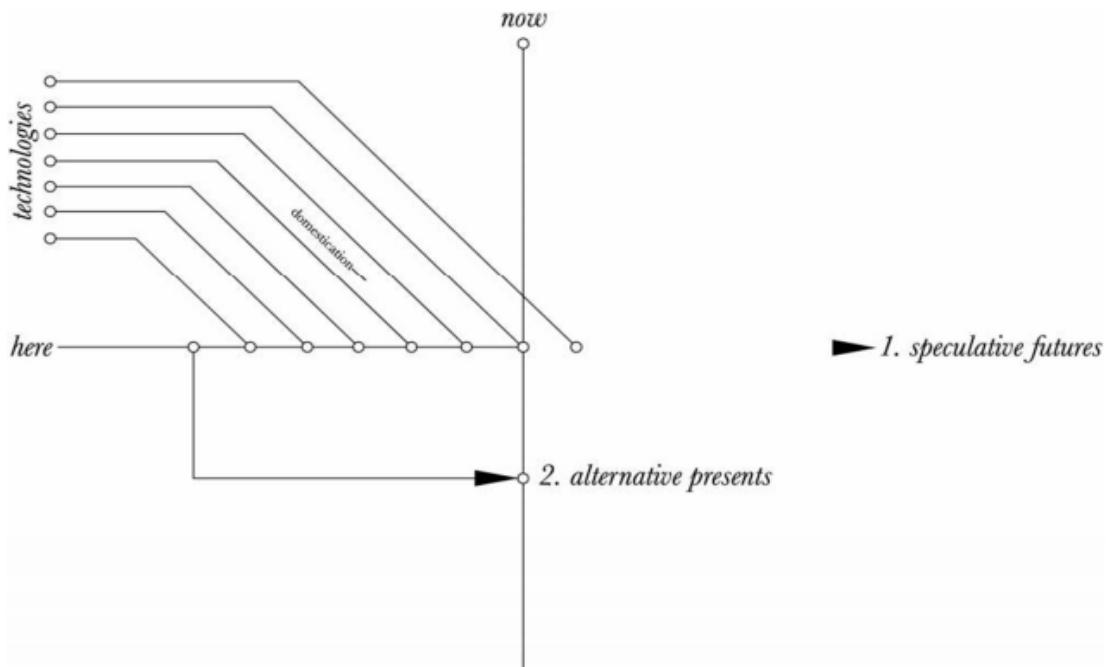


Figure 1: Different falling points of science and technology in the future cone. (Illustration by James Auger, 2013)

Speculation, breaking away from the framework of reality, critical thinking, fiction and creating new viewpoints and perspectives are several key points of speculative design. The works render the audience an ideological platform for discussing reality by showing the alternative presents or imaginary future in advance. In the application of the future cone (PPPP, see Fig. 2), speculative design uses the possibilities of the futures summarised to question and examine the present and create a new world outlook that offers us an opportunity to develop a preferable future (4).

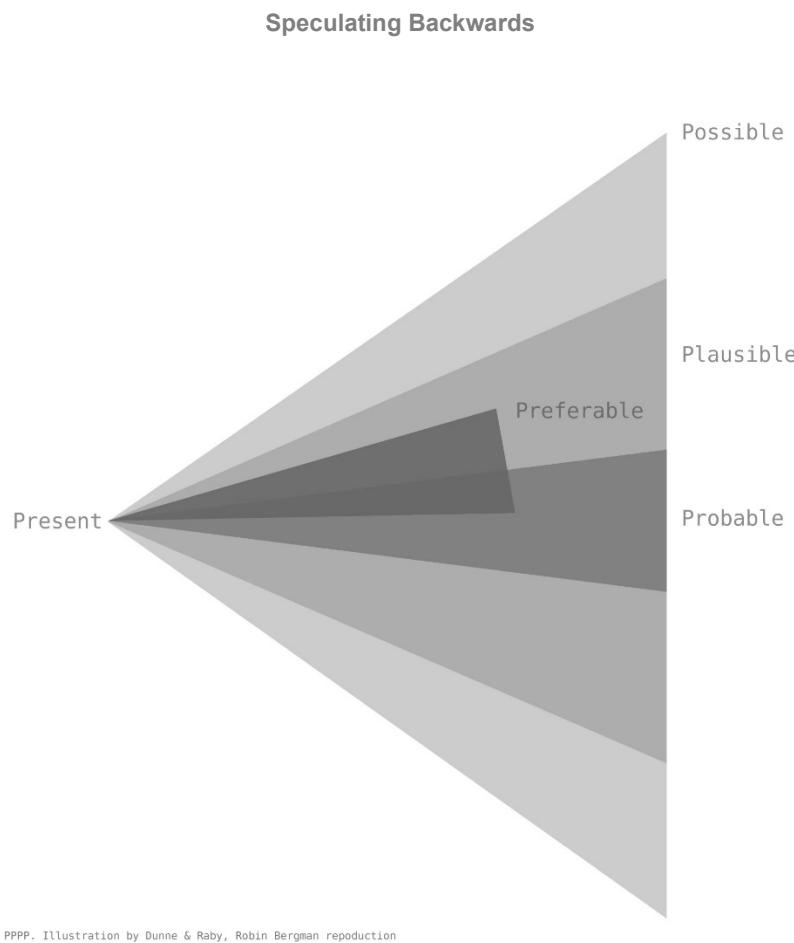


Figure 2: Future cone (pppp) illustrated by Dunne & Raby. (Speculative Everything, 2013)

China's Cultural Background

To look for ways to reflect on the present and speculate on the future in the cultural context of China, under its ancient philosophy, creating a hypothetical future is not a single factor that can influence the present, but rather a form of ‘recognizing the past’ that is often talked about among Chinese people (5). From the terms of Chinese ideology, it can be seen that Chinese people’s habit of ‘recognising the past and knowing the present and future’ comes from the historical lessons on the change of dynasties and the wax and wane of the country in history. Examining the words and deeds of historical figures, distinguishing right from wrong, and kindness from evil to measure the current social system and moral ethics of the present, such as the *Comprehensive Mirror for Aid in Government*, it takes the past as a mirror, aiming to understand the present and speculate on the future.

It is very common for China to reflect on the present from a historical perspective, taking into account the ancient times to the present (6). In order to achieve the purpose of reflecting on morality and humanity, as China has a large number of ‘past events’ that are recorded in all ages, capturing past narratives from legends, myths, official history and unofficial history will also become a rich context for promoting social dreams, and may even become a cultural dream. ‘Learning gains and losses from others and knowing the wax and wane of the country from history’ comes from the *New Book of Tang Wei Zheng Biography*. The original meaning is to know the wax and wane of the country in history, with history serving as a mirror—knowing your own gains and losses with others as a mirror. The first section of Peace Banquet (Anonymous in Ming Dynasty): ‘It is significant to recognise the past and know the present in expelling Cao Cao and wiping out the Kingdom of Wu’. Taking China as an example, history and experience examine the present from the perspective of

developing the original Western speculative design's future and technology so as to manifest other opportunities for our possible world.

Preliminary Construction of Backward Speculative Design

In Alain Badio's *Petit Panthéon Portatif*, Badio discusses that when we are dedicated to an event, we can really go back to it, and that while there is no absolute truth in this world, we can piece together a story that we are willing to trust through traces of events, wherein the key to completing this story is our concept of things (7). The Brazilian philosopher Álvaro Borges Vieira Pinto seriously criticised the limitations of the formalist method of cybernetics in his concept of technology (8). Rodrigo Freese Gonzatto draws the following picture based on this (see Fig. 3). In his cognition, he understands the past and future as being shaped by the present. Because of the constant changes and uncertainties, the present is extremely open and creative, and every moment provides opportunities to help people design and imagine the future they want. Therefore, cybernetics must be rooted in the concrete present reality and develops in the form of a closed cycle. Vieira Pinto named futurism a vision that will not close the cycle, which is the embodiment of the vision of imagining the future without considering its changes. In fact, our present is surrounded by history, truth and fiction, and the present will continue to change as our knowledge, including perspective, of the past and the future change (9).

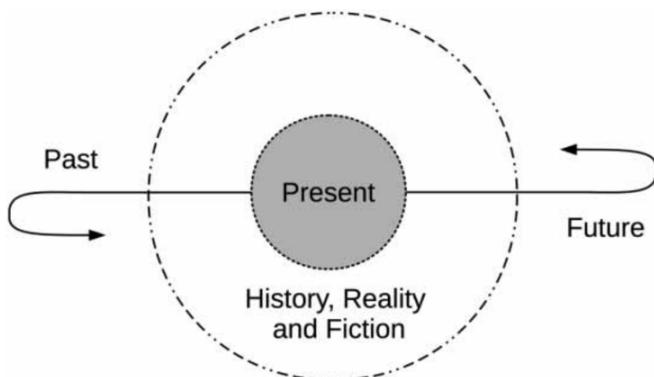


Figure 3: History as a tool for redefining the past from Rodrigo Freese Gonzatto, 2013.

Works on speculative design have many possibilities to develop the future in a predictive and speculative manner. Dunne and Raby utilise futurist Stuart Candy's future cone to support the creative blueprint of speculative design. This PPPP diagram above represents the range of feasibility from the central axis, with probably, plausible and possible, respectively (10). Different from the classical speculative design, which explores the boundary and appearance of the future, as the main core of speculation and critical thinking, classical philosophy divides time into three parts, namely the 'past', 'present' and 'future' in terms of the integrity of the time slice. The main design process of speculative design lies in building a different world from the present. Backward speculative design firstly constructs the worldview for all the time periods experienced by human beings in the past. Taking the percentage of truth in general cognition as the basic division standard, it is generally divided into 'official history', 'unofficial history', and 'legend and myth'. More accurately, it is a possible past with high credibility and official recognition, a plausible past with relatively low credibility and non-mainstream recognition and a fictional/experienced past with a fictional story or experience located in the past. The lexical distinction between myth and history is obvious, but in Claude Levi-Strauss's book, he writes:

Where does myth end? And where does history begin? A case that we are completely unfamiliar with, or a past that has no literature to refer to, of course, there is no written record but only a legend passed down by word of mouth, is also claimed as history (11).

According to Claude's point of view, it's presumed that if history is regarded as a continuation of myth rather than a different attribute, the boundary between history and myth may be broken. Incorporating the above-mentioned past texts, whether real or fictional, the past timeline is an induction made by researchers on people's cognition of past events. Therefore, the official history, unofficial history, and myths and legends are deduced as the three major blocks corresponding to the context of the past cone and future cone, and then the preliminary practice scope of the design of speculating backwards is roughly developed (see Fig. 4).

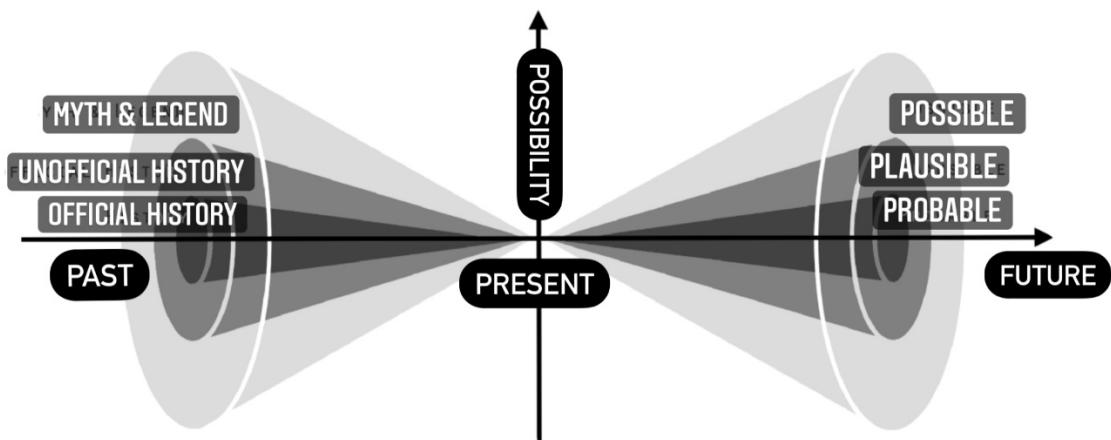


Figure 4: Dividing history, unofficial history, myth and legend according to the proportion of authenticity. (Illustration by Yiwen Tseng 2018)

Introduction to the Method of Speculating Backwards

Different from the classical speculative design route, speculating backwards uses the traditional cultural context produced by the 'past timeline' as the source of materials to reflect the current reality, develops a possible world and discusses various potential issues at present or in the future using design language. The above official history, unofficial history, and myth and legend are summarized into two parts, which are historical materials (official history and unofficial history) and fictional myths and legends reflecting the social state at that time. As far as historical material which may take place are concerned, its historical standpoint and subjectivity increase its uncertainty. The role of such historical materials in backward speculative design has a similar relationship with the role of the future in the original speculative design. The loose or uncertain history event provides a space for imagination in the design process. It chooses different historical narrative environments according to different design demands and re-examines various elements of history. Through the expansion of perspective and thinking mode, the method of backward speculative design has the ability to try to influence the present by loosening the past standpoint, changing the inertial past perspective, drawing lessons from innuendo, etc. when the historical part is chosen.

In view of the myths and legends that are pretty fictional, this research regards them as a loosened event. The creation of myths reflect the yearning or criticism of human beings in response to a certain social phenomenon or natural environment at that age, and also tell of the world outlook of the people at that time (12). In this case, the primary goal of design is to find the coincidence point between the existing design purpose (reflecting a social phenomenon or issue) and the factors behind the fictional stories, and then through today's objective scientific conditions, we can reasonably speculate on myths. Modern scientific cognition, such as the geographical ecological environment, evolutionary mode and physical knowledge, is used as a clue to run through the past and the present, adding a reasonable structural framework to the imagination space and improving the cognitive authenticity of constructing the world so as to dilute the question over the authenticity of myths and bring the audience into a more realistic narrative context.

Exploring and developing the future perspective represents the speculation core of this path. The biggest similarity of the above two design ideas lies in taking the present moment as the benchmark for looking back and bringing current social issues and scientific development into the past stories for detection. The method of backward speculative design always has two core actions, namely 'observing to the past' and 'speculating from the past'. The action of 'observing to the past' must take into account the background of modern scientific and cultural knowledge and the current social issues to speculate a certain point in the past. In 'speculating from the past', regardless of the falling point of the speculation, the time flow will inevitably or deviation of stories occur through the action of 'speculating' in the past. The two actions occur in turn to build a thinking path for backward speculative design. However, the loosening and deviation of the historical falling point of the world outlook usually involve two possibilities: 'active loosening' (see Fig. 5) and 'non-active loosening' (see Fig. 5). Active loosening is to actively conjecture and alternate fictional stories from the perspective of designers such as the above-mentioned official and unofficial history, while non-active loosening means that designers don't have to deliberately conceive stories, such as myths and legends handed down from ancient times, and the story background behind is the story content conceived. In the design path of 'active loosening' that designers need to actively change stories, present social phenomena, objective scientificity or issues are often connected with the historical materials, which may become the motivation to change the original stories, and then the audience can resonate with the works and interact with each other in thought through design techniques. And 'passive loosening', because of the foothold of myths and legends under the development of humanities, establishes the rationality of human cognition of a story. It can directly bring in the phenomenon or objective scientific basis that the designer wants to describe, and carry out a seemingly reasonable design result with speculation to talk with the audience. Conceptual design, which is related to the past timeline and modern context, derives an experiment between audience and past, present and future in thought, culture, science and philosophy because of the support of speculative design.

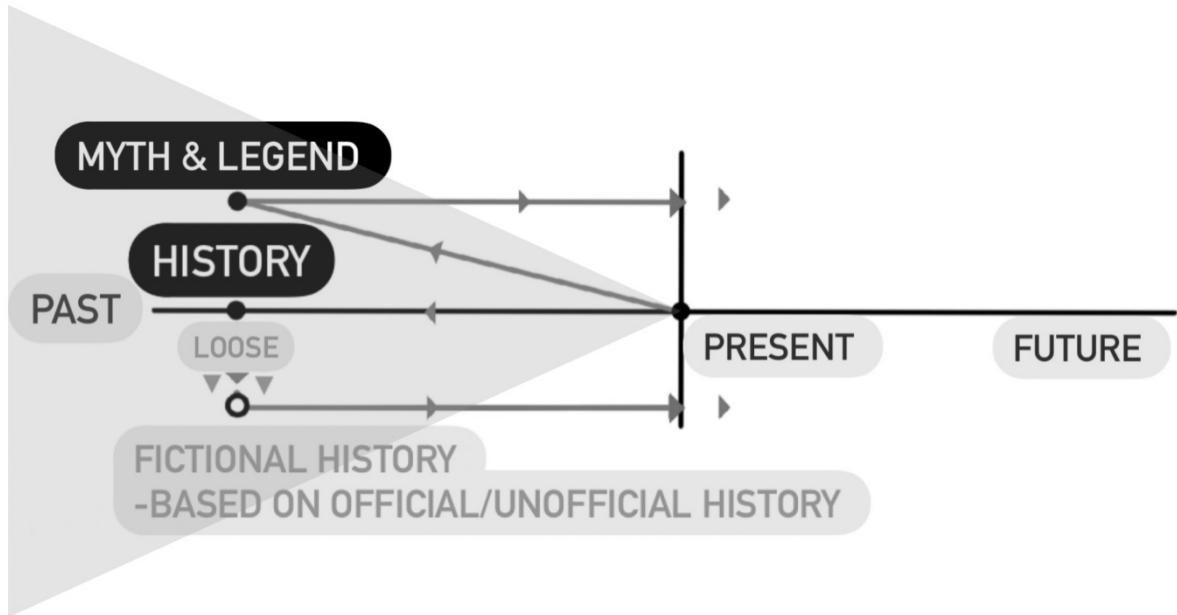


Figure 5: Possibility path of history and myths in design process. (Illustration by Yiwen Tseng 2021)

Characteristics of Backward Speculative Design

As a cultural keyword, 'narrative' contains many concepts and relationships, such as 'perspective', 'discourse' and 'narrative subject (13)'. Because the time point of speculating backwards is different, the narrative elements and design principles of what if tend to accurately draw materials from the partial elements of narrative so as to extract specific inspirational elements from stories. For example, this paper looks for roles similar to those occurring in today's social issues in ancient myths and historical materials and draws materials and speculations from the figures themselves to then develop events brought out by the characteristics of these figures. Taking the event as a direct example, through the analysis of the social structure of the event background, this paper discusses similar current social phenomena through the event itself, in which the role of figures has become a non-key element. In focusing on traditional scientific and technological devices, daily cultural objects and other items, it can reproduce the characteristics of users and the scenario; different elements can be combined with different creative carriers, and the strong correlation among elements leads to the butterfly effect of local hypothetical behavior, which eventually leads to the change of the macro-narrative context and achieves new and full speculative results.

As far as the standard of connection between the looseness of the historical materials and the current time point is concerned, the minimum departure principle in the science fiction narrative expresses that the connection between fiction (the past) and reality (the present), then there is a certain emphasis ratio in the fictionality of two periods (14). For example, as a certain time point in the past corresponds to and reflects a certain time point in the future, its potential to loosen greatly either in the past context or in the present. However, if both sides are greatly loosened at the same time, it may lead to an overly fictional imagination and lose the empathy element of connecting with the audience. Therefore, whether in the past context or the present, if both sides are overly fictional or too close to reality, the artist's creative intention as a designer will be reduced (see Fig. 6). However, there is an exception when there is no loosening in the narratives from left and right ends, while there is a fictional range between them as a springboard, which opens up a new way of interpreting the past context or the present.

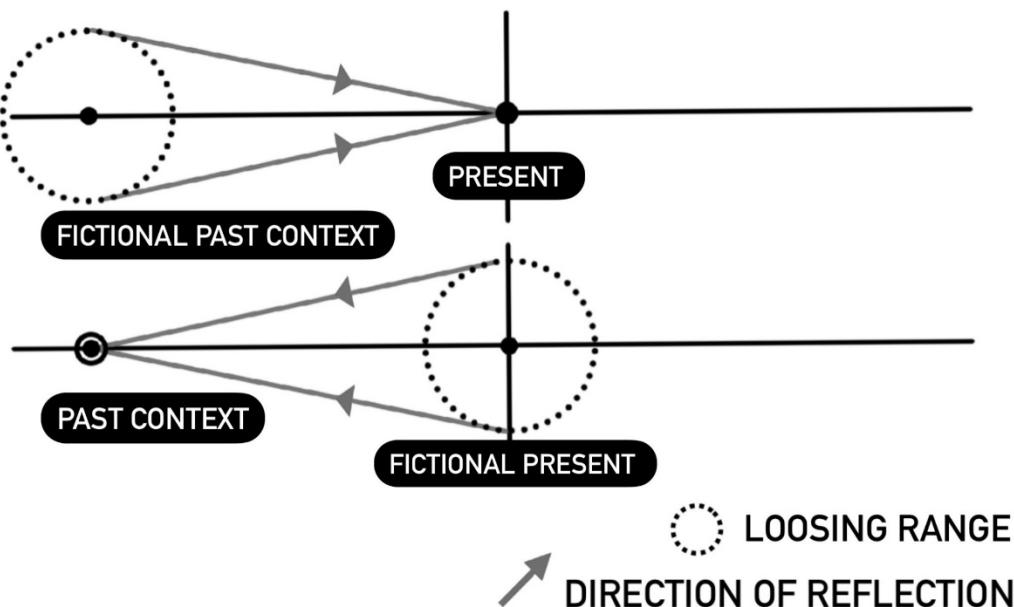


Figure 6: In most cases, one side of fiction and reality needs to be imaginative, and the other side needs to be close to reliable truth. (Illustration by Yiwen Tseng 2020)

A Key to the Culture Dream

Since the Industrial Revolution in the 18th century, it has been difficult to separate the evolution of design from technology. It became even more difficult after the Second World War in response to the massive supply and demand of daily necessities since most daily necessities were closely integrated with the industrial chain. Science and technology serve humanity; with the rapid development of modern science and technology and urbanisation, our society and environment have been flooded with high-tech products, and the side effects of science and technology are gradually emerging. Technology can bring development, but it can't bring equal opportunities to everyone. The so-called side effects of technology are often the effects that designers did not foresee or were unwilling to consider (15). This is also one of the main reasons for the rise of speculative design in the context of the development of contemporary design. Most speculative designs use future technologies to discuss current social issues, in a similar manner to works of science fiction realism, to encourage people to correct both themselves and their current behaviour and speculate about the future. In addition, by virtue of the unique speculations of speculative design, it tries to use design to break away from the realistic framework to construct multiple possibilities in the future and promote social dreams.

Society and environment have created the thinking mode of artists and designers, including inner cultural thoughts, while their art works and designs contain the cultural meaning thereof (16). In addition to the fact that speculative design proves the possibility of utilising design as the medium to promote social dreams, the development of speculative design in China has facilitated opportunities to explore the capacity to use design to promote cultural dreams. Sir Edward Burnett Tylor (1832-1917), a professor at Oxford University in England, said: 'Culture is a complex, involving knowledge, belief, art, morality, law, customs and all the abilities and habits that create members of human society (17).' And in different countries and cultures, there will be different universe (18) with different expectations of futures. Western culture has a linear timeline, while Eastern culture and many traditional cultures have a periodic understanding of time (19). Dunne and Raby reckon futures, as a narrative framework, shouldn't be too limiting. A nearly ossified future

blinds our imagination, since it's required to link the past to the present, which they are some version of, or extensions of existing world-views (20).

The future in Chinese culture is visible, convergent and consistent, and greater attention is paid to circulation and reincarnation. Therefore, the historical material from the past cone apparently works in the design speculations in China, and it's also the advantage of taking China as the primary case in this paper. However, both the East and the West have valuable historical materials that can be utilised in this design space. In ancient times, for instance, Confucius in the East and Jesus in the West shared and recorded their philosophies and beliefs through different stories and events. Chinese mythology and Greek mythology represent various world-buildings, and both influence our concepts and cultures, even nowadays. When constructing a fictional world model of the past, the number of texts drawn from myths or historical events from different cultures for projection and metaphors will be considerable. It is, therefore, essential to direct the audience's consciousness with creation media into the narrative scenario and re-examine an old history and culture.

As Butterfield said: 'Historians must recapture rich moments, people's humanity, external situational settings and the meaning of events, and put together specific, individual and personal things instead of sweeping them all away because they study the changes of things, not the eternal mountains and stars (21)'. Designers should also show the diversity of history through this method. In addition to constructing a new possible world that is different from the present reality stacked by present history, it is also possible to reinterpret history or a mythical, fictional world with the method discussed in this study, loosen the historical viewpoint that has been stereotyped by reality and liberate people's ideological deadlock in reality.

Notes

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Author Biography

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Yi-Wen is from Taipei. Her background is product designer, graduated from China Academy of Fine Art for the Bachelor. In 2013-2015, she took her Master in Design Interactions at Royal College of Art. Currently, she is PhD candidate in China Academy of Art. At the same time, she teaches Speculative design in Beijing (China Academy of Fine Art) and Hangzhou (China Academy of Art), as a visiting tutor. Her lesson is announced to distinguished teaching material 2018 in China Central academy of fine art. She focuses on how Critical design, Speculative design and Design fiction are transferred into China, and build the bridge between the possibilities of social issues, cultural materials, imaginary future and alternative reality through design. Her works has been interviewed by Dezeen, Daily Mail, FRAME, Designboom, IDEAT and other well-known medias, and her projects collected by CAFA. During 2013 to present, her works has been exhibited at London Design Week, NYC Design Week, Red Dot Design Museum in Singapore, Grafica Madrid, Spain, etc.