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Research article

Modernity As a Conversation – Investigating Chinese Modernity

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Abstract

The investigation of this paper focuses on the question of how to understand modernity between all different instances called modern. Understanding modernity as a universal might only acknowledge a European modernity, while there are non-western countries like China, that have also become modern countries, without having had a trajectory of thinking towards modern concepts. Where modernity as an inherently European way of thinking has set foot, it adapts and evolves into a variant of modernity being influenced by the certain grounds of ideas that it falls upon. Modernity is established by habituation with technological artifacts and their inherent values as manifestations of technological thinking. Yet, the initial thinking that is present in the context which is entered by modernity is relevant for the paradigm into which it will evolve. The values carried by modern technological artifacts can set foot in contexts and cultures that they were not part of initially. Presenting the example of China – a modern country without a tradition of modern thought – the idea of an adaptable modernity will be elaborated, a concept of modernity that is able to be appropriated and eventually exist in multiple variants. China had a rich and thriving cosmotechnics of knowledge, technical inventions and thought of its own, long before modern China came into place. Traditional Chinese thinking was not focused on progress, growth, or optimization. It had to meet the challenge of modernization, when it was already defining European science and economy. The awareness of modernity’s accidentality might pose an important stepping stone for overcoming modernity in Europe as well as other contexts.

Keywords: Modernity, Modernization, China, Chinese modernization, Cosmotechnics, Technological Thinking.

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Научная статья

Современность как диалог – Исследуя китайскую модернизацию

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Аннотация

Исследование, представленное в данной работе, сосредоточено на вопросе понимания современности в контексте всех различных проявлений модернизации. Понимание современности как универсального явления может означать признание только европейской модернизации, в то время как есть незападные страны, такие как Китай, прошли модернизацию, не имея траектории мышления, ориентированного на концепции модернизации. Там, куда проникает модерн как изначально европейский способ мышления, он адаптируется и преобразуется в иной вариант, испытывая влияние тех идейных оснований, на которые ложится. Современность утверждается через привыкание к технологическим артефактам и заложенным в них ценностям как проявлениям технологического мышления. Однако первоначальное мышление, присутствующее в контексте, в который вводится модернизация, имеет отношение к парадигме, в которую она будет эволюционировать. Ценности, которые несут в себе современные технологические артефакты, могут проявляться в контекстах и культурах, частью которых они изначально не являлись. На примере Китая будет разработана идея адаптируемой модернизации, концепция современности, которая может быть адаптирована и в конечном итоге существовать во множестве вариантов. Китай обладал богатой и процветающей космотехникой знаний, технических изобретений и собственной мысли задолго до появления Китайской модернизации. Традиционное китайское мышление не было сосредоточено на прогрессе, росте или оптимизации. Оно должно было ответить на вызов модернизации, когда уже определяло европейскую науку и экономику. Осознание случайности современности может стать важным шагом на пути к преодолению модернизации как в Европе, так и в других контекстах.

Ключевые слова: Современность, Модернизация, Китай, Китайская модернизация, Космотехника, Технологическое мышление

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INTRODUCTION

There have been numerous names for the epoch that we live in: modernity, post-modernity, second or reflexive modernity to name a few. Lately, this question is viewed in the light of a multi-polar world with various instances of modernity in different places and contexts that influence the terms and ideas individuals think in. Is there one universal modernity? One that traces back to the birth of capitalism, modern science and Enlightenment? Are there multiple modernities? Have they evolved as modernities from different backgrounds? Or are they mere imitations, adaptations and appropriations of one universal modernity? This opens the following reflections, discussing some approaches of philosophy of technology and the works of Yuk Hui especially. After a cursory consideration of what evolved to be modern thought over time in Europe, some adaptation points from the Chinese contact with modernity will be presented. With the example of today's China as a modern country – ‘modernity’ can be viewed as a conversation that adapts to different backgrounds of thought. Modernity only comes to rise in the habituation with technical artifacts, technological thinking and their carried values, and originated from ancient Greek thinking. Modernity's origin lies in European thinking. How does modernity operate differently in Europe than in places that did not follow a trajectory of thought that is driven by modernity?

UNDERSTANDING MODERNITY

First it will be established that modernity cannot be discussed without technological thinking. A brief look into the trajectory of technological thinking in Europe will be followed by an outline of traditional Chinese thought. Modernity entering a Chinese context and thinking will exemplify the introduction of modernity to different contexts. After looking into the Chinese adaption of modern thought, a summary of the learnings about the adaptability and logic of modernity can be formed. Modernity will be described as adaptable and able to shift in order to fit into different backgrounds.

Modern thought is the resulting paradigm of the course of European thinking. What is called European thinking is the thought evolved in Europe deriving from the Greek heritage of duality of body and soul, Galileo Galilei's geometrical endeavors, and the scientific method.

The modern trajectory of thought starts with Greek thought and progressed to the study of universal applicable laws lying behind events in nature, with the goal of manipulating these in order to control the world. Until now, European thinking, as in ‘western’ philosophy has utilized the universal laws and idealizations taken from experiments and deliberations in a never-ending evolution of a body of technologies. The sum of artifacts grows everyday, grows closer together, and becomes a conglomeration of artifacts in relation to one another – towards the so-called megamachine (Mumford, 1977).

Modernity is characterized by modern technological artifacts: planes, smart phones and apps, subway lines going through cities. The term ‘technological artifact’ includes various different kinds of gadgets, systems and infrastructure. They undoubtedly belong to modernity and are defining the modern individual and society. This goes beyond the



their mere materiality. Any kind of artifact incorporates values and affects the individual that uses it. Modern technological artifacts affect individuals through habituation and change their relation to the world in a subtle manner. Technological artifacts embody and transport modern thought.

The evolution of technological artifacts can be exemplified by Heidegger's river. A river is viewed through the lense of technological thinking as a flowing source of water – merely as a mere means to be exploited and to produce electricity – it is seen solely in technological terms (Heidegger, 1996). Following this logic and the possibilities it generates, a whole body of electrical artifacts can be imagined, in order to make 'good' use of this electricity. This force of exploitation of forces in nature leads to a system or growing body of artifacts. At the same time, they grow closer together over time, resulting nowadays in the upcoming interconnection of technological artifacts, e.g. the 'internet of things.' Modernity strives to incorporate and homogenize everything from ground logic to daily routines (Hui, 2024).

By utilizing technological artifacts, the life and practice of any individual gets affected by their implicit values (Grunwald, 2018) This can happen without needing to be aware of this force (Blumenberg, 2015, p. 190). The technological artifacts and technology as a whole are affecting the individual to use artifacts in a specific way and for a specific purpose and are therefore changing the way of thinking (Grunwald, 2018 and Blumenberg, 2015, pp. 190-192). This reaches into the inner workings of the individual's thoughts and choices which affect the possibilities and limits of one's thinking (Grunwald, 2018, p. 206 and Blumenberg, 2015, p. 190). Technical artifacts are affecting the individual's intentions to utilize them in a certain way. Heidegger's example of the hammer in its '*Zuhandenheit*' exemplifies this effect (Heidegger, 1927/2006, pp. 69-70). The hammer is affecting the individual to utilize it as a hammer, therefore shaping their apparent possibilities of action (pp. 69-70). Hence lifestyles, practices and whole cultures are constantly and inherently affected and defined by technology and its artifacts in presence, execution and imagination (Grunwald, 2018, p. 206; Blumenberg, 2015, p. 190). Technology is not merely a means to an end, not 'just' a tool, that is between the individual and the world. It is rather the mediator and the interconnection between individuals and things, and therefore also inherently part of the relation between individuals and the world (Nordmann, 2016, p. 165).

Modernity is a 'Western' project that culminates in Heidegger's *Gestell* (Hui, 2024, pp. 40-41 and pp. 54-55). The subtle force of the *Gestell* erects self-evidency (Selbstverständlichkeit), which is – after habituation – drifting into the background of attention. Within this paradigm only the measurable data points and a logic of optimization and acceleration are accepted as the guidelines for thinking. This underlying logic can also be called a cosmotechnics (Hui, 2022 and Hui, 2024). Cosmotechnics is a concept defined by Yuk Hui which describes the interrelatedness between individuals and the world mediated by technics (Hui, 2022, p. 19-20).

Modernity has a powerful way to incorporate almost everything into its own paradigm and logic of optimization. The problem with modernity "is not that it is a malfunctioning machine, but rather one that works all too well according to the logic embedded in it" (Hui, 2022, p. 296). Technological thought is inherently European but



ended up framing the history of all localities that it came in contact with. It thereby often posed a threat to local traditions of thought, as we will see also in the example of China (Hui, 2024, pp. 40-41, and Hui, 2022, pp. 151-153). While discussing Hui's thesis about modernity in Europe and China, it will be shown that, there can be different cosmotechnics, each with their own underlying concepts of world, truth, and the good life.

TRADITIONAL CHINESE THINKING

Starting in ancient Chinese history, a brief look into the most widespread schools of thought will establish a general idea of Chinese thinking: Confucianism and Daoism. Their relation towards tools (器 qi) and the so-called 道 dao will then be presented and elaborated. 道 dao can be translated as “way,” also in a metaphorical sense. The harmonic interplay of tools, as in 器 qi and the concept of 道 dao in Daoism and Confucianism will be sketched. In Confucianism as well as Daoism 器, qi and 道 dao both relate to the sky or heaven (天, tian), which is a “moral being” (Hui, 2022, p. 81). Sky and heaven are the same, as there is no transcendent world next to or beyond the sky. This moral aspect as an end of the individual's relation to the world also needs to be explained.

The 道 dao is the initial cause and the underlying principle of everything that exists (Hui, 2022, p. 68). It also is the cause of all technical objects in Confucianism and Daoism and can be found in the most complex as well as the most trivial things under the sky (p. 69). The 道 dao is the higher order of being which technical artifacts and practice need to be compatible with (pp. 65-66). The good life refers to building and “maintain[ing] a subtle and complicit relation with the [道] dao” (p. 69). This interaction with the 道 dao does not have to be acknowledged. It may happen without conscious effort (p. 69). The 道 dao allows and limits the relations one can have with the world and the things in it (pp. 65-66).

Confucianism is practiced through study and “memorization of the state-sanctified Confucian classics,” such as the Yijing, as well as through rituals (Freiberg, 1977). This practice of rituals preserves the way of Confucianist thinking, its knowledge and its insights. Confucianism strives to achieve happiness in this world, it thrives towards a happiness that everyone can achieve and that can be found without the need for transcendence (Freiberg, 1977). Tools (qi 器) in Confucianism mainly serve as instruments and are supporting the rituals (li 禮) – e.g. dishes or musical instruments (Hui, 2022, pp. 108-109). In this way 器 qi is stabilizing the moral cosmology through supporting the rituals (pp. 109-110). Constructing and handling the tools (器 qi) requires a cosmological consciousness of the relation between individuals and nature in Confucianism (pp. 27-29). Formalized orders and rituals are established to preserve the 道 dao (pp. 109-110 and pp. 114-115).

Daoism is based on a dialectical understanding of the inner workings of the world. It is a unified world that is made manifest to humans through a unity of opposition – the



world consists in “paired opposites” (Freiberg, 1977). Between these opposites everything is in motion, and it is therefore a world of constant cyclical change, as for example the seasons changing in a cyclical manner. A constant motion, a constant becoming and ceaseless change defines Daoist thinking (Freiberg 1977). Daoism criticizes imposed orders and only accepts the 道 dao as the ultimate order of the world’s underlying harmony. The improving of tools, [器 qi], represents “the perfecting of living and being, since it is guided by the [道] dao” (Hui, 2022, p. 108).

In Daoism, calculating reasoning, 機心 (ji xin)¹, is a mode of thinking to be avoided in order to lead a good life, as calculating reasoning leads to restlessness (Hui, 2022, pp. 105-106). Thinking solely like a machine makes one think of everything only in a machine-like and logical way, which culminates in losing the freedom of relating to the world in other ways according to the 道 dao. The 道 dao is lost by being distracted by this focus on machinery. In Daoism the 道 dao can be reached without using any 器 qi (as in tools or machinery) at all, as acting according to nature and the 道 dao is sufficient (p. 115). In conclusion, the 道 dao can be served in Daoism by a realization of technical artifacts in harmony with nature (pp. 115-116).

Confucianism and Daoism both incorporate a moral cosmotechnics. ‘Moral’ refers to the fact that Confucianism and Daoism set the moral order and the good life as guides the cosmic order. Therefore, all existing things that thrive to be good have to apply to the harmony of the 道 dao (Hui 2022, p.65).

TECHNICAL ARTIFACTS AND SCIENCE IN CHINA BEFORE MODERNITY

Looking into the genesis of technical artifacts in traditional Chinese thinking there are some significant differences to the traditional Greek conception (Hui, 2022, pp. 61-62). Dating back to the 8th century BC, Daoist sources tell of four elements of production, which consist of time, energy (气 qi), materials of good quality, as well as techniques. The question of techniques relies on three further elements, firstly in that they are supposed to be “learned and improved.” The study and practice of technology in this sense is to further the 气 qi which moves according to the 道 dao. The concept guiding the genesis of technical artifacts is finally the 道 dao after all. When followed, the cosmic order ensures also a moral order (pp. 61-62).

While the Greek conception after Aristotle, is to develop a deliberately chosen shape (*morphe*), bringing it into existence, materially (*hyle*), Chinese thinking conveys a ready-set source of shapes to be moulded (the 道 dao) and the 道 dao is manifested when serving the 气 qi (Hui, 2022, pp. 61-62).

Techné in Greek thinking is a means of taking control of and manipulating things in the world towards the aim of productivity. For the production of a technical artifact to

¹ This can be translated as “machine heart” (Hui, 2022, p. 105).



be taken as good practice, it has to serve the principle of growth and bringing forth something that imitates and at the same time completes nature (Hui, 2022, pp. 69-79).

While the Greeks relied on the form that was inherent in the material to utilize it for a purpose, the first reason something comes into existence is to serve the 气 qi in Chinese Daoistic thinking (Hui, 2022, pp. 61-62). European and Chinese cosmotechnics carry different cosmotechnical dispositions (pp. 62). In the Greek context *techné* is mediating between *physis* and *tyche*, while in the traditional Daoist Chinese context, artifacts and science are beholden to the cosmological order (pp. 66-69). In Chinese thinking, the cosmological order is intangible, yet perceptible, even when it is not actively perceived (pp. 68-70).

In China in the second century AD, there is historical proof of sketches of a carrier-type vehicle, that might be taken as the first cybernetic machine (Needham, 2016, p. 114 and p. 174). Though it is an artifact that was constructed with knowledge about the mechanics of a vehicle, its principle of operation was based on keeping up an equilibrium. Once pointed south it would ultimately return to face the south, regardless of where it was steered to. To be sure, it was also in China that the magnetic compass was invented (p. 114).

Traditional Chinese thought and artifacts were rich of creativity, knowledge, and understanding. These were not the factors that were missing towards an establishment of modern thought. But looking at the gathering of knowledge, early sciences in China adopt their own approach towards learning about the world and using this knowledge. Their way of gathering and applying knowledge differs from the European way. The earliest documented alchemical efforts are found in Chinese history (Hui, 2022, pp. 63-64). Hence alchemy can be said to issue from a Daoist approach to look for ever-lasting life (Needham, 2016, pp. 109-110).

This ever-lasting life was not a celestial one, but one right on earth. Chinese science in this sense stayed empirical and developed from the eternal principles of harmony: Yin & Yang and the five elements (Needham, 2016, p. 112). Yin and Yang are always entangled in a motion of oscillation between one another (Needham 2016, p. 113 and Freiberg, 1977).

Looking into chemistry and medicine, in China there were highly successful formulations even of steroid hormones between the 11th and 17th centuries (Needham, 2016, p. 143). Eventually the Chinese explanation of the cause of its working (Yin and Yang as well as the five Elements) were substituted by modern, that is Western approaches to explaining chemical interactions. In this case the modern explanations were accepted over traditional reasonings, even though the practice was successful before these changes were implemented (p. 143). When coming into contact with modern science, the traditional Chinese sciences would eventually become modern – some disciplines faster than others. Interestingly, the field of medicine found itself modernising rather slowly in comparison to others, and to this day both strains of teaching still exist (p. 132-144). The closer the sciences were to the living being, the slower the process, the harder it would be for the modern view to dominate (p. 144).



Joseph Needham, the famous scholar on Chinese thought and culture, also opened up the debate about the so-called ‘Needham Question’: Why did modern science not arise in China? (Needham, 2016) While Chinese thinking and technical endeavours were thriving without question, modern science, based on universal laws and the manipulability of nature was not coming from a Chinese trajectory of thinking. While in Chinese thought the harmonic interplay of all things is central, in modern Western thought causality prevails and the idealized principles that allow for manipulation and control of nature (Hui, 2022, pp. 169-172).

As a consequence of this missing causal perspective there was no conception of an axiomatic system of underlying events in the world. Therefore, Chinese thinking lacked a program, that would investigate ‘*das Seiende*’ effectively to manipulate it according to mechanical causality (Hui, 2022, pp. 169-172). Chinese thinking was rich but did not follow modern ambitions.

A BRIEF CHINESE HISTORY OF MODERN TIMES

The opium wars against England in the 19th century mark the “traumatic inauguration of the country’s modern history” (Lovell, 2012, p. 9).

While the British were importing opium into China, fuelling the rising opium addiction of the country, the Chinese government eventually declared war on opium. Chinese people became addicted so severely, that they were no longer able to fight back. British ‘gunboat diplomacy’ combined with the issues of drug addiction caused China to sign the ‘Unequal Treaty’ of 1842. These events started the so-called ‘century of humiliation’ (1842-1949) in China (Lovell, 2011, p. 9). To this day, these events are an open wound in the self-esteem of China: “It marks the beginning of China’s struggle to free itself [...] and to stand up as a strong modern nation” (p. 9).

The British were a European power, powerful in military strength and machinery. The situation to be dealt with was an overwhelming force that was threatening China’s very existence, but could not be extinguished by China’s own power and artifacts. Eventually the reaction chosen by China was to adapt this overwhelming force, and appropriate the parts that were posing a threat. Old customs and patterns of thinking were neglected due to the efforts to catch up with the West. The shock of Europe’s invading efforts would lead to a pressure to appropriate the force as a means of defence and avoidance of further threats.

These efforts were intended to be taken only as far as required to still be effective and no further. This idea was not entirely successful, as it took technology and its artifacts as nothing more than matter that would not resonate with other categories in life, let alone alter human relations to the world itself (Hui, 2022, pp. 151-164). Importing and furthering modern Western scientific studies and technological inventions, while maintaining basic principles of Chinese thinking, would require one’s mind to interact with the physical world via the medium of technology, while not itself being affected or transformed by the medium (p. 151-152). Habituation through the use of these technical artifacts, and the subtle acceptance of their premises and values, lead to a slow loss of



traditional Chinese thought. Slowly, yet steadily, modern values made their way into the Chinese context.

After World War I Confucian thought was still prevalent, yet Western ideas were spawning (Gao, 2016 and Hui, 2024). China was transforming from an agricultural nation into an industrialized power. Chinese scholars combined the ideas of modern Western industrialization (Marxist-Leninism among them) with Chinese thought and founded the widespread movement of democracy and science. These gave rise to ‘Dialectics of Nature.’ In the 1920s, Communist scholars endorsed the thoughts of Friedrich Engels to support China’s process of transformation. After the breakdown of the alliance between the socialist and nationalist parties, Engels’ writings and ‘Dialectics of Nature’ became a doctrine to counter nationalist views on modern science (Gao, 2016). Modern thought increasingly became a tool to be picked up and dropped when required.

In 1935, seeing the subtle change of Chinese thought, ten of the most renowned professors in China brought forth “A Manifest for a Chinese-oriented cultural Development” (Hui, 2022, p. 162). This manifest expressed their fear of a chaotic internal intellectual war, which would simultaneously lead to a forgetfulness of Chinese origins. It imagined a new China that would be able to integrate technology and science effectively without losing its origins. This manifest spoke against the Westernization of China, while maintaining Chinese thought as it called for substantial reform (p. 162-163). The authors had seen that in the course of Westernization, Chinese thinking was under threat.

Indeed, in the process, the spirit of the old cosmotechnics was mostly lost and the aspects incompatible with modern thought were summarized only as ‘tradition’ (Hui, 2022, p. 163-164). Neglecting the question of technology by categorizing technology as applied science, the debate got stuck at the level of ideology (p. 164). If technology is not acknowledged for its invisible presence as its inherent strength, it becomes invisible in a different way by being subsumed among the problems of science (p. 163-164).

As the spread of modernity continued, Dialectics of Nature became in 1949 an official discipline and branch of philosophy in China – just as the establishment of the People’s Republic of China took place (Gao, 2016). It was an “innovative [...] approach for the philosophical reflection on scientific method and a tool for the modernization of the country” (Gao, 2016, p. 273). Still, Dialectics of Nature served to reinforce the view that science was a means to overcome the stigma of ‘underdeveloped industry’ that was hurting Chinese self-esteem. It fueled the ambition to catch up with the West and does so to this day, thus allowing for technological thought and its values to enter in and subtly take ground.

In the second half of the 20th century, China undertook several initiatives towards the goal of ‘catching up,’ among which was the Great Leap Forward and the Four Modernizations. By this time, these were defined as inherently modern concepts, such as acceleration, innovation, and military competition (Hui, 2022, p. 291-292).



CHINA ADAPTED A VARIANT OF MODERNITY AND IT TOOK GROUND

Understanding modernity only through the adaption of technological artifacts without their underlying values misses out on a wide range of essential features. Looking at Europe and China, a Europeanization took place that goes beyond the existence and handling of artifacts of a certain kind (Hui, 2024). The logic, science and relation-building of technologies enter in and set foot in the contexts where these technological artifacts are adopted. The inviting-in of modernity is not a mere copy-and-paste motion, as these ideas and concepts fall on certain ground of a kind of thinking that existed before technological thinking. That is why a slightly modified modernity is the outcome of the conversation between existing (here: Chinese) thought and modern technological thought.

This conversation makes apparent an *actio-reactio* dynamic that defines the evolving relationship between an intruding modernity and Chinese actors who are looking for ways to deal with it. As China was unquestionably rich of thought, knowledge and a world of technical artifacts, it was not developing a modern science in the sense of an ever-to-be-growing and ever-to-be-optimized landscape of artifacts that are required to sustain the idea of progress.

The pathway China has taken – especially in the 20th and 21st century – allows for an interpretation of different variants of modernity where these variants are influenced by the different ground they grow on (Hui, 2022, p. 291-292 and pp. 296-299).

As capitalism has taken hold also in China, these key implications of modernity also account for the Chinese individual nowadays. The harmony of the 道 *dao* is getting replaced by the European ‘good life’ of growth, acceleration, and optimization. Core elements of life become measurable and exploitable. Even traditional temples are now incorporated into touristically useful sites, with shopping centers and arcades growing up around them. Just like traditional Chinese medicine, these temples exist, but only on the sidelines of attention. Even their traditional aspects become incorporated into modern logic by being commodified as, for example, revenue generating tourist activities. Modernity’s takeover is still going on in the form of individualistic consumerism, an approach to science in the service of economic growth, and the idea of technology as a means to dominate and control the forces of nature.

Looking into China nowadays, one can see an overwhelming amount of modern technological artifacts shaping everyday life. In China as in Europe, when one has a smartphone in one’s hand, one can look for directions with similar applications, buy groceries and gifts online, write e-mails and listen to music – all with the same underlying technology, the same principles, sometimes even the exact same line of code being processed on both devices. The homogenizing power of modernity is working in the non-western context as it is in the West.

And yet, all this does not mean that Chinese thought has altogether receded or that it no longer resonates with modern Chinese individuals – even if some of it is pushed to the sidelines, there are still vivid traces.

Europe had a continuous trajectory towards a modernity that has since imposed itself through force and pressure on other parts of the world – calling for a forceful



response to this imposition. China is an example of a country in which its original thinking was not going to lead to the cosmotechnics of Europe, but rather to a cosmotechnics grounded in Daoism and Confucianism. Staring in the 19th century it therefore had to deal with the challenge of becoming modern in a short period of time. China had to change traditional paradigms and practices while trying to maintain the underlying identifying aspects of its original tradition of thought.

China lived through “modernisation without modernity” (Hui, 2022, p. 291). Chinese modernity may be described as a variant of European modernity as it is the reply to the forces that entered and threatened China – producing as a reaction the appropriation of modern thought. Chinese modernity thus has to be considered for its lack of a continuous trajectory. Instead, modernity is a reaction in a conversation. Everything that is touched by it enters this conversation, and through this conversation modern thought becomes supplanted in different contexts and cultures.

Nowadays, modern China also builds technology and technical artifacts, just as it is done in Europe and the West. Even through the attempts of catching up, the Chinese way of thinking did not completely surrender to technology and technological thought as it set foot in China. In a subtle way, Chinese thought transformed the cosmotechnics prevailing in China. The manifold relations of 器 qi and 道 dao were gradually assimilated to technological thought, that is, to a relation to the world where matter is calculable and controllable through technology, unavoidably rooted in modern science.

If China’s modernization had to take place faster than in Europe, this also meant that the efforts to “Catch up with the West” were followed vigorously. Certain aspects of modernity fell on more fertile ground in the Chinese context than in others. Dialectical approaches are inherent in Chinese thinking and philosophy as seen in Daoism. In Dialectical thinking, everything is moving because of polar opposites – constantly interacting with one another. Nothing remains in a static position.

But now, when China's modernity is identified as “Catching up with the West,” this also refers to a movement. Constant motion and change are therefore on the forefront, rather than reaching a certain stage of technological evolution to rest upon. Europe was the first to develop modern thought and technological thinking, and the force of their artifacts led countries like China to find themselves in a process to become a modern country, in order to be able to compete in modernity’s logic.

China kept up with this pace, even after it had caught up. Cars that burn fuel were polluting the cities, so they were substituted with electrical cars. Everyone in the big cities owns a smart phone now, so messages, data, even money can be easily transferred just by showing a QR code. Even the song and light choice in a KTV bar can be chosen and adjusted by the mini-app on your WeChat social media account. Certain traditional things like 红包 'hongbaos' as the symbol for sending money remain, but they are now merely an icon in one’s app. How goods are exchanged, transported, and used changes with the sheer speed of China’s journey into modernity. This also owes, however, to underlying aspects of Chinese thinking which conceives the project of modernization as a continuous motion which is not attached to certain milestones along the way.



In summary, then, while upholding many aspects of traditional culture, Chinese trajectories of becoming modern moved from its traditional thought via socialist influences to the modern era.

MODERNITY'S ADAPTABILITY TO DIFFERENT BACKGROUNDS

Europe's orientation towards the great powers of technical artifacts and modern science have made technological thought a mostly unquestioned way of thinking in an era defined by European modern cosmotechnics (Hui, 2024, p. 105-106). But it was not sheer theoretical advancement that gave European thinking its current status. In different contexts there is a universal capacity to adapt to modernity. The capacity for modern thought in the sense of technology seems to be universal, as it can be adapted by individuals and societies which did not have a tendency towards it. But technological thinking itself is not a universal necessity – it is not a universal truth (p. 40-41). Technological thought can be appropriated, sometimes also adapted, and may consume other paradigms. Yet this process does not proceed with necessity, but can be shaped and guided.

Chinese modernity is therefore not the same as Western modernity. Chinese thinking constituted a different background for modernity to take place in. Several attempts of appropriation and protection of certain aspects of its original thinking were undertaken through the decades. Modernity can be seen as a conversation of global powers. When viewing modernity in different contexts, it apparently must be able to constantly evolve and adapt. Modernization takes place in very different ways, between different motivations towards different prerequisites and with different goals. In the context of China we can see a habituated adoption of modern thought in a multitude of areas and also in daily life. But in China this came from a different background, happened at a different pace, with different ends in mind.

Modernity is always revising or revolutionizing itself with new iterations, each one going further than the previous step. If the discussion of modernization often begins with an attempt to define its essential features (Yan et al., 2026), modernity is presented here as being in a constant conversation with itself. This conversation unfolds not within one universal frame, but between multiple instances that are acting and re-acting to one another.

Different cosmotechnics allow for different experiences and images of relation to the world, artifacts to be imagined and used in practice and scientific endeavors. Where the cosmotechnics of modernity have entered in through habituation, modernity's power settles in and grows, but may also grow into new variants, each depending on the specific ground of thinking they fall upon. Even as modern cosmotechnics share the same key values, the example of Chinese modernity weakens the plausibility of one ubiquitous universal modernity. The capability to adapt to key aspects of what is called modern, seems to be universal – the exact outcome of such adaptation is not (Hui, 2024).

The discussion of this paper may open perspectives of possibilities of different cosmotechnics, variants of modernity and therefore different futures.



The world is currently captured by a ubiquitous but also loosely fading grip of Europeanization and it's cosmotechnics of modernity as alternatives become apparent again (Hui, 2024, p. 119). Chinese philosophy as the unification of dao 道 and qi 器 could provide an alternative cosmotechnic. It could be an opportunity to re-invent the 道 dao in relation to global time (pp. 307-312). The question is not solved by a duality of thinking and materiality. According to cosmotechnics, technical artifacts and thinking interact and condition one another (p. 301-302). The choice arises after becoming aware of the presumed self-evidencies of a now apparent merely accidental hold of technological thinking – of modernity.

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