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The semiotic significance of monetary design in historical context

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Abstract

This article analyses the evolution of currency design as a means of communication through semiotic, cultural, and historical approaches. Case studies from China, the US, Japan, and Singapore reveal how design reflects national identity, historical memory, and cultural values. In antiquity, coins legitimised rulers; in the Middle Ages, they conveyed state and religious symbols. Since the eighteenth century, paper money incorporated economic and ideological messages. In the nineteenth and twentieth centuries, design grew more intellectualised, reflecting historical and cultural shifts. The study highlights modern trends, especially digitalisation, and shows how portraits, text, symbols, and colours convey stability, development, and power. China's banknotes, for example, feature historical figures, landscapes, and technology as markers of national identity. The semiotic approach proves vital in understanding how currency communicates societal values. The findings are relevant for historians, cultural scholars, and economists, and offer insights for preserving symbolic meaning in digital currency formats.

Keywords: monetary unit, identification, dematerialisation, symbolism, cultural characteristics.

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*El significado semiótico del diseño monetario en el
contexto histórico*

Resumen

Este artículo analiza la evolución del diseño de la moneda como medio de comunicación a través de enfoques semióticos, culturales e históricos. Estudios de casos de China, Estados Unidos, Japón y Singapur revelan cómo el diseño refleja la identidad nacional, la memoria histórica y los valores culturales. En la Antigüedad, las monedas legitimaban a los gobernantes; en la Edad Media, transmitían símbolos estatales y religiosos. Desde el siglo XVIII, el papel moneda incorporó mensajes económicos e ideológicos. En los siglos XIX y XX, el diseño se intelectualizó, reflejando los cambios históricos y culturales. El estudio destaca las tendencias modernas, especialmente la digitalización, y muestra cómo los retratos, textos, símbolos y colores transmiten estabilidad, desarrollo y poder. Los billetes chinos, por ejemplo, presentan figuras históricas, paisajes y tecnología como marcadores de identidad nacional. El enfoque semiótico resulta vital para entender cómo la moneda comunica valores sociales. Las conclusiones son relevantes para historiadores, estudiosos de la cultura y economistas, y ofrecen ideas para preservar el significado simbólico en los formatos de moneda digital.

Palabras clave: unidad monetaria, identificación, desmaterialización, simbolismo, características culturales

Introduction

Technological innovations and cultural interaction significantly influence global processes, particularly the formation of monetary systems, which perform not only financial but also communicative functions. Currency design reflects national identity, historical heritage, and cultural characteristics; however, its development requires a comprehensive approach that integrates aesthetic, functional, and symbolic aspects. At the same time, insufficient attention to the semiotic analysis of currency design may lead to ambiguous interpretations or the loss of the relevance of symbols. In the digital era, where cryptocurrencies and

electronic payments are reshaping the concept of money, semiotic aspects acquire new significance, with logos, colour schemes, and fonts becoming key carriers of identity. The application of semiotic methodology will not only facilitate a better understanding of the cultural dynamics of currency design but also allow for its adaptation to contemporary challenges in both traditional and digital spheres.

The issue of semiotics in currency design has been the subject of research by many scholars, who examine various aspects of this multifaceted topic. In their studies, they analyse currency design as a socio-cultural phenomenon that embodies symbolic meanings, historical events, and national identities. Ojedo and Macizo (2023) explain the impact of colours and graphic elements on trust in currency through their aesthetic appeal and emotional influence, which contribute to the formation of a positive perception of the monetary unit. They emphasise that currency design plays a crucial role in creating a sense of stability, especially in conditions of economic instability. Meanwhile, Taheri and Yaqouti (2021) consider changes in currency design as part of political transformations, highlighting those updates to symbolism often reflect shifts in the state system, ideological narratives, and national identity. They argue that political changes can lead to both a radical rethinking of symbols and their gradual evolution in response to shifts in societal values. Thus, both studies underscore the importance of monetary symbols in public perception, albeit with different focal points: political factors in Taheri and Yaqouti and aesthetic considerations in Ojedo and Macizo.

Xie (2023) and Fisher-Høyrem (2022) analyse portraits of historical figures on banknotes as a means of reinforcing national pride. Their approach can be compared to that of Eilouti (2019), who examined architectural motifs as symbols of cultural uniqueness. Both studies demonstrate how images on banknotes shape

national identity, yet their approaches differ: Fisher-Høyrem focuses on the role of individuals, whereas Eilouti emphasises cultural landmarks. Balvers and McDonald (2021) explore the globalisation of currency design and the impact of universal visual elements on the international recognition of currencies. Their research contrasts with that of Maurer et al. (2019), who stress the importance of inclusive design aimed at representing ethnic and cultural minorities. Guan et al. (2022) note that standardisation simplifies international currency circulation, while Wang et al. (2024) argue that it can negatively affect local identity, particularly in multinational countries. These opposing approaches highlight the need to balance global and local aspects in currency design.

Lawson (2019) conducts a detailed analysis of the role of textual elements, particularly mottos, as a means of strengthening national ideals in times of crisis. He emphasises that such textual messages foster a sense of unity and resilience, appealing to shared values and the historical experience of the nation. His approach shares similarities with the research of Brunnermeier et al. (2021), who also examine the impact of crisis periods on currency symbolism, though they focus primarily on visual elements. Brunnermeier et al. highlight symbols such as state emblems, classical architecture, and images of prominent historical figures that embody ideas of stability and national identity. A key distinction between these approaches lies in the use of different semiotic tools: textual elements in Lawson and visual elements in Brunnermeier et al., demonstrating different strategies for fostering trust in national currency.

Innovative technologies in currency design, as noted by Zhang (2020), open new opportunities for both reinforcing national symbolism and enhancing the security of banknotes. In particular, he draws attention to the use of augmented

reality (AR), which enables the reading of hidden information via mobile devices, providing an additional level of user interaction with banknotes. To counter counterfeiting, technologies such as holographic elements, optically variable inks, and microtext are being actively implemented, significantly complicating the forgery process (Kyrychok et al., 2023; 2024; Maripov, 1994). Zhang's research is complemented by the work of Amirza and Abdul Razak (2021), who examine the use of natural motifs in banknote design as a means of promoting environmental awareness. They argue that depictions of national flora and fauna or natural landscapes not only highlight a country's cultural heritage but also contribute to fostering a responsible attitude towards the environment. Despite differences in focus, both approaches demonstrate the importance of integrating modern technologies and social trends into the currency design process.

A comprehensive analysis of currency design as a semiotic phenomenon that integrates visual, textual, and symbolic aspects remains underexplored. The objective of this article was to investigate the applicability of semiotic methodology to the study of currency design and to analyse its role in improving the design of both traditional and digital currencies in the context of contemporary challenges posed by globalisation and technological progress. The research objectives were: to determine the role of currency design as a communicative tool that reflects national, cultural, and historical characteristics; to analyse key semiotic concepts applicable to currency design research, particularly its symbolic and sign-based significance; and to examine the evolution of semiotic elements in physical currency design based on specific case studies, tracing changes in their semantic and visual content.

1. Materials and methods

The study employed semiotic methods aimed at analysing currency design as a communicative tool. The primary theoretical approaches included Charles Peirce's classification of signs and Ferdinand de Saussure's concept of the sign (Afisi, 2020). According to Peirce's classification, three types of signs were identified: iconic signs, which visually resemble real objects; indexical signs, which indicate causal relationships; and symbolic signs, whose meaning is shaped by socio-cultural context. Ferdinand de Saussure's concept of the sign facilitated the examination of currency design through the relationship between the signified (image, symbol) and the signifier (the concept it conveys). Within this framework, semantic connections between banknote images and their cultural significance were analysed.

The study materials consisted of currency design samples from different countries and historical periods, including both paper banknotes and coins. Case studies from Japan, China, Singapore, and the United States were examined. The selection of samples followed the principle of representativeness, considering economic regions, cultural characteristics, and the number of samples from specific periods. Information sources included the website of the European Central Bank (2025), open-access digital databases such as Banknote World and Numista. These sources contain verified information on the design, evolution, and semiotic features of currencies from various countries and periods. The study also considered the visual identity of digital currencies, including logos, graphical interfaces, and marketing materials.

The research process comprised several stages. The first stage involved the systematic collection and analysis of theoretical sources to understand the fundamentals of semiotics and its application in visual communication. At this stage, key concepts necessary for describing currency design as a “semiotic text” were refined. The second stage focused on the evolution of currency design. For a comparative analysis of Chinese banknote design, the currencies of Japan (yen), the United States (US dollar), and Singapore (Singapore dollar) were selected. The choice of currencies was based on their economic significance, cultural characteristics, and trends in currency design: the Japanese yen combines traditional motifs with modern security technologies, the US dollar maintains a conservative style in contrast to the regular updates of the yuan, while the Singapore dollar balances Western and Eastern design traditions.

The criteria for sample representativeness included economic influence, cultural characteristics, and different periods of currency design development. The study considered countries with similar historical traditions (Japan) and countries with international influence (the US, Singapore). The examination of contemporary banknote issues allowed for the identification of trends in symbolism, colour schemes, and technologies, encompassing the evolution of Chinese banknotes (from the 1980 to the 21st century), the stability of Japanese yen (since the 2000s), and global trends in American and Singaporean dollar designs reflecting socio-cultural and political changes. The third stage explored the role of currencies in shaping national identity. A semiotic analysis was conducted on the use of national symbols, such as coats of arms, portraits of historical figures, and architectural landmarks. The analysis considered the context of design creation, its public perception, and cultural significance. The

results of each stage were synthesized to formulate conclusions and recommendations for improving currency design considering its semiotic impact. The research involved digital tools for collecting and processing visual data. Software tools, including Adobe Photoshop, were used for analysing graphical elements. Zotero was employed for working with digital databases.

2. Results

2.1. The evolution of currency design through the lens of semiotics

Money, as a unique element of material culture, serves not only an economic function but also holds significant symbolic potential, acting as a form of semiotic text. Its design reflects national identity, values, and historical narratives that shape a society's cultural and political heritage. Images of historical figures, architectural monuments, or natural landscapes on currency carry culturally significant information that is perceived on an everyday level. Thus, currency design fulfils not only an aesthetic function but also creates visual communication between the state and its citizens (Wennerlind, 2019). At the same time, the materiality of money is constantly transforming, reflecting technological advancements and changes in social practices (Diniz, 2024). Paper banknotes and metal coins are gradually being replaced by digital payment forms, affecting their functionality. However, despite the dematerialization process, the visible and visual aspect remains important. For instance, while bank cards reduce the need for cash, they retain materiality through their tactile and visual characteristics (Khamzaeva et al., 2020). These elements form the symbolic meaning of capital alongside traditional coins and banknotes. Electronic payment services such as Apple Pay or digital wallets create new social practices (Spytska, 2024; Varela et

al., 2023). The digitization of money transforms it from a physical object into an abstract capital accessed through mobile app interfaces or other devices. Yet, even in this context, visualization remains a key element of interaction with money. Digital services use design to ensure ease of use and a symbolic connection with traditional money forms (Siqueira et al., 2020).

Historically, money has always possessed visual and material characteristics that defined its function in specific socio-historical contexts. From the invention of coins in the 7th century to modern electronic payments, money has evolved while maintaining the importance of its design. This evolutionary process demonstrates how currency design serves not only as a reflection of an era but also as a tool for shaping exchange practices and capital management. Viewing money as a process shaped by political and material systems offers a new perspective on its role in society. Currency design has become an interdisciplinary field of study, integrating economic, cultural, and sociological aspects. In this context, money cannot be viewed solely as an economic object – its cultural significance is inseparable from its functionality (First and Sheffi, 2015). While digital transformation reduces the physical presence of money in everyday practices, it does not entirely eliminate its material component. Even in digital services, currency design remains crucial for ensuring functionality, symbolic meaning, and user engagement (Bekmuratov et al., 2024). Thus, analyzing the design of money, including both traditional and digital forms, provides a broader understanding of the dematerialization process and its role in modern society.

Banknote design serves not only a practical but also a broader symbolic function, as banknotes become a form of national representation (Kyrychok et al., 2020). Once their appearance is established, they contribute to a country's global

image and influence citizens' self-perception. This is evident in the use of symbols associated with national history or cultural achievements. The psychological aspect of currency design is particularly important. Studies indicate that aesthetically pleasing, well-designed banknotes evoke positive emotions in citizens, increase trust in national currency, and even foster emotional attachment to it (Hongqing and Fang, 2024). The aesthetic aspect includes color schemes, composition, textures, and imagery that align with modern design standards while incorporating national characteristics and symbolism. The cultural aspect of currency design becomes apparent when analysing various national currencies. For example, the Chinese yuan emphasizes political ideals of state sovereignty. The yuan serves not only as a payment tool but also as a symbol of national stability and independence, akin to a constitution, emblem, flag, or anthem. Chinese banknotes reflect the country's political agenda, economic achievements, and cultural heritage.

In most cases, political elites determine the conceptual approaches to national currency design, as banknotes must reflect the state's strategic ideas (Tryhuba et al., 2022). This applies to both the selection of symbols and the overall stylistic approach, which highlights a country's uniqueness on the international stage. The design of national banknotes functions as a tool that shapes both domestic and international perceptions of a country (Lyndyuk et al., 2024). Analysing currency design through the lens of semiotics reveals its role as a significant marker of national identity and a medium for conveying important social and cultural messages. The visual aspect of money, as evidence that can reflect the qualitative and contextual characteristics of social relations in a specific historical period, demonstrates its multifaceted nature. The design of money is not

only a reflection of economic and political changes but also serves as a tool of ideological influence (Spytska, 2023). Analysing the visual design of currencies from different historical eras allows us to trace patterns in the transformation of social relations associated with the transition to new forms of money.

Despite money being one of the most widespread means of visual communication, its design often goes unnoticed by users. This is because its primary function – financial value – prevails over aesthetic or ideological aspects. However, it is worth considering not only how individuals perceive the design of money but also how external factors influence this perception. This involves the specific systems that govern money as a process and the ideological implications of its design. Currency design, as a form of social evidence, lacks objectivity and is a product created by specific power structures (Liao and Wang, 2018). Through design, those who create money assert their authority, giving it a visible symbolic character. Thus, money design serves not only an aesthetic function but also an ideological one, materializing ideas that reinforce dominant social meanings.

The French philosopher Louis Althusser (2014) noted that ideology always takes material form through specific social practices. In political and economic contexts, these practices become tools in the struggle for the legitimization of dominant meanings. Within this context, money design is a powerful instrument for materializing ideology, as it visualizes the symbolism of exchange practices and economic relations. One of the longest-standing practices in the dematerialization of money is the use of coins, which emerged in antiquity and persist into the 21st century. From the perspective of mass production (quantity and quality), an important aspect is the analysis of coin circulation, metal composition, and weight characteristics. Changes in coin design often reflected

their transition to the use of less valuable metals, giving them a symbolic nature. Regarding authenticity, metal money served as confirmation of the symbolic meaning of exchange practices. Coins facilitated verification of their authenticity, provided convenience in storage, and even became collectible items (Mishchenko, 2009). The category of intention in coin design reveals the most significant aspects of visual symbolism. It demonstrates how governing structures used coins to establish their ideological presence.

In Ancient Greece, coins featured depictions of plants, animals, and textual elements known as “coin legends” (Schaps, 2023). These symbols indicated the geographical regions where the coins were produced and identified political and cultural centres. Anthropomorphic images played a special role, emphasizing the presence and authority of power. During the flourishing of city-states, coins began to feature portraits of patron deities, uniting political, legal, and religious symbolism. The first real historical figure to appear on coins was Alexander the Great (Pohranychna, 2023). After his death, his successors used his portraits to legitimize their own power by appealing to the legacy of the empire. Later, they began minting coins with their own realistic portraits, starting a tradition that has lasted into the 21st century (Wang et al., 2024). Byzantine coins featured religious themes, beginning with events from the New Testament, emphasizing the canonization of rulers as “anointed by God” (Leidholm, 2024). In Western Europe, coins continued to follow ancient design traditions until the emergence of paper money in the 18th century.

The evolution of paper money design marked a new stage in the development of socio-economic relations (Yesimov and Borovikova, 2022). Its functionality can be compared to that of coins, but in terms of quantity and quality,

there were significant differences. In particular, two types of paper money should be distinguished: credit money, backed by gold and valued based on the equivalent of a material asset, and fiat money, whose nominal value is determined by the state and does not depend on the material from which it is made. The introduction of paper money signifies the intellectualization of economic relations, as, unlike coins, it is more widely distributed, allowing a significantly larger number of people to participate in financial processes (Butenko et al., 2023; Mishchenko et al., 2025).

In terms of authenticity, paper money introduced new social practices related to its use (Krasnobayev et al., 2014). For example, the transformation of wallet designs and other money storage items illustrates society's adaptation to new requirements. With the advent of paper money, the category of intention also changed. Initially, banknotes contained only textual information, but the development of printing technology made it possible to use more complex compositions, including heraldic symbols, allegorical figures, and other visual elements. The introduction of paper money coincided with the Age of Enlightenment and the French Revolution, which reshaped perceptions of the state: it was no longer exclusively associated with the monarch but was seen as a collective entity of citizens (Wennerlind, 2019). During this period, the design of banknotes also changed: portraits of living rulers were replaced by anthropomorphic allegories symbolizing the ideas of liberty, equality, and unity.

The material nature of paper money differs from that of coins, as banknotes have no intrinsic value and are purely symbolic, their worth confirmed only by government guarantees. Innovations in banknote design included signatures of treasury officials and warnings about criminal liability for counterfeiting,

highlighting the importance of protecting authenticity (Varnaliy et al., 2016). With advancements in technology, paper money acquired complex designs incorporating multilayered compositions, security features, and symbolic imagery (Mishchenko and Mishchenko, 2015; Meyer and Hudon, 2019). These changes demonstrate not only artistic richness but also the desire to prevent counterfeiting and strengthen trust in the fiat system. Thus, the evolution of paper money design reflects changes not only in the financial sphere but also in society, the economy, and ideology. From simple textual messages to intricate compositions, banknotes have become not only a medium of exchange but also an important symbol of an era, a carrier of ideological values, and a guarantee of state system stability.

2.2. Key semiotic concepts in currency design analysis

The key concepts applicable to the analysis of currency design are Charles Peirce's theory of signs and Ferdinand de Saussure's concept of the sign (Afisi, 2020). Charles Peirce, one of the founders of semiotics, classified signs into iconic, indexical, and symbolic. Iconic signs have a direct connection to the object they represent. In currency design, these can include images of prominent figures, architectural landmarks, or natural landscapes that directly reflect national heritage and history (Volichenko et al., 2024). Their iconicity lies in their ability to directly point to important national symbols. For instance, American dollars' feature portraits of notable leaders such as George Washington and Abraham Lincoln, reflecting their role in shaping the political and cultural identity of the United States.

Indexical signs, in contrast, point to certain realities or conditions. In the context of currency design, these may include elements associated with a country's

political or economic stability, such as images of government institutions or symbols of independence. For example, British banknotes depict Buckingham Palace, symbolizing the monarchy of the United Kingdom (Ledin and Machin, 2018). Symbolic signs derive meaning through social conventions (Du and Xu, 2022). In currency design, these can include colours, fonts, and abstract images with culturally and politically significant meanings. For instance, the choice of colour schemes or typography may symbolize national pride or a country's political orientation (Hongqing and Fang, 2024). The euro features images of bridges and architectural elements, symbolizing unity and cooperation among European Union countries, emphasizing their shared history and commitment to integration.

Another crucial semiotic concept applicable to currency design is Ferdinand de Saussure's theory of the sign, which consists of two elements: the signifier (the physical form of the sign) and the signified (its conceptual meaning) (Hongqing and Fang, 2024). In currency design, the meaning of images and symbols depends on the context in which they are used. For example, a portrait on a banknote not only depicts a specific historical figure, but also symbolises his or her role in shaping national identity or political achievements. This meaning is conveyed through socially fixed associations that are formed in the process of common perception of these symbols. For example, the Indian rupee bears the image of Mahatma Gandhi, who is a symbol of peace and the struggle for Indian independence. This emphasises his central place in the country's history and his influence on national identity. The sign, in turn, is embodied through specific images, fonts, colours and composition that convey these conceptual meanings.

Generally speaking, currency design can be seen as a “semiotic text” that, through its visual component, shape’s national identity, reflects the political and social situation in the country, and acts as a communication tool between the state and its citizens. Currency design is becoming not only an economic tool but also an important element of state identity that affects the perception of the country both inside and outside its borders.

2.3. Semiotics of national identity in currency design

Currency design conveys specific social and cultural messages, often utilized by state authorities to maintain political stability, foster national pride, and strengthen economic identity. The visual design of banknotes helps shape citizens’ perceptions of the state and its status in the international context (Hongqing and Fang, 2024). The design of banknotes from different countries reflects not only their economic and political history but also the cultural values shaped over centuries. Figure 1 illustrates these differences and common features in banknote design across various countries.

Figure 1. Examples of banknote designs from Japan, the USA, China, and Singapore



Source: created by the author based on the European Central Bank (2025).

Table 1 presents a structured overview of selected examples illustrating the application of semiotic concepts in currency design.

Table 1. Examples of the application of semiotic concepts in currency design

Country	Design Element	Type of sign (C. Peirce)	Semiotic meaning (F. Saussure)	Cultural/Political context
Japan (10,000 yen, 2024)	Image of Eiichi Shibusawa	Iconic/Symbolic	Symbol of economic development, entrepreneurs hip	Emphasizes the role of industrialization and Japan's economic growth
USA (100 dollars, 2013)	Image of Benjamin Franklin	Iconic	Symbol of the Enlightenment, science, and state-building	Reflects historical heritage, democratic values
China (100 yuan, 2015)	Image of Mao Zedong	Iconic/Symbolic	Symbol of revolution, communist ideas	Supports political discourse on unity, stability, and ideological continuity
Singapore (50 Singapore dollars, 2017)	Image of Yusof Ishak (first president)	Iconic	Symbol of national unity, political independence	Reflects the country's multiethnic nature, emphasizes social harmony

Source: created by the author based on the European Central Bank (2025).

Chinese yuan notes retain ideological content: the central design element remains the portrait of Mao Zedong, serving both a commemorative and political function, emphasizing the continuity of communist ideas. By contrast, the American approach focuses on historical figures symbolizing the development of science, education, and state-building. Japanese yen and Singapore dollars also

feature national figures, but their semantics are linked to economic growth and multiculturalism. A key trend in modern currency design is the combination of national traditions with global standards (Krasivsky, 2024). For example, the Singapore dollar harmoniously integrates Western and Eastern aesthetic traditions, balancing national identity with international recognition. Similar changes can be observed in Chinese banknotes, which are gradually adapting to international standards: modern yuan notes exhibit a minimalist style typical of the euro and Japanese yen, along with enhanced security features.

Particular attention should be given to the evolution of symbolism over time. While the design of Japanese and American banknotes remains stable, Chinese yuan notes have undergone significant changes: from ethnographic motifs to a unified image of a political leader. Meanwhile, commemorative issues dedicated to key events signal China's growing role on the global stage. Such transformations indicate that banknote design is not just an aesthetic choice but also a tool of state policy, reflecting cultural and political changes. Another important factor is the advancement of security technologies. Regardless of their semantic content, all the currencies studied demonstrate the use of cutting-edge technological solutions such as holograms, microtext, and ultraviolet markings, ensuring compliance with international security standards.

The evolution of Chinese banknote design demonstrates a shift from diverse ethnographic motifs to a more unified image of Mao Zedong, emphasizing national unity and continuity of the country's political course. At the same time, commemorative issues dedicated to significant events highlight China's increasing presence on the world stage. Table 2 presents the key characteristics of major series of Chinese banknotes, illustrating these changes and trends.

Table 2. Key characteristics of Chinese banknotes from different series (1948-2024)

Year of issue	Denomination	Dedicated to	Type of image	Main information
Early Series (1948-1980)	1, 5, 10, 50, 100 yuan	Workers, peasants, soldiers, industrial facilities	Iconic/Realistic	Reflection of socialist values, promotion of labor unity, demonstration of economic development
1980-1990 (Fourth Series)	1, 2, 5, 10, 50, 100 yuan	Representatives of different ethnic groups in China	Iconic	Reflection of ethnic diversity, support for national unity and equality policies
1999-Present (Fifth Series)	1, 5, 10, 20, 50, 100 yuan	Mao Zedong	Iconic/Symbolic	Strengthening of ideological narrative, creation of a unified image of the national leader

Source: created by the author based on the European Central Bank (2025).

Since the founding of the People's Republic of China in 1949, banknotes have reflected socialist ideals: images of workers, peasants, and military personnel symbolized labor unity and the importance of collective work. This was part of propaganda emphasizing the role of the state in economic development. In the 1980, during economic reforms, banknotes began to feature images of representatives of different ethnic groups, highlighting the policy of national unity

and integration (Maripov and Ismanov, 1994). These changes reflected a phase of modernization, but they also raised questions about the actual status of minorities in the country. A crucial turning point was the introduction of Mao Zedong's portrait on all denominations in 1999. This design reinforced the ideological narrative and focused attention on a single leader figure, creating a centralized narrative supported by the official version of Chinese history. The absence of other historical figures or symbols contributed to the formation of state-controlled memory culture.

Regional features in the design of Chinese banknotes are also an important factor. Despite overall unification, some series include symbolism reflecting China's diversity. For example, traditional cultural elements such as dragons, phoenixes, and hieroglyphs maintain a significant presence in design, as these images have deep roots in Chinese culture. The dragon symbolizes power and imperial authority, while the phoenix is associated with harmony and renewal. The use of such symbols in currency design underscores the continuity of Chinese civilization and its connection to the imperial past. In addition to traditional banknotes, the digital yuan (DCEP) plays a crucial role in China's monetary system. It is not just a new means of payment but also a strategic tool allowing the state to control financial flows and track citizens' transactions (Shen and Hou, 2021). The introduction of the digital yuan highlights the growing role of technology in the financial system, but it also raises concerns about potential increases in state control (Chen and Adams, 2023). The absence of a physical design in digital currency strips it of traditional symbolic elements, indicating a gradual shift toward new forms of financial communication, where visual symbolism is replaced by technological mechanisms of control.

The design of Chinese banknotes reflects a complex interaction between national identity, political stability, and global trends in currency design. It integrates advanced technologies, traditional symbolism, and ideological elements, making it not only a means of economic exchange but also a tool of state policy and cultural communication. Viewing the evolution of money design through a semiotic lens provides deeper insight into the changing relationships between economics, power, and culture. Money does not merely reflect history – it actively participates in it, reinforcing ideological narratives through its material and visual aspects.

3. Discussion

The research findings confirm that currency design is not merely an instrument of aesthetic decoration but also an important communicative tool that reflects a society's historical, political, and cultural characteristics. An analysis through the lens of semiotics has revealed how currency design conveys ideological messages, shapes national identity, and reflects changes in socio-economic conditions. The results demonstrate that currency design serves not only as a means of facilitating circulation but also as a symbolic expression of ideology and cultural heritage. As evidenced by the case study of China, images on banknotes represent not only historical events but also national identity and modern achievements, particularly technological progress. These conclusions align with the findings of Taheri and Yaqouti (2021), who noted that currency design can function as a tool of cultural propaganda. The significance of these findings lies in understanding currency as a socio-cultural phenomenon that influences public perception of the state both domestically and internationally. For instance, symbolic depictions of natural landscapes or historical figures on

Chinese banknotes contribute to strengthening patriotism among citizens while also shaping a positive image of the country abroad.

The study corroborates the conclusions of other scholars who have examined currency design as a means of communication. For example, the works of Hongqing and Fang (2024) and Lyu et al. (2023) highlight the crucial role of monetary symbols in shaping collective memory. In China's case, this is evidenced by the depiction of national heroes and cultural symbols that are integrated into national ideology. However, the present study has provided a deeper exploration of the semiotic aspects of currency design. The research by L. Ding et al. (2020), which focused on the aesthetic aspect of Chinese banknotes, primarily examined visual elements. In contrast, this study emphasises the combination of visual and textual components and their semantic function in shaping social messaging. The evolution of Chinese banknote design reflects the historical, political, and economic transformations that have taken place in the country. Following the Communist Party's rise to power in 1949, the symbolic content of banknotes was adapted to align with socialist ideology. Images of workers, peasants, and soldiers underscored the role of the people as the driving force behind national development and contributed to the creation of a unified ideological space (Ding et al., 2020). However, some authors argue that such depictions of society did not reflect actual economic challenges but rather served to legitimise the ruling regime (Guan et al., 2022).

The economic reforms of the 1980, initiated by Deng Xiaoping, brought about significant changes, which were also reflected in currency design. The emphasis shifted from overt ideological symbols to cultural heritage and natural landscapes, symbolising harmony and economic progress. This supports the

hypothesis that China sought to employ softer cultural diplomacy through visual elements (Chao, 2023). However, compared to European banknotes, which highlight shared architectural and cultural achievements (as seen in the euro), Chinese banknotes remained more nationally focused. Some researchers view this as a means of fostering internal patriotism rather than promoting international integration (Curtin, 2019).

In the 21st century, the trend towards technological progress and modernisation has intensified. Chinese banknote design has become more universal and minimalist, aligning with global trends in currency aesthetics. However, unlike in most developed countries, where national currencies emphasise economic or cultural achievements, Chinese banknotes continue to feature distinct political elements, the most striking example being the depiction of Mao Zedong on all denominations. This contrasts with the gradual decline of political symbols seen in currencies such as those of the United Kingdom and Canada (Hu et al., 2019). Nevertheless, this approach can be viewed as a means of maintaining internal ideological stability, which, in a broader sense, reflects China's state traditions.

Additionally, modern Chinese banknotes incorporate advanced security technologies, such as holograms, ultraviolet images, and microtext, which are part of global anti-counterfeiting practices. The introduction of the digital yuan represents another strategic step, ensuring not only the security of financial transactions but also providing the state with new mechanisms for economic oversight. Some analysts argue that the digital yuan may serve as both a technological breakthrough and a political instrument, as it enables the government to monitor citizens' financial activities, raising concerns about

privacy and economic freedom (Hilpert, 2024; Shen and Hou, 2021). Furthermore, the study's findings align with the work of Meyer and Hudon (2019), who examined the evolution of currency design in Europe. Similar to European countries, Chinese currency design in the 21st century has exhibited a tendency toward greater abstraction. This suggests a global trend toward the universalisation of symbols, which enhances international recognition.

Conclusion

The study confirms that currency design is not merely an aesthetic element but also a crucial means of communication that reflects social, political, and cultural processes. The analysis demonstrates that currency design plays a key role in shaping national identity, historical memory, and cultural values, as it incorporates symbolic elements that represent state ideology, strategic narratives, and economic stability. The research explored key semiotic concepts, particularly the theories of Charles Peirce and Ferdinand de Saussure, which explain how visual symbols on money create a link between society and the state. The analysis encompassed various aspects of the evolution of currency design, from ancient coins that legitimised rulers' authority to modern digital payment systems that partially retain the symbolic characteristics of traditional money.

Changes in currency design were examined through historical periods. In early societies, coins served not only an economic function but also a political one, reinforcing rulers' power and religious legitimacy. During the Middle Ages, symbolic elements of money highlighted the connection between the monarch and divine authority, whereas from the 18th century onward, with the advent of paper money, the focus shifted to representing state stability, economic strength, and



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political ideology. The 19th and 20th centuries saw an intellectualisation of currency design, reflected in the expansion of images on banknotes, including historical figures, architectural landmarks, natural landscapes, and technological achievements. Case studies of China, the United States, Japan, and Singapore demonstrated how monetary symbols convey political and cultural messages and how currency design adapts to globalisation. The Chinese yuan maintains an ideological focus, featuring the portrait of Mao Zedong as a symbol of political continuity. US dollars emphasise national leaders associated with democracy and independence. Japanese yen depicts figures from science and entrepreneurship, highlighting economic development, while Singaporean dollars represent multiculturalism and social harmony.

It has been found that contemporary trends in currency design favour abstract and symbolic imagery that highlights national achievements, natural resources, and cultural heritage. Special attention was given to the transition to digital currencies, which alter their material form but not their visual identity. Despite dematerialisation, currency remains an important tool of ideological influence and state policy. The limitations of this study lie in its focus on physical currencies and specific regions, necessitating further research on digital currencies and cross-country comparisons. Future studies could explore the symbolism of digital money, the impact of globalisation on currency design, and comparative analyses of different countries' currencies to identify universal and local trends.

References

- Afisi, O. (2020). *The concept of semiotics in Charles Sanders Peirce's pragmatism. Trends in Semantics and Pragmatics.* https://www.researchgate.net/publication/343167191_THE_CONCEPT_OF_SEMIOTICS_IN_CHARLES_SANDERS_PEIRCE'S_PRAGMATISM
- Althusser, L. (2014). *On the reproduction of capitalism: Ideology and ideological state apparatuses.* NY: Verso.
- Amirza, M. & Abdul Razak, M. (2022). *Rethinking a national monetary identity: Does Malaysia need a fitter ringgit symbol?* In: Proceedings of the 2nd International Conference on Design Industry and Creative Culture. Gent: EAI. <http://dx.doi.org/10.4108/eai.24-8-2021.2315048>
- Balvers, R. & McDonald, B. (2021). Designing a global digital currency. *Journal of International Money and Finance*, 111, 102317. <https://doi.org/10.1016/j.jimonfin.2020.102317>
- Bekmuratov, A., Myrzaibraimova, I., Mamashov, K., Raimberdiev, B. & Tookeeva, D. (2024). Impact of leasing transactions on business development in Kyrgyzstan. *Scientific Bulletin of Mukachevo State University. Series Economics*, 11(3), 21-33. <https://doi.org/10.52566/msu-econ3.2024.21>
- Brunnermeier, M., James, H. & Landau, J. (2021). *The digitalization of money. BIS Working Papers.* <https://www.bis.org/publ/work941.pdf>
- Butenko, N., Mykhaylovysh, O., Bincheva, P., Lyndyuk, A. & Luchnikova, T. (2023). The Role of Internet Marketing in the Strategy of Forming Entrepreneurial Activity. *Economic Affairs (New Delhi)*, 68(1), 73-82. <https://doi.org/10.46852/0424-2513.1s.2023.9>
- Chao, J. (2023). The visual politics of Brand China: Exceptional history and speculative future. *Place Branding and Public Diplomacy*, 19(3), 305-316. <https://doi.org/10.1057/s41254-022-00270-6>
- Chen, Y. & Adams, M. (2023). The regulation of digital currency in China. *European Journal of Law Reform*, 25(1-2), 143-160. <https://doi.org/10.5553/ejlr/138723702023025001004>

- Curtin, B. (2019). *Semiotics and Visual Representation. International Program in Design and Architecture*.
<https://www.arch.chula.ac.th/journal/files/article/1JjpgMx2iiSun103202.pdf>
- Ding, L., He, X. & Tang, Y. (2020). Integration of Chinese traditional cultural elements in modern graphic design teaching based on big data analysis. *Journal of Physics Conference Series*, 1533, 042095.
<https://doi.org/10.1088/1742-6596/1533/4/042095>
- Diniz, E., De Araujo, M., Alves, M. & Gonzalez, L. (2024). Design principles for sustainable community currency projects. *Sustainability Science*.
<https://doi.org/10.1007/s11625-023-01456-4>
- Du, Y. & Xu, D. (2022). Analysis of graphic design based on AI interaction technology. *Journal of Environmental and Public Health*.
<https://doi.org/10.1155/2022/8493528>
- Eilouti, B. (2019). Shape grammars as a reverse engineering method for the morphogenesis of architectural façade design. *Frontiers of Architectural Research*, 8(2), 191-200. <https://doi.org/10.1016/j.foar.2019.03.006>
- European Central Bank. Statistic. (2025). <https://www.ecb.europa.eu/stats/all-key-statistics/html/index.en.html>
- First, A. & Sheffi, N. (2015). Borders and banknotes: The national perspective. *Nations and Nationalism*, 21(2), 330-347.
<https://doi.org/10.1111/nana.12097>
- Fisher-Høyrem, S. (2022). Banknotes: The money of civilization. In: *Rethinking Secular Time in Victorian England. Histories of the Sacred and Secular, 1700-2000* (pp. 165-218). Cham: Palgrave Macmillan.
https://doi.org/10.1007/978-3-031-09285-5_5
- Guan, H., Palma, N. & Wu, M. (2022). *The rise and fall of paper money in yuan China, 1260-1368*.
<https://hummedia.manchester.ac.uk/schools/soss/economics/discussionpapers/EDP-2207.pdf>
- Hilpert, H. (2024). China's currency campaign. The challenge of internationalisation and digitalisation of the Renminbi. *SWP Research Paper*. <https://doi.org/10.18449/2024RP07>
- Hongqing, G. & Fang, X. (2024). The application and trends of semiotics in design. *AHFE International*. <https://doi.org/10.54941/ahfe1005433>

- Hu, B., Zelenko, O., Pinxit, V. & Buys, L. (2019). A social semiotic approach and a visual analysis approach for Chinese traditional visual language: A case of tea packaging design. *Theory and Practice in Language Studies*, 9(2), 168. <https://doi.org/10.17507/tpls.0902.06>
- Khamzaeva, A., Myrzaibraimova, I. & Mamashov, K. (2020). Problems and Prospects of Economic Digitalization in Kyrgyzstan. *Lecture Notes in Networks and Systems*, 87, 876-881. https://doi.org/10.1007/978-3-030-29586-8_99
- Krasivskyy, O. (2024). Development and evolution of European Union policy. *Democratic Governance*, 17(2), 46-57. <https://doi.org/10.56318/dg/2.2024.46>
- Krasnobayev, V., Koshman, S. & Mavrina, M. (2014). A Method for Increasing the Reliability of Verification of Data Represented in a Residue Number System. *Cybernetics and Systems Analysis*, 50(6), 969-976. <https://doi.org/10.1007/s10559-014-9688-3>
- Kyrychok, T., Baglai, V. & Kyrychok, A. (2020). Optical methods of banknotes sorting for Ukrainian Hryvnia: Results and problems. *Proceedings of SPIE - The International Society for Optical Engineering*, 11369, 1136918. <https://doi.org/10.1117/12.2553936>
- Kyrychok, T., Korotenko, O., Baglai, V. & Kyrychok, A. (2024). Investigation of quality recognition of banknotes marks for visually impaired people. *Proceedings of SPIE - The International Society for Optical Engineering*, 12938, 1293817. <https://doi.org/10.1117/12.3012707>
- Kyrychok, T., Korotenko, O., Talimonov, Y. & Kyrychok, A. (2023). Improving a method for determining the level of wear of the mark for people with visual impairments on ukrainian hryvnia banknotes. *Eastern-European Journal of Enterprise Technologies*, 5(1(125)), 92-103. <https://doi.org/10.15587/1729-4061.2023.287746>
- Lawson, K. (2019). Using currency iconography to measure institutional quality. *The Quarterly Review of Economics and Finance*, 72, 73-79. <https://doi.org/10.1016/j.qref.2018.10.006>
- Ledin, P. & Machin, D. (2018). *Doing visual analysis: From theory to practice*. London: SAGE Publications Ltd. <https://doi.org/10.4135/9781529793529>

- Leidholm, N. (2024). Transforming the religious landscape: Emperor Leo VI and his struggle for supremacy over the church. *Turkish Journal of History*, 82, 1-26. <https://doi.org/10.26650/iutd.1384759>
- Liao, T. & Wang, C. (2018). The changing face of money. *The China Review*, 18(2), 87-120. <https://www.jstor.org/stable/26435649>
- Lyndyuk, A., Havrylyuk, I., Tomashevskii, Y., Khirivskiy, R. & Kohut, M. (2024). The impact of artificial intelligence on marketing communications: New business opportunities and challenges. *Economics of Development*, 23(4), 60-71. <https://doi.org/10.57111/econ/4.2024.60>
- Lyu, W., Liu, Y., Jiang, Y., Su, H. & Zhang, K. (2023). E-CNY and digital economy in China. *Journal of Advance Research in Social Science and Humanities*, 9(11). <https://doi.org/10.61841/g15vgt84>
- Maripov, A. (1994). Slitless and lensless rainbow holography. *Journal of Optics*, 25(4), 131-134. <https://doi.org/10.1088/0150-536X/25/4/001>
- Maripov, A. & Ismanov, Y. (1994). The Talbot effect (a self-imaging phenomenon) in holography. *Journal of Optics*, 25(1), 3-8. <https://doi.org/10.1088/0150-536X/25/1/001>
- Maurer, B., Musaraj, S. & Small, I. (2019). *Money at the Margins: Global Perspectives on Technology, Financial Inclusion, and Design*. Oxford: Berghahn Books. <https://doi.org/10.2307/j.ctvw04bp0>
- Meyer, C. & Hudon, M. (2019). Money and the commons: An investigation of complementary currencies and their ethical implications. *Journal of Business Ethics*, 160, 277-292. <https://doi.org/10.1007/s10551-018-3923-1>
- Mishchenko, S. (2009). Financial crisis influence upon realization of monetary policy by central banks. *Actual Problems of Economics*, 9, 209-218.
- Mishchenko, V., Naumenkova, S., Mishchenko, S. & Tishchenko, I. (2025). Formation and functioning of financial metaverse platforms. *Financial and Credit Activity: Problems of Theory and Practice*, 1(60), 111-122. <https://doi.org/10.55643/fcaptp.1.60.2025.4689>
- Mishchenko, V. & Mishchenko, S. (2015). Enhancing the effect of transmission channels in monetary policy of Ukraine under the transition to inflation targeting. *Actual Problems of Economics*, 163(1), 421-428.

- Ojedo, F. & Macizo, P. (2023). The value of banknotes: Relevance of size, colour and design. *Psychological Research*, 87(6), 1944-1952. <https://doi.org/10.1007/s00426-022-01764-x>
- Pohranychna, I. (2023). Renovation of residences from previous historical eras and styles. *Architectural Studies*, 9(1), 65-73. <https://doi.org/10.56318/as/1.2023.65>
- Schaps, D. (2023). *The first coins in Ancient Greece*. <https://rethinkq.adp.com/artifact-first-coins-ancient-greece/>
- Shen, W. & Hou, L. (2021). China's central bank digital currency and its impacts on monetary policy and payment competition: Game changer or regulatory toolkit? *Computer Law & Security Review*, 41, 105577. <https://doi.org/10.1016/j.clsr.2021.105577>
- Siqueira, A., Honig, B., Mariano, S. & Moraes, J. (2020). A commons strategy for promoting entrepreneurship and social capital: Implications for community currencies, cryptocurrencies, and value exchange. *Journal of Business Ethics*, 166(4), 711-726. <https://doi.org/10.1007/s10551-020-04578-2>
- Spytska, L. (2023). Inheritance of power in the XXI century: legal mechanisms for the transfer of presidential powers to controlled viceroys and family members in authoritarian regimes. *Law of Justice Journal*, 37(2), 178-206. <https://doi.org/10.5335/rjd.v37i2.14929>
- Spytska, L. (2024). Practice-based methods of bringing to legal liability for anonymous defamation on the Internet and in the media. *Social and Legal Studies*, 7(1), 202-209. <https://doi.org/10.32518/sals1.2024.202>
- Taheri, S. & Yaqouti, N. (2021). Social semiotics analysis of the dollar's visual structure. *Occidental Studies*, 11(2), 95-117. <https://doi.org/10.30465/os.2021.35113.1693>
- Tryhuba, A., Hutsol, T., Kuboń, M., Tryhuba, I., Komarnitskyi, S., Tabor, S., Kwaśniewski, D., Mudryk, K., Faichuk, O., Hohol, T. & Tomaszewska-Górecka, W. (2022). Taxonomy and Stakeholder Risk Management in Integrated Projects of the European Green Deal. *Energies*, 15(6), 2015. <https://doi.org/10.3390/en15062015>

- Varela, M., Mishchenko, V. & Cherkashyna, K. (2023). Sufficiency of banking capital: the experience of Portugal. *Financial and Credit Activity: Problems of Theory and Practice*, 6(53), 9-20. <https://doi.org/10.55643/fcaptop.6.53.2023.4235>
- Varnaliy, Z., Onishchenko, S. & Masliy, A. (2016). Threat prevention mechanisms of Ukraine's economic security. *Economic Annals-XXI*, 159(5-6), 20-24. <https://doi.org/10.21003/ea.V159-04>
- Volichenko, O., Xiong, W., Huang, X. & Orozonova, A. (2024). The genesis and fortification of the castle architecture of the early Middle Ages. *Architectural Studies*, 10(2), 111-123. <https://doi.org/10.56318/as/2.2024.111>
- Wang, X., Liu, D. & Zhang, P. (2024). Financial development, money demand, and currency internationalization: Based on a multidimensional globalization perspective. *Finance Research Letters*, 67, Part A, 105830. <https://doi.org/10.1016/j.frl.2024.105830>
- Wennerlind, C. (2019). Money and its ideas: Enlightenment debates about the morality of money. In: *A Cultural History of Money in the Age of Enlightenment* (pp. 53-74). London: Bloomsbury Academic. <http://dx.doi.org/10.5040/9781474206822.ch-002>
- Xie, H. (2023). Analysis of interaction function of modern graphic design based on technical-aided design. *Journal of King Saud University – Science*, 35(8), 102828. <https://doi.org/10.1016/j.jksus.2023.102828>
- Yesimov, S. & Borovikova, V. (2022). Administrative and Legal Implementation of the Rights of Business Entities. *Social and Legal Studios*, 5(3), 16-22. <https://doi.org/10.32518/2617-4162-2022-5-3-16-22>
- Zhang, N. (2020). Application of computer graphics and image software in marine graphic design. *Journal of Coastal Research*, 106(sp1), 600. <https://doi.org/10.2112/si106-136.1>

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